



**Gulf Coast Ecosystem Restoration Council  
Categorical Exclusion Determination Form**

*This form is to be completed before the Gulf Coast Ecosystem Restoration Council (Council) uses one or more Categorical Exclusions (CEs) to comply with the National Environmental Policy Act (NEPA) for a specific action or group of actions, as appropriate. More information on the Council's NEPA compliance and use of CEs can be found in the Council's [NEPA Procedures](#).*

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**Proposed Action Title:**

**Proposed Action Location:** *(State, County/Parish)*

**Proposed Action Description:**

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**Categorical Exclusion(s) Applied:**

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### **Council Use of Member Categorical Exclusion(s)**

*If the Categorical Exclusion(s) was established by a Federal agency Council member, complete the following. If not, leave this section blank and proceed to the segmentation section.*

Member with Categorical Exclusion(s)

Has the member with CE(s) advised the Council in writing that use of the CE(s) would be appropriate for the specific action under consideration by the Council, including consideration of segmentation and extraordinary circumstances (as described below)?

Yes                  No

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### **Segmentation**

Has the proposed action been segmented to meet the definition of a Categorical Exclusion? (In making this determination, the Council should consider whether the action has independent utility.)

Yes                  No

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### **Extraordinary Circumstances**

In considering whether to use a Categorical Exclusion for a given action, agencies must review whether there may be extraordinary circumstances in which a normally excluded action may have a significant environmental effect and, therefore, warrant further review pursuant to NEPA. Guidance on the review of potential extraordinary circumstances can be found in Section 4(e) of the Council's NEPA Procedures. The potential extraordinary circumstances listed below are set forth in the Council's NEPA Procedures.

The Council, in cooperation with the sponsor of the activity, has considered the following potential extraordinary circumstances, where applicable, and has made the following determinations. (By checking the "No" box, the Council is indicating that the activity under review would not result in the corresponding potential extraordinary circumstance.)

- |     |    |   |
|-----|----|---|
| Yes | No | 1. Is there a reasonable likelihood of substantial scientific controversy regarding the potential environmental impacts of the proposed action?                     |
| Yes | No | 2. Are there Tribal concerns with actions that impact Tribal lands or resources that are sufficient to constitute an extraordinary circumstance?                    |
| Yes | No | 3. Is there a reasonable likelihood of adversely affecting environmentally sensitive resources? Environmentally sensitive resources include but are not limited to: |

- a. Species that are federally listed or proposed for listing as threatened or endangered, or their proposed or designated critical habitats; and
- b. Properties listed or eligible for listing on the National Register of Historic Places.

Yes	No	4. Is there a reasonable likelihood of impacts that are highly uncertain or involve unknown risks or is there a substantial scientific controversy over the effects?
Yes	No	5. Is there a reasonable likelihood of air pollution at levels of concern or otherwise requiring a formal conformity determination under the Clean Air Act?
Yes	No	6. Is there a reasonable likelihood of a disproportionately high and adverse effect on low income or minority populations (see Executive Order 12898)?
Yes	No	7. Is there a reasonable likelihood of contributing to the introduction or spread of noxious weeds or non-native invasive species or actions that may promote the introduction, or spread of such species (see Federal Noxious Weed Control Act and Executive Order 13112)?
Yes	No	8. Is there a reasonable likelihood of a release of petroleum, oils, or lubricants (except from a properly functioning engine or vehicle) or reportable releases of hazardous or toxic substances as specified in 40 CFR part 302 (Designation, Reportable Quantities, and Notification); or where the proposed action results in the requirement to develop or amend a Spill Prevention, Control, or Countermeasures Plan in accordance with the Oil Pollution Prevention regulation?

**Supplemental Information**

Where appropriate, the following table should be used to provide additional information regarding the review of potential extraordinary circumstances and compliance with other applicable laws. The purpose of this table is to ensure that there is adequate information for specific findings regarding potential extraordinary circumstances.

Supplemental information and documentation is not needed for each individual finding regarding the potential extraordinary circumstances listed above. Specifically, the nature of an activity under review may be such that a reasonable person could conclude that there is a very low potential for a particular type of extraordinary circumstance to exist. For example, it would be reasonable to conclude that the simple act of acquiring land for conservation purposes (where

there are no other associated actions) does not present a reasonable likelihood of a release of petroleum, oils, lubricants, or hazardous or toxic substances.

For some types of activities, no supplemental information may be needed to support a finding that there are no extraordinary circumstances. For example, where the activity under review is solely planning (with no associated implementation activity), it may be reasonable to conclude that none of the extraordinary circumstances listed above would apply. In such cases, the table below would be left blank.

In other cases, it may be appropriate to include supplemental information to ensure that there is an adequate basis for a finding regarding a particular extraordinary circumstance. For example, it might be appropriate in some cases to document coordination and/or consultation with the appropriate agency regarding compliance with a potentially applicable law (such as the Endangered Species Act). In those cases, the table below should be used to provide the supplemental information.

Agency or Authority Consulted	Agency or Authority Representative: Name, Office & Phone	Date of Consultation	Notes: Topic discussed, relevant details, and conclusions. (This can include reference to other information on file and/or attached for the given action.)

Additional supplemental information may be attached, as appropriate. Indicate below whether additional supplemental information is attached.

**Additional Information Attached:**      Yes      No

If “Yes”, indicate the subject:

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**Determination by Responsible Official**

Based on my review of the proposed action, I have determined that the proposed action fits within the specified Categorical Exclusion(s), the other regulatory requirements set forth above are met, and the proposed action is hereby Categorical Excluded from further NEPA review.

**Responsible Official** (*Name*)

**BENJAMIN**

Digitally signed by

**Responsible Official** (*Signature*)

**SCAGGS**

BENJAMIN SCAGGS

**Date**

Date: 2020.03.03 17:02:59

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# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Poarch Band of Creek Indians, Youth Conservation Corps Grant Funding FY20

Exclusion category: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Poarch Band of Creek Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The mission of the TYCC is to provide tribal youth, 13-25 years of age, with work-based opportunities in environmental conservation, natural resource management, and related education through summer camp participation that strengthens the protection, conservancy, and long-term maintenance of natural resources on Tribal lands. The TYCC will focus on short-term and long-term restoration and environmental stewardship projects and service-learning opportunities. Some of these projects could include native plant establishment including rivercane, long leaf pine, and white oak. The project will focus on educating youth with environmental, cultural, and historical knowledge and training them with skills to complete restoration projects. The tribal youth will become more culturally and historically educated, connected to the environment, engaged in conservation, involved in their community and prepared for future employment and a lifetime of ongoing public service.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR§ 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR§ 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary

circumstances are defined for the Department of the Interior at 43 CFR §46.215. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 12-12-2019  
Regional Environmental Scientist

*W. p. lto*  
Concur: Natural Resources Officer Date: 12-12-19  
Regional Archeologist

Concur:  Date: 12/12/19  
Regional Director

## Attachment 1

### Extraordinary Circumstance Review

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature. All youth activities will be performed under adult supervision.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Any ground disturbing activities would be minimal in context and intensity.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The</p>	X	

<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. Please see attached correspondence from the Tribal Historic Preservation Officer.</p>	X	
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature. BIA reviewed potential impacts in the USFWS IPAC Database and supporting documentation has been attached.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.</p>	X	



# POARCH BAND OF CREEK INDIANS

5811 Jack Springs Road • Atmore, Alabama 36502  
Tribal Offices: (251) 368-9136 • Administrative Fax: (251) 368-4502  
[www.poarchcreekindians-nsn.gov](http://www.poarchcreekindians-nsn.gov)

December 11, 2019

Mr. William Joseph Selzer  
Cultural Educator  
Poarch Band of Creek Indians  
5811 Jack Springs Road  
Atmore, AL 36502

Re: PBCI THPO 2019-12-011: Poarch Creek Indians Tribal Youth Conservation Corps

Dear Mr. Selzer,

The Poarch Band of Creek Indians, Tribal Historic Preservation Office has received and reviewed the documentation submitted for the referenced project in Escambia Co., in the state of Alabama. Based upon the information submitted we concur with the determination of no effect.

Should implementation of the project result in an inadvertent discovery of any material remains of past human life or activities of archaeological interest, such as chipped stone tools, pottery, bone, historic crockery, glass, metal items or building materials, the project should be halted until evaluation and consultation is complete.

Thank you for the opportunity to comment on this project. We look forward to working with you in the future. Should further correspondence pertaining to the project be necessary, please reference the above file number when responding. If you have any questions, please do not hesitate to call 251-368-9136 extension 2072.

Sincerely,

Larry D. Haikey  
Tribal Historic Preservation Officer



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### Memorandum

Date: December 4, 2019

To: Project File

From: Chet McGhee, BIA Regional Environmental Scientist 

Subject: T&E species/critical habitat species impact determination review –  
Poarch Band of Creek Indians RESTORE Grant

**Proposed Action:** The Poarch Band of Creek Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The mission of the TYCC is to provide tribal youth, 13-25 years of age, with work-based opportunities in environmental conservation, natural resource management, and related education through summer camp participation that strengthens the protection, conservancy, and long-term maintenance of natural resources on Tribal lands. The TYCC will focus on short-term and long-term restoration and environmental stewardship projects and service-learning opportunities. Some of these projects could include native plant establishment including rivercane, long leaf pine, and white oak. The project will focus on educating youth with environmental, cultural, and historical knowledge and training them with skills to complete restoration projects. The tribal youth will become more culturally and historically educated, connected to the environment, engaged in conservation, involved in their community and prepared for future employment and a lifetime of ongoing public service.

A review of potential impacts to threatened and endangered species and/or critical habitat was conducted for the project using the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPAC) Database. IPAC allows federal managers to obtain a species and critical habitat list for the proposed project area. IPAC also assists federal agencies by providing specific information so managers are able to make species effect determinations from their projects.

Based on the internal review conducted, it is my determination that the proposed action will have “no effect” on threatened or endangered species or their critical habitat. The activities are educational in nature. With this “no effect” determination, no further consultation is considered necessary.

[Regulatory review](#) / Endangered species / Species determinations

# Species determinations

For listed species<sup>1</sup> not covered by determination keys, an impact analysis should be performed to reach a conclusion about how this project will impact the species. These conclusions will result in *determinations* for each species, which will be used in consultation with the U.S. Fish and Wildlife Service.

## Birds

Wood Stork Mycteria americana	None
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## Reptiles

Eastern Indigo Snake Drymarchon corais couperi	None
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Gopher Tortoise Gopherus polyphemus	None No determination required
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## Clams

Choctaw Bean Villosa choctawensis	None
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Narrow Pigtoe Fusconaia escambia	None
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## Critical habitats

BIA has evaluated the projects potential impacts on the species listed above and determined that there will be "No Effect."

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Alabama Ecological Services Field Office  
1208 B Main Street  
Daphne, AL 36526-4419  
Phone: (251) 441-5181 Fax: (251) 441-6222

In Reply Refer To:

December 04, 2019

Consultation Code: 04EA1000-2020-SLI-0255

Event Code: 04EA1000-2020-E-00589

Project Name: Poarch Band of Creek Indians Youth Camp

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. Please note that new information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Note that due to the volume of emails received by our office, we cannot accept project consultation requests by email.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Also note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the process and consultation under the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs

for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/pdf/management/usfwscommunicationtowerguidance.pdf>

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

We can be reached at:

US Fish and Wildlife Service

1208 Main Street

Daphne, AL 36526

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Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Alabama Ecological Services Field Office**

1208 B Main Street

Daphne, AL 36526-4419

(251) 441-5181

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## Project Summary

Consultation Code: 04EA1000-2020-SLI-0255

Event Code: 04EA1000-2020-E-00589

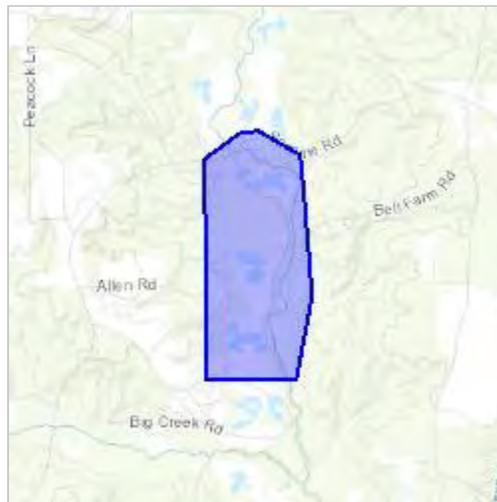
Project Name: Poarch Band of Creek Indians Youth Camp

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: The Poarch Band of Creek Indians have requested federal funding to engage Tribal youth in conservation/restoration workforce training activities to acquire skills and abilities to execute culturally and historically significant projects uniquely affecting the Poarch Creek community. Projects will include planting rivercane and other native plants. Working on signage and nature trail access at Magnolia Branch Wildlife Preserve and assisting the NRCS and Longleaf Alliance in maintaining forest health.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/31.117709633552316N87.36639093826433W>



Counties: Escambia, AL

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## Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>	Threatened

### Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6994">https://ecos.fws.gov/ecp/species/6994</a>	Candidate

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## Clams

NAME	STATUS
Choctaw Bean <i>Villosa choctawensis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5038">https://ecos.fws.gov/ecp/species/5038</a>	Endangered
Narrow Pigtoe <i>Fusconaia escambia</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5040">https://ecos.fws.gov/ecp/species/5040</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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**Note for Members:** Information in italics below indicate the options for selection (for multiple choice fields) or instructions for completion (for text fields). Please refer to the Proposal Submission Guidelines for additional information and definitions of the terms below.

<b>Project/Program Information</b>	
<b>Project Title:</b> <i>Poarch Creek Tribal Youth Conservation Corps</i>	
<b>Pre-Proposal Submission Date:</b> August 30, 2019	
<b>Sponsor Agency:</b> Department of the Interior, <i>Bureau of Indian Affairs</i>	<b>Co-Sponsor Agency(ies):</b> <i>Poarch Band of Creek Indians, a federally-recognized Indian Tribe</i>
<b>Project / Program Activity Type:</b> <i>Category 1 : Planning and Implementation</i>	<b>FPL Category(ies):</b> <i>Select one: Cat1:Planning Only; Cat1:Implementation Only; Cat1:Planning and Implementation; Cat1:Planning/Cat2:Implementation; Cat1:Planning/Cat2: Planning and Implementation; Cat2:Implementation Only</i>
<b>Planning Framework Geographic Area(s):</b> <i>Site #1: Continue restoration of Tribal rivercane site initiated at the headwaters of the Perdido River Watershed on Tribal lands at 263 Aplin Rd Atmore AL 36502; Site #2: Magnolia Branch Wildlife Reserve located at 24 Big Creek Rd Atmore AL 36502; Site #3: Assistance with controlled burns and other environmental work on Tribal lands on and near the reservation at 5811 Jack Springs Rd. Atmore AL 36502</i>	<b>Project Location(s):</b> <i>Provide a short description of the location for the proposed activity.</i>
<b>Estimated Project Duration (Years):</b> <i>Year One - \$50,000 Year Two - \$50,000 Year Three - \$50,000</i>	<b>Estimated Cost:</b> <i>\$150,000.00</i>
<b>Primary Comprehensive Plan Goal:</b> <i>Poarch Band of Creek Indians Tribal Youth Conservation Corps will continue to engage Tribal youth in workforce training activities to acquire skills and abilities to execute culturally and historically significant projects uniquely affecting the Poarch Creek community.</i>	
<b>Primary Comprehensive Plan Objective:</b> <i>The Tribe seeks to address ecosystem challenges on and near the watersheds on Tribal lands by recruiting, training and deploying a responsible Tribal Youth Conservation Corps that will manage and maintain the watersheds for perpetuity.</i>	
<b>Planning Framework Approach:</b> Cultural, historic preservation & environmental training costs will include off-site visits to see, learn and experience activities and events complementary to the TYCC program. The Tribe will provide transportation for youth to engage in local	<b>Planning Framework Technique(s):</b> 1. Number of TYCC recruits 2. Number, types and scope of restoration projects selected 3. Documented issues, concerns, permits, actions needed for each unique project and resolution of each

**Note for Members:** Information in italics below indicate the options for selection (for multiple choice fields) or instructions for completion (for text fields). Please refer to the Proposal Submission Guidelines for additional information and definitions of the terms below.

<p>RESTORE programs and collaborative events with other Tribal sites. Specific events will be based on availability and calendared by adult supervisors.</p> <p>Native plant establishment will include preliminary training of Corps members by professional botanists already working with the Tribe through University of South Alabama and Mississippi State universities. Professors and Corps members will then seek out and secure essential plants for propagation and transplantation onto Tribal sites. Tribal members with identified mother plants will be included in the project, as warranted, to allow youth to collect plants. Propagation will be at the identified Tribal sites. Restoring Tribal sites are important educational conservation tools for teaching youth that they are the next generation of stewards of Tribal lands.</p> <p>Nature trail access and ongoing education costs include planning, clearing and professional, educational and weather-resistant signage for the Magnolia Branch Wildlife Reserve site that is visited annually by thousands of individuals and families.</p> <p>Native plant education costs are for 2 to 4 annual community meetings to raise awareness about the new Tribal Youth Conservation Corps, to share project progress with the Tribal Council and community and to give Corps members the opportunity to demonstrate their new knowledge and skills.</p> <p>Natural Resources Conservation Service and the Longleaf Alliance stewards train Corps members on environmental best practices before including the Corps in wildland burn and environmental activities.</p>	<ol style="list-style-type: none"> <li>4. Update TYCC by-laws and seek Tribal Council review</li> <li>5. Number of community, staff &amp; Tribal Council meetings, attendees, presenters and topics.</li> <li>6. Number, media type, content and dates of public service and community awareness efforts.</li> <li>7. Number, types and placement sites of project signage</li> <li>8. Program progress and financial status reports.</li> <li>9. Number and types of partners for each project</li> </ol>
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**Overview of Proposed Activity**

**Note for Members:** Information in italics below indicate the options for selection (for multiple choice fields) or instructions for completion (for text fields). Please refer to the Proposal Submission Guidelines for additional information and definitions of the terms below.

- Identify and select appropriate restoration projects:
  - Restore rivercane, longleaf pines, native medicinal plants
  - Restore gopher tortoise habitat and relocate tortoises in danger of eradication
  - Environmental electronic GPS mapping of habitats restored
  - Restore pollinator habitats and planting secure pollinator fields
  - Land management best practices for forestry and eradication of invasive plants
  - Audubon Society partnering for migratory and coastal bird surveillance
- Engage environmental, cultural and historic preservation directors regarding compliance issues:
  - Land and Natural Resources meetings are held monthly
  - Quarterly joint meetings of Division and Program Directors
  - Monthly meetings of program managers coordinated by Division Directors
  - Tribal Newsletter articles and notices
  - Semiannual fur bearing, trapping and hunter safety training sessions with U.S. Fish & Wildlife
  - Online information and articles on internal Workplace information site
  - Wildland fire information meetings with U.S. Forestr
  - Gopher tortoise and forestry meetings with Longleaf Alliance staff
- Meet with Tribal staff, community and Tribal Council on project details:
  - Periodic community meetings to inform the community and field questions
  - Issues presented to Tribal Council, as needed, at monthly Tribal Council sessions
  - Workshop meetings with Tribal Council, As needed
  - Tribal Newsletter articles submitted for the community
  - Information and articles published on Tribe's social media portal
- Calendar activities for each restoration project:
  - Annual calendar of events prepared by Cultural Educator for Division Director's approval
  - Monthly activities added to calendar, as appropriate
- Procure appropriate tools and supplies unique to each project:
  - Procurement with grant funds will follow the Tribe's "Procurement Policy" which is compliant with 2 CFR 200 for expenditures of federal funds
- Perform activities:
  - All activities will be approved and monitored by the Tribal Cultural Director and Community Services Division Director
- Evaluate performance of activities and outcomes:
  - Field evaluation will be done by the Cultural Educator to ensure completion and compliance with grant activities
  - Local reports will be evaluated by the Tribal Cultural Director and Community Services Division Director
  - Evaluation of the Tribe's reports will be done by the Contracting Grant Officer annotated on the Tribe's Grant and Cooperative Agreement notice of award
- Periodic reports to Tribal Council on projects accomplished:
  - Bi-monthly reports by the Tribal Cultural Director are shared in the Division Directors' meeting by the Community Services Division Director with the Tribal Chief of Staff. The Chief of Staff is responsible for updating the Tribal Council on all grant projects.

**Note for Members:** Information in italics below indicate the options for selection (for multiple choice fields) or instructions for completion (for text fields). Please refer to the Proposal Submission Guidelines for additional information and definitions of the terms below.

- Ongoing project monitoring:
  - Accomplishment of calendared activities is included in reports
  - Issues are clarified with the federal Project Officer before activities are done, as needed
  - Fiscal reports on expenditures are prepared by Tribal Federal Accounting
  - Photos are compiled for each project and shared with Cultural Archives and the Tribal Council

**RESTORE Act Priority Criteria Information**

**Priority Criteria:** *Priority Criteria I: Projects that are projected to make the greatest contribution to restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region, without regard to geographic location within the Gulf Coast region.*

**Priority Criteria Justification:** *The Poarch Band of Creek Indians main reservation is at the head of the Perdido Creek Watershed which affects everything in the waters between the Tribal homelands and the Gulf Coast.*

**Collaboration & Leveraging**

*The Tribal Council provides support funds for transportation, limited supplies, some on-site training, joint community meetings, and co-op student costs. Partners include U. S. Forestry, U. S. Fish & Wildlife, Natural Resources Conservation Service, Audubon Society, Longleaf Pine Alliance, Coastal Clean Up, The Jones Center at Ichauway, The Gopher Tortoise Council, University of South Alabama and Mississippi University.*

**Project/Program Budget Information**

**Project/Program Funding Request:** *\$150,000 for a 3-year project*

**Estimated % Planning:** 20% Planning – Refine recruiting and training process for TYCC participants, plan annual calendar, coordinate partners and allocate funds per activity, finalize in-house budget and obtain approval for expenditure of funds with Tribal Federal Accounting

**Estimated % Implementation:** 70% Implementation – Update program staff and provide training unique to each proposed activity, coordinate partners and logistics for each activity, secure essential participant permissions to mitigate the Tribe’s liability, accomplish proposed tasks and report results.

**Estimated % Monitoring and Data Management:** 10% Monitoring and Data Management – Field monitoring to be included in reports will be accomplished during activities, data monitoring will include participants clocking in by computer to report for duty, monitoring during activities will be the responsibility of the adult field workers on duty for an activity, data reporting will be the program progress reports submitted to the grantor and the Tribal Council, financial data management will be part of the Tribe’s Federal Accounting process, all Tribal

**Note for Members:** Information in italics below indicate the options for selection (for multiple choice fields) or instructions for completion (for text fields). Please refer to the Proposal Submission Guidelines for additional information and definitions of the terms below.

funds are audited annually as part of the Single Audit Act applicable to federally recognized Indian Tribes.

**Is the Project/Program Scalable?** *Yes, but full funding is essential to accomplishment of all stated projects and activities.*

**If yes, provide a short description of scalability:** *Scalability would require the reduction of the number of sites for which project activities will be conducted. The priority of sites from the Tribal perspective would be #1 – Land Management (controlled burning), #2 – Restoration of rivercane and longleaf pines (which are contingent on Land Management activities) and #3 – Magnolia Branch gopher tortoise habitat restoration project.*

### Additional Information

**Bibliography:** *No literature is cited in this project proposal*

**Project Map Description:** To the right of the map is the Magnolia Branch Track of land which is on the Big Escambia Creek which ties to the Escambia river then the Escambia Bay. Then to the left of the map above I-65 is the track that is located at the head of the Perdido.



Land Map.docx



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Coushatta Tribe of Louisiana, Youth Conservation Corps Grant Funding FY20

Exclusion category: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Coushatta Tribe of Louisiana has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC will provide tribal youth work-based opportunities in the field of environmental conservation, natural resources management. Tribal youth will learn the importance to restore and protect natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region. This activity will be followed by experiential learning, that is, the actual preparation and planting of the vegetation and trees. Students will learn of the anticipated environmental benefits of the project, particularly reduced coastal erosion, increased habitat for coastal species, creation of a storm barrier to protect against future weather events, and a decrease of pollution reaching the gulf waters.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR§ 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR§ 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary circumstances are defined for the Department of the Interior at 43 CFR §46.215. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 2-5-2020  
Regional Environmental Scientist

Concur:  Date: 2/5/2020  
Regional Archeologist

Concur:  Date: 2/6/2020  
Regional Director

**Attachment 1****Extraordinary Circumstance Review**

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature and the youth will be working under adult supervision.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Environmental effects of any activities would be minimal in context and intensity and will benefit the local watershed.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The activities planned are simply educational in nature.</p>	X	

<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. Please see attached correspondence from the Tribal Historic Preservation Office.</p>	X	
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature. See concurrence letter from USFWS.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.</p>	X	



**COUSHATTA TRIBE OF LOUISIANA**  
Tribal Historic Preservation Office

December 16, 2019

Chet McGhee  
Regional Environmental Scientist  
Bureau of Indian Affairs  
U.S. Department of the Interior  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

Dear Mr. McGee,

As the Coushatta Tribal Historic Preservation Officer, I have reviewed the RESTORE Tribal Youth conservation proposal and have determined that there will be no effect upon any Coushatta historical or cultural resources within the project APE.

I fully support this project and am happy to provide this clearance to proceed. Please don't hesitate to contact me if I can provide additional information or assistance.

Respectfully,

Linda Langley, Ph.D.  
Tribal Historic Preservation Officer



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

JAN 23 2020

IN REPLY REFER TO:  
Trust Services  
Environmental Management

### SUBMITTED ELECTRONICALLY

Ms. Brigitte Firmin  
ESA Consultation Team Lead  
U.S. Fish and Wildlife Service  
200 Dulles Drive  
Lafayette, Louisiana 70506

Dear Ms. Firmin:

The Coushatta Tribe of Louisiana has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs (BIA) in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC will provide tribal youth work-based opportunities in the field of environmental conservation, natural resources management. Tribal youth will learn the importance to restore and protect natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region. This activity will be followed by experiential learning, including the actual preparation and planting of native vegetation. Students will learn of the anticipated environmental benefits of the project, particularly reduced coastal erosion, increased habitat for coastal species, creation of a storm barrier to protect against future weather events, and a decrease of pollution reaching the gulf waters.

Due to the need for federal funding the project was reviewed in accordance with the National Environmental Policy Act and the Endangered Species Act. BIA's review of potential impacts to threatened and endangered species and/or critical habitat was conducted for the project using the U.S. Fish and Wildlife Service Information for Planning and Consultation Database (*IPAC Record Locators 058-19919264 and 650-19935402*).

Based on all of the information evaluated from the IPAC Database review, it is BIA's determination that the proposed action "may affect" threatened or endangered species or their critical habitat and further consultation/coordination with the Louisiana Ecological Services Office is necessary.

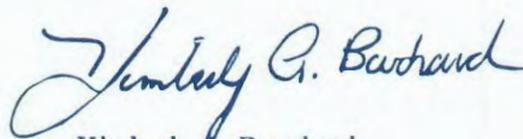
Since some of the learning activities will occur along the shoreline in both Holly Beach, LA and Rutherford Beach, LA, BIA believes the project “*may affect, but is not likely to adversely affect*” the following species:

- Endangered Hawksbill sea turtle (*Eretmochelys imbricata*)
- Endangered Kemp's ridley sea turtle (*Lepidochelys kempii*)
- Endangered Leatherback sea turtle (*Dermochelys coriacea*)
- Threatened Loggerhead sea turtle (*Caretta caretta*)
- Threatened Piping Plover (*Charadrius melodus*)
- Threatened Red knot (*Calidris canutus rufa*)
- Threatened West Indian Manatee (*Trichechus manatus*)

The BIA respectfully requests concurrence from your office on this determination. In order to minimize any potential impacts to sea turtles during nesting season, participating tribal youth will be educated about sea turtles, their nesting behavior and identifying turtle nests. Additionally, tribal youth will be working directly with conservation professionals from the United States Department of Agriculture (USDA) Gulf Coast Soil and Water Conservation District throughout the project.

If you have any questions or need further information, please contact Mr. Chet McGhee, Regional Environmental Scientist, at (615) 564-6830.

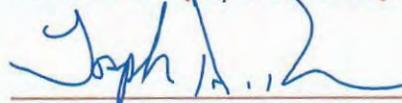
Sincerely,



Kimberly A. Bouchard  
Acting Regional Director

**This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act.) The project, as proposed,**

**Is not Likely to adversely effect those resources**



Supervisor  
Louisiana Ecological Services Office  
U.S. Fish and Wildlife Service

31 Jan 2020

Date



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Louisiana Ecological Services Field Office  
200 Dulles Drive  
Lafayette, LA 70506  
Phone: (337) 291-3100 Fax: (337) 291-3139



IPaC Record Locator: 058-19919264

January 22, 2020

Subject: Consistency letter for the project named 'Coushatta RESTORE Tribal Youth Camp' for specified threatened and endangered species that may occur in your proposed project location pursuant to the Louisiana Endangered Species Act project review and guidance for other federal trust resources key.

Dear Chester McGhee:

The U.S. Fish and Wildlife Service (Service) received on January 22, 2020 your effects determination for the 'Coushatta RESTORE Tribal Youth Camp' (the Action) using the Louisiana Endangered Species Act project review and guidance for other federal trust resources key within the Information for Planning and Consultation (IPaC) system. This system was developed in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on the answers provided, the proposed Action is consistent with a determination of “no effect”, “may affect, but not likely to adversely affect (NLAA)”, or “may affect” for the following species as outlined in the Service’s Louisiana Endangered Species Act project review and guidance for other federal trust resources key.

Threatened Piping Plover ( <i>Charadrius melodus</i> )	NLAA
Threatened Red knot ( <i>Calidris canutus rufa</i> )	NLAA
Threatened West Indian Manatee ( <i>Trichechus manatus</i> )	NLAA
Endangered Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> )	May Affect
Endangered Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> )	May Affect
Endangered Leatherback sea turtle ( <i>Dermochelys coriacea</i> )	May Affect
Threatened Loggerhead sea turtle ( <i>Caretta caretta</i> )	May Affect

One or more of the species listed above have a determination of “my affect”; therefore, further consultation/coordination with the Louisiana Ecological Services Office is necessary. Please contact our office to discuss methods to avoid or minimize potential adverse effects to those species.

**Please Note:** If the Federal Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) may be required. Please contact Ulgonda Kirkpatrick (phone:

321/972-9089, e-mail: [ulgonda\\_kirkpatrick@fws.gov](mailto:ulgonda_kirkpatrick@fws.gov)) with any questions regarding potential impacts to bald or golden eagles.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Coushatta RESTORE Tribal Youth Camp

**2. Description**

The following description was provided for the project 'Coushatta RESTORE Tribal Youth Camp':

The Coushatta is seeking educational grant funding through the BIA to teach tribal youth about ecosystem conservation/restoration. This funding is provided to BIA through an agreement with the Gulf Restoration Council's RESTORE fund.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/29.76929474343831N93.45231413841248W>



## Qualification Interview

1. Is this a Federal project?  
*Yes*
2. Have you determined that the project will have "no effect" on federally listed species? (If unsure select "No")  
*No*
3. Are you with the U.S. Army Corps of Engineers Regulatory Division?  
*No*
4. Are you with the U.S. Army Corps of Engineers Planning Division?  
*No*
5. [Hidden Semantic] Does the project intersect the piping plover AOI?  
**Automatically answered**  
*Yes*
6. Will the proposed project involve human disturbance or ground disturbance (such as foot traffic, vehicles, tracked equipment, excavating, grading, placing fill material, etc.)?  
*Yes*
7. Will the proposed project result in impacts to foraging habitat (intertidal beaches, sand, mud, or algal flats, between annual low tide and annual high tide) or roosting habitat (unvegetated or sparsely vegetated dune systems, sand, mud, or algal flats above high tide)?  
*No*
8. [Hidden Semantic] Does the project intersect the red knot AOI?  
**Automatically answered**  
*Yes*
9. [Semantic (same answer as "10")] Will the proposed project result in impacts to foraging habitat (intertidal beaches, sand, mud, or algal flats, between annual low tide and annual high tide) or roosting habitat (unvegetated or sparsely vegetated dune systems, sand, mud, or algal flats above high tide)?  
**Automatically answered**  
*No*

10. [Hidden Semantic] Does the project intersect the west indian manatee AOI?  
**Automatically answered**  
*Yes*
11. (Semantic) Is the project located within the manatee consultation zone, excluding the Mississippi River?  
**Automatically answered**  
*Yes*
12. Is the water depth within the project greater than 2 feet (at mean high tide)?  
*No*
13. [Hidden Semantic] Does the project intersect the sea turtle AOI?  
**Automatically answered**  
*Yes*
14. Will the project result in long-term impacts (effects lasting up to 6 months or more) to nesting habitat (sandy beaches)?  
*No*
15. Will the project occur during the sea turtle nesting season (April 15 – October 31)?  
*Yes*
16. (Semantic) Does the project intersect the Louisiana black bear Range?  
**Automatically answered**  
*No*



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Louisiana Ecological Services Field Office  
200 Dulles Drive  
Lafayette, LA 70506  
Phone: (337) 291-3100 Fax: (337) 291-3139

IPaC Record Locator: 650-19935402

January 23, 2020

Subject: Consistency letter for the project named 'Coushatta Tribal Youth RESTORE Summer Camp' for specified threatened and endangered species that may occur in your proposed project location pursuant to the Louisiana Endangered Species Act project review and guidance for other federal trust resources key.

Dear Chester McGhee:

The U.S. Fish and Wildlife Service (Service) received on January 23, 2020 your effects determination for the 'Coushatta Tribal Youth RESTORE Summer Camp' (the Action) using the Louisiana Endangered Species Act project review and guidance for other federal trust resources key within the Information for Planning and Consultation (IPaC) system. This system was developed in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on the answers provided, the proposed Action is consistent with a determination of “no effect”, “may affect, but not likely to adversely affect (NLAA)”, or “may affect” for the following species as outlined in the Service’s Louisiana Endangered Species Act project review and guidance for other federal trust resources key.

Threatened Piping Plover ( <i>Charadrius melodus</i> )	NLAA
Threatened Red knot ( <i>Calidris canutus rufa</i> )	NLAA
Threatened West Indian Manatee ( <i>Trichechus manatus</i> )	NLAA
Endangered Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> )	May Affect
Endangered Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> )	May Affect
Endangered Leatherback sea turtle ( <i>Dermochelys coriacea</i> )	May Affect
Threatened Loggerhead sea turtle ( <i>Caretta caretta</i> )	May Affect

One or more of the species listed above have a determination of “my affect”; therefore, further consultation/coordination with the Louisiana Ecological Services Office is necessary. Please contact our office to discuss methods to avoid or minimize potential adverse effects to those species.

**Please Note:** If the Federal Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) may be required. Please contact Ulgonnda Kirkpatrick (phone:

321/972-9089, e-mail: [ulgonda\\_kirkpatrick@fws.gov](mailto:ulgonda_kirkpatrick@fws.gov)) with any questions regarding potential impacts to bald or golden eagles.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

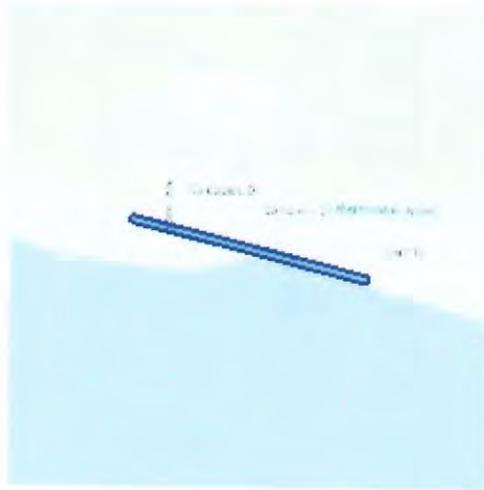
Coushatta Tribal Youth RESTORE Summer Camp

**2. Description**

The following description was provided for the project 'Coushatta Tribal Youth RESTORE Summer Camp':

The Coushatta Tribe has requested funding from BIA to conduct an education camp for tribal youth regarding conservation/restoration of the gulf shoreline. The project will involve tribal youth working with NRCS staff to improve the shoreline through restoration activities.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/29.75884387769773N93.12527239322664W>



## Qualification Interview

1. Is this a Federal project?  
*Yes*
2. Have you determined that the project will have "no effect" on federally listed species? (If unsure select "No")  
*No*
3. Are you with the U.S. Army Corps of Engineers Regulatory Division?  
*No*
4. Are you with the U.S. Army Corps of Engineers Planning Division?  
*No*
5. [Hidden Semantic] Does the project intersect the piping plover AOI?  
**Automatically answered**  
*Yes*
6. Will the proposed project involve human disturbance or ground disturbance (such as foot traffic, vehicles, tracked equipment, excavating, grading, placing fill material, etc.)?  
*Yes*
7. Will the proposed project result in impacts to foraging habitat (intertidal beaches, sand, mud, or algal flats, between annual low tide and annual high tide) or roosting habitat (unvegetated or sparsely vegetated dune systems, sand, mud, or algal flats above high tide)?  
*No*
8. [Hidden Semantic] Does the project intersect the red knot AOI?  
**Automatically answered**  
*Yes*
9. [Semantic (same answer as "10")] Will the proposed project result in impacts to foraging habitat (intertidal beaches, sand, mud, or algal flats, between annual low tide and annual high tide) or roosting habitat (unvegetated or sparsely vegetated dune systems, sand, mud, or algal flats above high tide)?  
**Automatically answered**  
*No*

10. [Hidden Semantic] Does the project intersect the west indian manatee AOI?  
**Automatically answered**  
*Yes*
  
11. (Semantic) Is the project located within the manatee consultation zone, excluding the Mississippi River?  
**Automatically answered**  
*Yes*
  
12. Is the water depth within the project greater than 2 feet (at mean high tide)?  
*No*
  
13. [Hidden Semantic] Does the project intersect the sea turtle AOI?  
**Automatically answered**  
*Yes*
  
14. Will the project result in long-term impacts (effects lasting up to 6 months or more) to nesting habitat (sandy beaches)?  
*No*
  
15. Will the project occur during the sea turtle nesting season (April 15 – October 31)?  
*Yes*
  
16. (Semantic) Does the project intersect the Louisiana black bear Range?  
**Automatically answered**  
*No*



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Miccosukee Tribe of Indians, Youth Conservation Corps Grant Funding FY20

Exclusion categories: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Miccosukee Tribe of Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC will be a collaborative effort to engage the Miccosukee youth in conservation practices and wetlands restoration. Participants will be parsed into small groups of 5 youth worker trainees with one youth senior classman supervisor and one cultural advisor to create a work unit. Work units will focus on challenging tasks as a unit to build leadership skills and cooperation skills. Collaborating Departments and Programs will provide GPS support, species identification support, scientific support and construction support. Support services will be to teach, and provide on the job training in the green job sector. Collaborating partners will be providing support and completing the tasks.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR§ 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR§ 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary circumstances are defined for the Department of the Interior at 43 CFR §46.215. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

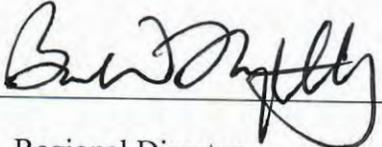
Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 12-9-19  
Regional Environmental Scientist

Concur: Jan Peter  
Natural Resources Officer Date: 12-9-19  
Regional Archeologist

Concur:  Date: 12/10/19  
Regional Director

## Attachment 1

### Extraordinary Circumstance Review

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Environmental effects of any activities would be minimal in context and intensity.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The activities planned are simply educational in nature.</p>	X	
<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the</b></p>	X	

<p><b>National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. See letter from Acting Tribal Historic Preservation Officer.</p>		
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.</p>	X	



# Miccosukee Tribe of Indians of Florida

## Business Council Members

Billy Cypress, Chairman

Roy Cypress Jr., Assistant Chairman

Jerry L. Cypress, Treasurer

Talbert Cypress, Secretary

Petties Osceola Jr., Lawmaker

December 5, 2019

Chester McGhee  
Bureau of Indian Affairs  
U.S. Department of Interior  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### **Re: RESTORE Tribal Youth Program Conservation Initiative**

Dear Mr. McGhee:

The Miccosukee Tribe of Indians of Florida (Miccosukee Tribe) Real Estate Services (RES) Department provides professional land conservation and environmental services for the Tribe. These duties include administering the Tribal program for Section 106 National Historic Preservation, Native American Graves Protection and Repatriation under the authority of the Miccosukee Business Council.

The Miccosukee Tribe RES Department has determined there are no significant impacts to Tribal cultural resources, sacred sites, historic sites, or religious sites anticipated by the proposed activity of the subject initiative. Further, the Miccosukee Tribe RES Department fully supports the proposed program as described in the enclosed RESTORE 2020-2021 work plan.

Thank you for the opportunity to participate in this matter. For any additional information or concerns please contact the Real Estate Services Department staff at 305-223-8380 ext 2244.

Sincerely,

Kevin Donaldson  
Real Estate Services Director  
Tribal Historic Preservation Officer (THPO)

PC: Ivis Billie, Director Vocational ED, Miccosukee Tribe

Enclosure



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### Memorandum

Date: December 9, 2019

To: Project File

From: Chet McGhee, BIA Regional Environmental Scientist 

Subject: T&E species/critical habitat species impact determination review –  
Miccosukee RESTORE Grant

**Proposed Action:** The Miccosukee Tribe of Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC will be a collaborative effort to engage the Miccosukee youth in conservation practices and wetlands restoration. The initiative will draw from the organization, knowledge, and in-kind services of the existing, established Tribal Programs. Participants will be parsed into small groups of 5 youth worker trainees with one youth senior classman supervisor and one cultural advisor to create a work unit. Work units will focus on challenging tasks as a unit to build leadership skills and cooperation skills. Collaborating Departments and Programs will provide GPS support, species identification support, scientific support and construction support. Support services will be to teach, and provide on the job training in the green job sector. Collaborating partners will be providing support and completing the tasks. This project relates to the goals of RESTORE by contributing to protecting and restoring natural resources, ecosystems, wildlife habitats and wetlands of the greater RESTORE region.

A review of potential impacts to threatened and endangered species and/or critical habitat was conducted for the project using the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPAC) Database. IPAC allows federal managers to obtain a species and critical habitat list for the proposed project area. IPAC also assists federal agencies by providing specific information so managers are able to make species effect determinations from their projects.

Based on all of the information evaluated from the IPAC Database review (attached), it is my determination that the proposed action will have “no effect” on threatened or endangered species or their critical habitat. The activities proposed by the Tribe are educational in nature and any field work conducted tribal youth would be limited in context and intensity. With this “no effect” determination, no further consultation is considered necessary.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Florida Ecological Services Field Office  
1339 20th Street  
Vero Beach, FL 32960-3559  
Phone: (772) 562-3909 Fax: (772) 562-4288  
<http://fws.gov/verobeach>

In Reply Refer To:

December 09, 2019

Consultation Code: 04EF2000-2020-SLI-0174

Event Code: 04EF2000-2020-E-00636

Project Name: Miccosukee Tribal Youth Conservation Camp

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**South Florida Ecological Services Field Office**

1339 20th Street

Vero Beach, FL 32960-3559

(772) 562-3909

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## Project Summary

Consultation Code: 04EF2000-2020-SLI-0174

Event Code: 04EF2000-2020-E-00636

Project Name: Miccosukee Tribal Youth Conservation Camp

Project Type: Federal Grant / Loan Related

Project Description: The Miccosukee are seeking federal funding to hold a conservation camp for tribal youth. Youth will learn about conservation, restoration and sustainable resource management.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/25.759242358309567N80.79595309827917W>



Counties: Miami-Dade, FL

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## Endangered Species Act Species

There is a total of 38 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Florida Bonneted Bat <i>Eumops floridanus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8630">https://ecos.fws.gov/ecp/species/8630</a>	Endangered
Florida Panther <i>Puma (=Felis) concolor coryi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1763">https://ecos.fws.gov/ecp/species/1763</a> Habitat assessment guidelines: <a href="https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf">https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf</a>	Endangered
Puma (=mountain Lion) <i>Puma (=Felis) concolor (all subsp. except coryi)</i> Population: FL No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6049">https://ecos.fws.gov/ecp/species/6049</a>	Similarity of Appearance (Threatened)
West Indian Manatee <i>Trichechus manatus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <b><i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i></b> Species profile: <a href="https://ecos.fws.gov/ecp/species/4469">https://ecos.fws.gov/ecp/species/4469</a>	Threatened

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## Birds

NAME	STATUS
<p>Bachman's Warbler (=wood) <i>Vermivora bachmanii</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/3232">https://ecos.fws.gov/ecp/species/3232</a></p>	Endangered
<p>Cape Sable Seaside Sparrow <i>Ammodramus maritimus mirabilis</i>            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/6584">https://ecos.fws.gov/ecp/species/6584</a></p>	Endangered
<p>Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i>            There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/7713">https://ecos.fws.gov/ecp/species/7713</a>            Species survey guidelines:  <a href="https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf</a></p>	Endangered
<p>Ivory-billed Woodpecker <i>Campephilus principalis</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/8230">https://ecos.fws.gov/ecp/species/8230</a></p>	Endangered
<p>Red Knot <i>Calidris canutus rufa</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a></p>	Threatened
<p>Wood Stork <i>Mycteria americana</i>            Population: AL, FL, GA, MS, NC, SC            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>            Habitat assessment guidelines:  <a href="https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf">https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf</a></p>	Threatened

## Reptiles

NAME	STATUS
<p>American Alligator <i>Alligator mississippiensis</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/776">https://ecos.fws.gov/ecp/species/776</a></p>	Similarity of Appearance (Threatened)
<p>American Crocodile <i>Crocodylus acutus</i>            Population: U.S.A. (FL)            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/6604">https://ecos.fws.gov/ecp/species/6604</a></p>	Threatened
<p>Eastern Indigo Snake <i>Drymarchon corais couperi</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a></p>	Threatened
<p>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i>            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a></p>	Endangered
<p>Leatherback Sea Turtle <i>Dermochelys coriacea</i>            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a></p>	Endangered
<p>Loggerhead Sea Turtle <i>Caretta caretta</i>            Population: Northwest Atlantic Ocean DPS            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a></p>	Threatened

## Fishes

NAME	STATUS
<p>Atlantic Sturgeon (gulf Subspecies) <i>Acipenser oxyrinchus (=oxyrhynchus) desotoi</i>            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/651">https://ecos.fws.gov/ecp/species/651</a></p>	Threatened

## Insects

NAME	STATUS
<b>Bartram's Hairstreak Butterfly</b> <i>Strymon acis bartrami</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4837">https://ecos.fws.gov/ecp/species/4837</a>	Endangered
<b>Florida Leafwing Butterfly</b> <i>Anaea troglodyta floralis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6652">https://ecos.fws.gov/ecp/species/6652</a>	Endangered
<b>Miami Blue Butterfly</b> <i>Cyclargus (=Hemiargus) thomasi bethunebakeri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3797">https://ecos.fws.gov/ecp/species/3797</a>	Endangered

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## Flowering Plants

NAME	STATUS
Beach Jacquemontia <i>Jacquemontia reclinata</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1277">https://ecos.fws.gov/ecp/species/1277</a>	Endangered
Blodgett's Silverbush <i>Argythamnia blodgettii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6823">https://ecos.fws.gov/ecp/species/6823</a>	Threatened
Cape Sable Thoroughwort <i>Chromolaena frustrata</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4733">https://ecos.fws.gov/ecp/species/4733</a>	Endangered
Carter's Mustard <i>Warea carteri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5583">https://ecos.fws.gov/ecp/species/5583</a>	Endangered
Carter's Small-flowered Flax <i>Linum carteri carteri</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7208">https://ecos.fws.gov/ecp/species/7208</a>	Endangered
Crenulate Lead-plant <i>Amorpha crenulata</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6470">https://ecos.fws.gov/ecp/species/6470</a>	Endangered
Deltoid Spurge <i>Chamaesyce deltoidea ssp. deltoidea</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/199">https://ecos.fws.gov/ecp/species/199</a>	Endangered
Everglades Bully <i>Sideroxylon reclinatum ssp. austrofloridense</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4735">https://ecos.fws.gov/ecp/species/4735</a>	Threatened
Florida Brickell-bush <i>Brickellia mosieri</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/956">https://ecos.fws.gov/ecp/species/956</a>	Endangered
Florida Pineland Crabgrass <i>Digitaria pauciflora</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3728">https://ecos.fws.gov/ecp/species/3728</a>	Threatened
Florida Prairie-clover <i>Dalea carthagenensis floridana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2300">https://ecos.fws.gov/ecp/species/2300</a>	Endangered
Florida Semaphore Cactus <i>Consolea corallicola</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.	Endangered

NAME	STATUS
Species profile: <a href="https://ecos.fws.gov/ecp/species/4356">https://ecos.fws.gov/ecp/species/4356</a>	
Garber's Spurge <i>Chamaesyce garberi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8229">https://ecos.fws.gov/ecp/species/8229</a>	Threatened
Pineland Sandmat <i>Chamaesyce deltoidea pinetorum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1914">https://ecos.fws.gov/ecp/species/1914</a>	Threatened
Sand Flax <i>Linum arenicola</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4313">https://ecos.fws.gov/ecp/species/4313</a>	Endangered
Small's Milkpea <i>Galactia smallii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3360">https://ecos.fws.gov/ecp/species/3360</a>	Endangered
Tiny Polygala <i>Polygala smallii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/996">https://ecos.fws.gov/ecp/species/996</a>	Endangered

## Ferns and Allies

NAME	STATUS
Florida Bristle Fern <i>Trichomanes punctatum</i> ssp. <i>floridanum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8739">https://ecos.fws.gov/ecp/species/8739</a>	Endangered

## Critical habitats

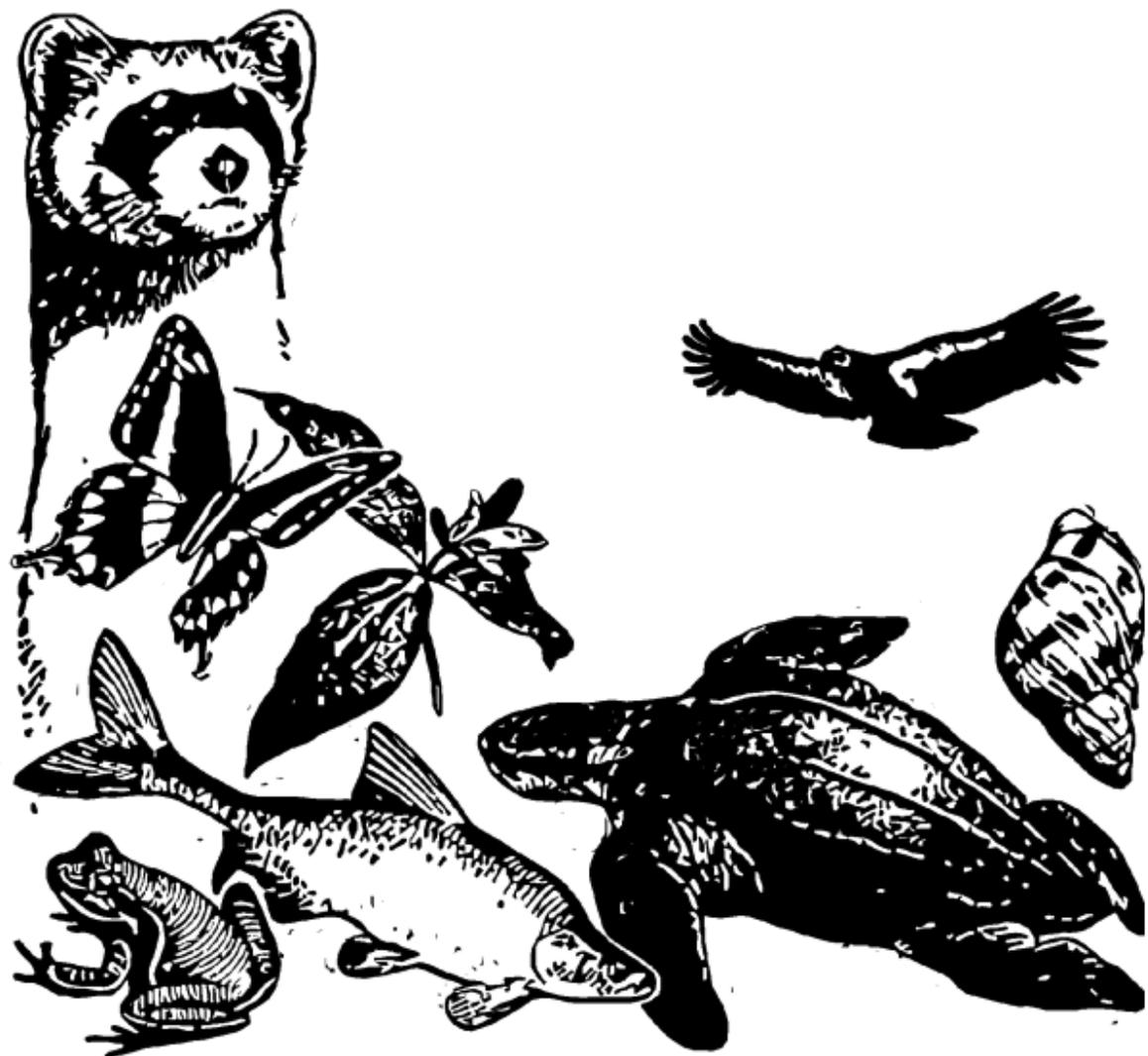
There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> <a href="https://ecos.fws.gov/ecp/species/7713#crithab">https://ecos.fws.gov/ecp/species/7713#crithab</a>	Final

# Miccosukee Tribal Youth Conservation Camp

## *Habitat Assessment Guidelines (2 Species)*

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## Species Document Availability

### Species with habitat assessment guidelines

Florida Panther *Puma* (=Felis) *concolor coryi*

Wood Stork *Mycteria americana*

### Species without habitat assessment guidelines available

American Alligator *Alligator mississippiensis*

American Crocodile *Crocodylus acutus*

Atlantic Sturgeon (gulf Subspecies) *Acipenser oxyrinchus* (=oxyrhynchus) *desotoi*

Bachman's Warbler (=wood) *Vermivora bachmanii*

Bartram's Hairstreak Butterfly *Strymon acis bartrami*

Beach Jacquemontia *Jacquemontia reclinata*

Blodgett's Silverbush *Argythamnia blodgettii*

Cape Sable Seaside Sparrow *Ammodramus maritimus mirabilis*

Cape Sable Thoroughwort *Chromolaena frustrata*

Carter's Mustard *Warea carteri*

Carter's Small-flowered Flax *Linum carteri carteri*

Crenulate Lead-plant *Amorpha crenulata*

Deltoid Spurge *Chamaesyce deltoidea* ssp. *deltoidea*

Eastern Indigo Snake *Drymarchon corais couperi*

Everglade Snail Kite *Rostrhamus sociabilis plumbeus*

Everglades Bully *Sideroxylon reclinatum* ssp. *austrofloridense*

Florida Bonneted Bat *Eumops floridanus*

Florida Brickell-bush *Brickellia mosieri*

Florida Bristle Fern *Trichomanes punctatum* ssp. *floridanum*

Florida Leafwing Butterfly *Anaea troglodyta floridaalis*

Florida Pineland Crabgrass *Digitaria pauciflora*

Florida Prairie-clover *Dalea carthagenensis floridana*

Florida Semaphore Cactus *Consolea corallicola*

Garber's Spurge *Chamaesyce garberi*

Hawksbill Sea Turtle *Eretmochelys imbricata*

Ivory-billed Woodpecker *Campephilus principalis*

Leatherback Sea Turtle *Dermochelys coriacea*

Loggerhead Sea Turtle *Caretta caretta*

Miami Blue Butterfly *Cyclargus* (=Hemiargus) *thomasi bethunebakeri*

Pineland Sandmat *Chamaesyce deltoidea pinetorum*

Puma (=mountain Lion) *Puma* (=Felis) *concolor* (all subsp. except *coryi*)

Habitat Assessment Guidelines (2 Species)  
Species Document Availability

**Red Knot** *Calidris canutus rufa*

**Sand Flax** *Linum arenicola*

**Small's Milkpea** *Galactia smallii*

**Tiny Polygala** *Polygala smallii*

**West Indian Manatee** *Trichechus manatus*



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Florida Ecological Services Office  
1339 20<sup>th</sup> Street  
Vero Beach, Florida 32960

May 18, 2010

Donnie Kinard  
Chief, Regulatory Division  
Jacksonville District Corps of Engineers  
Post Office Box 4970

Jacksonville, Florida 32252-0019  
Habitat Assessment Guidelines - Wood Stork

Service Federal Activity Code: 41420-2007-FA-1494  
Service Consultation Code: 41420-2007-I-0964  
Subject: South Florida Programmatic  
Concurrence  
Species: Wood Stork

Dear Mr. Kinard:

This letter addresses minor errors identified in our January 25, 2010, wood stork key and as such, supplants the previous key. The key criteria and wood stork biomass foraging assessment methodology have not been affected by these minor revisions.

The Fish and Wildlife Service's (Service) South Florida Ecological Services Office (SFESO) and the U.S. Army Corps of Engineers Jacksonville District (Corps) have been working together to streamline the consultation process for federally listed species associated with the Corps' wetland permitting program. The Service provided letters to the Corps dated March 23, 2007, and October 18, 2007, in response to a request for a multi-county programmatic concurrence with a criteria-based determination of "may affect, not likely to adversely affect" (NLAA) for the threatened eastern indigo snake (*Drymarchon corais couperi*) and the endangered wood stork (*Mycteria americana*) for projects involving freshwater wetland impacts within specified Florida counties. In our letters, we provided effect determination keys for these two federally listed species, with specific criteria for the Service to concur with a determination of NLAA.

The Service has revisited these keys recently and believes new information provides cause to revise these keys. Specifically, the new information relates to foraging efficiencies and prey base assessments for the wood stork and permitting requirements for the eastern indigo snake. This letter addresses the wood stork key and is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). The eastern indigo snake key will be provided in a separate letter.

Wood stork

## Habitat

The wood stork is primarily associated with freshwater and estuarine habitats that are used for nesting, roosting, and foraging. Wood storks typically construct their nests in medium to tall



trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water (Ogden 1991, 1996; Rodgers et al. 1996). Successful colonies are those that have limited human disturbance and low exposure to land-based predators. Nesting colonies protected from land-based predators are characterized as those surrounded by large expanses of open water or where the nest trees are inundated at the onset of nesting and remain inundated throughout most of the breeding cycle. These colonies have water depths between 0.9 and 1.5 meters (3 and 5 feet) during the breeding season.

Successful nesting generally involves combinations of average or above-average rainfall during the summer rainy season and an absence of unusually rainy or cold weather during the winter-spring breeding season (Kahl 1964; Rodgers et al. 1987). This pattern produces widespread and prolonged flooding of summer marshes, which maximize production of freshwater fishes, followed by steady drying that concentrate fish during the season when storks nest (Kahl 1964). Successful nesting colonies are those that have a large number of foraging sites. To maintain a wide range of foraging sites, a variety of wetland types should be present, with both short and long hydroperiods. The Service (1999) describes a short hydroperiod as a 1 to 5-month wet/dry cycle, and a long hydroperiod as greater than 5 months. During the wet season, wood storks generally feed in the shallow water of the short-hydroperiod wetlands and in coastal habitats during low tide. During the dry season, foraging shifts to longer hydroperiod interior wetlands as they progressively dry-down (though usually retaining some surface water throughout the dry season).

Wood storks occur in a wide variety of wetland habitats. Typical foraging sites for the wood stork include freshwater marshes and stock ponds, shallow, seasonally flooded roadside and agricultural ditches, narrow tidal creeks and shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs. Because of their specialized feeding behavior, wood storks forage most effectively in shallow-water areas with highly concentrated prey. Through tactolocation, or grope feeding, wood storks in south Florida feed almost exclusively on fish between 2 and 25 centimeters [cm] (1 and 10 inches) in length (Ogden et al. 1976). Good foraging conditions are characterized by water that is relatively calm, uncluttered by dense thickets of aquatic vegetation, and having a water depth between 5 and 38 cm (5 and 15 inches) deep, although wood storks may forage in other wetlands. Ideally, preferred foraging wetlands would include a mosaic of emergent and shallow open-water areas. The emergent component provides nursery habitat for small fish, frogs, and other aquatic prey and the shallow, open-water areas provide sites for concentration of the prey during seasonal dry-down of the wetland.

### Conservation Measures

The Service routinely concurs with the Corps' "may affect, not likely to adversely affect" determination for individual project effects to the wood stork when project effects are insignificant due to scope or location, or if assurances are given that wetland impacts have been avoided, minimized, and adequately compensated such that there is no net loss in foraging potential. We utilize our *Habitat Management Guidelines for the Wood Stork in the Southeast Region* (Service 1990) (Enclosure 1) (HMG) in project evaluation. The HMG is currently under review and once final will replace the enclosed HMG. There is no designated critical habitat for the wood stork.

The SFESO recognizes a 29.9 kilometer [km] (18.6-mile) core foraging area (CFA) around all known wood stork colonies in south Florida. Enclosure 2 (to be updated as necessary) provides locations of colonies and their CFAs in south Florida that have been documented as active within the last 10 years. The Service believes loss of suitable wetlands within these CFAs may reduce foraging opportunities for the wood stork. To minimize adverse effects to the wood stork, we recommend compensation be provided for impacts to foraging habitat. The compensation should consider wetland type, location, function, and value (hydrology, vegetation, prey utilization) to ensure that wetland functions lost due to the project are adequately offset. Wetlands offered as compensation should be of the same hydroperiod and located within the CFAs of the affected wood stork colonies. The Service may accept, under special circumstances, wetland compensation located outside the CFAs of the affected wood stork nesting colonies. On occasion, wetland credits purchased from a "Service Approved" mitigation bank located outside the CFAs could be acceptable to the Service, depending on location of impacted wetlands relative to the permitted service area of the bank, and whether or not the bank has wetlands having the same hydroperiod as the impacted wetland.

In an effort to reduce correspondence in effect determinations and responses, the Service is providing the Wood Stork Effect Determination Key below. If the use of this key results in a Corps determination of "no effect" for a particular project, the Service supports this determination. If the use of this Key results in a determination of NLAA, the Service concurs with this determination<sup>1</sup>. This Key is subject to revisitation as the Corps and Service deem necessary.

The Key is as follows:

- A. Project within 0.76 km (0.47 mile)<sup>2</sup> of an active colony site<sup>3</sup> ..... "may affect"<sup>4</sup>
- Project impacts Suitable Foraging Habitat (SFH)<sup>5</sup> at a location greater than 0.76 km (0.47 mile) from a colony site..... "go to B"

<sup>1</sup> With an outcome of "no effect" or "NLAA" as outlined in this key, and the project has less than 20.2 hectares (50 acres) of wetland impacts, the requirements of section 7 of the Act are fulfilled for the wood stork and no further action is required. For projects with greater than 20.2 hectares (50 acres) of wetland impacts, written concurrence of NLAA from the Service is necessary.

<sup>2</sup> Within the secondary zone (the average distance from the border of a colony to the limits of the secondary zone is 0.76 km (2,500 feet, or 0.47 mi).

<sup>3</sup> An active colony is defined as a colony that is currently being used for nesting by wood storks or has historically over the last 10 years been used for nesting by wood storks.

<sup>4</sup> Consultation may be concluded informally or formally depending on project impacts.

<sup>5</sup> Suitable foraging habitat (SFH) includes wetlands that typically have shallow-open water areas that are relatively calm and have a permanent or seasonal water depth between 5 to 38 cm (2 to 15 inches) deep. Other shallow non-wetland water bodies are also SFH. SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to freshwater marshes, small ponds, shallow, seasonally flooded roadside or agricultural ditches, seasonally flooded pastures, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

- Project does not affect SFH..... “no effect”.
- B. Project impact to SFH is less than 0.20 hectare (one-half acre)<sup>6</sup>.....*NLAA*<sup>1</sup>”
- Project impact to SFH is greater in scope than 0.20 hectare (one-half acre).....*go to C*
- C. Project impacts to SFH not within the CFA (29.9 km, 18.6 miles) of a colony site .....*go to D*
- Project impacts to SFH within the CFA of a colony site .....*go to E*
- D. Project impacts to SFH have been avoided and minimized to the extent practicable; compensation (Service approved mitigation bank or as provided in accordance with Mitigation Rule 33 CFR Part 332) for unavoidable impacts is proposed in accordance with the CWA section 404(b)(1) guidelines; and habitat compensation replaces the foraging value matching the hydroperiod<sup>7</sup> of the wetlands affected and provides foraging value similar to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance<sup>8</sup>..... *NLAA*<sup>1</sup>”
- Project not as above..... “*may affect*<sup>A</sup>”
- E. Project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA or within the service area of a Service-approved mitigation bank; and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration matching the hydroperiod<sup>7</sup> of the wetlands affected, and provides foraging value similar

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<sup>6</sup> On an individual basis, SFH impacts to wetlands less than 0.20 hectare (one-half acre) generally will not have a measurable effect on wood storks, although we request that the Corps require mitigation for these losses when appropriate. Wood storks are a wide ranging species, and individually, habitat change from impacts to SFH less than one-half acre are not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

<sup>7</sup> Several researchers (Flemming et al. 1994; Ceilley and Bortone 2000) believe that the short hydroperiod wetlands provide a more important pre-nesting foraging food source and a greater early nestling survivor value for wood storks than the foraging base (grams of fish per square meter) than long hydroperiod wetlands provide. Although the short hydroperiod wetlands may provide less fish, these prey bases historically were more extensive and met the foraging needs of the pre-nesting storks and the early-age nestlings. Nest productivity may suffer as a result of the loss of short hydroperiod wetlands. We believe that most wetland fill and excavation impacts permitted in south Florida are in short hydroperiod wetlands. Therefore, we believe that it is especially important that impacts to these short hydroperiod wetlands within CFAs are avoided, minimized, and compensated for by enhancement/restoration of short hydroperiod wetlands.

<sup>8</sup> For this Key, the Service requires an analysis of foraging prey base losses and enhancements from the proposed action as shown in the examples in Enclosure 3 for projects with greater than 2.02 hectares (5 acres) of wetland impacts. For projects with less than 2.02 hectares (5 acres) of wetland impacts, an individual foraging prey base analysis is not necessary although type for type wetland compensation is still a requirement of the Key.

to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance<sup>8</sup> ..... “NLAA<sup>1</sup>”

Project does not satisfy these elements ..... “may affect<sup>4</sup>”

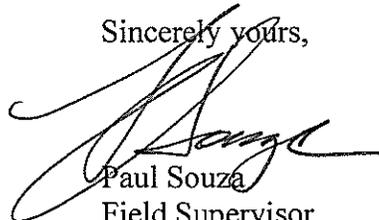
This Key does not apply to Comprehensive Everglades Restoration Plan projects, as they will require project-specific consultations with the Service.

Monitoring and Reporting Effects  
South Florida Ecological Services Field Office - Publication Date 5/18/2010  
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For the Service to monitor cumulative effects, it is important for the Corps to monitor the number of permits and provide information to the Service regarding the number of permits issued where the effect determination was: “may affect, not likely to adversely affect.” We request that the Corps send us an annual summary consisting of: project dates, Corps identification numbers, project acreages, project wetland acreages, and project locations in latitude and longitude in decimal degrees.

Thank you for your cooperation and effort in protecting federally listed species. If you have any questions, please contact Allen Webb at extension 246.

Sincerely yours,



Paul Souza  
Field Supervisor  
South Florida Ecological Services Office

Enclosures

- cc: w/enclosures (electronic only)
- Corps, Jacksonville, Florida (Stu Santos)
- EPA, West Palm Beach, Florida (Richard Harvey)
- FWC, Vero Beach, Florida (Joe Walsh)
- Service, Jacksonville, Florida (Billy Brooks)

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# HABITAT MANAGEMENT GUIDELINES FOR THE WOOD STORK IN THE SOUTHEAST REGION

South Florida Ecological Services Field Office - Publication Date 5/18/2010  
Habitat Assessment Guidelines - Wood Stork



**HABITAT MANAGEMENT GUIDELINES  
FOR THE WOOD STORK IN THE  
SOUTHEAST REGION**

South Florida Ecological Services Field Office - Publication Date 5/18/2010  
Habitat Assessment Guidelines - Wood Stork

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# HABITAT MANAGEMENT GUIDELINES FOR THE WOOD STORK IN THE SOUTHEAST REGION

## Introduction

A number of Federal and state laws and/or regulations prohibit, cumulatively, such acts as harrassing, disturbing, harming, molesting, pursuing, etc., wood storks, or destroying their nests (See Section VII). Although advisory in nature, these guidelines represent a biological interpretation of what would constitute violations of one or more of such prohibited acts. Their purpose is to maintain and/or improve the environmental conditions that are required for the survival and well-being of wood storks in the southeastern United States, and are designed essentially for application in wood stork/human activity conflicts (principally land development and human intrusion into stork use sites). The emphasis is to avoid or minimize detrimental human-related impacts on wood storks. These guidelines were prepared in consultations with state wildlife agencies and wood stork experts in the four southeastern states where the wood stork is listed as Endangered (Alabama, Florida, Georgia, South Carolina).

## General

The wood stork is a gregarious species, which nests in colonies (rookeries), and roosts and feeds in flocks, often in association with other species of long-legged water birds. Storks that nest in the southeastern United States appear to represent a distinct population, separate from the nearest breeding population in Mexico. Storks in the southeastern U.S. population have recently (since 1980) nested in colonies scattered throughout Florida, and at several central-southern Georgia and coastal South Carolina sites. Banded and color-marked storks from central and southern Florida colonies have dispersed during non-breeding seasons as far north as southern Georgia, and the coastal counties in South Carolina and southeastern North Carolina, and as far west as central Alabama and northeastern Mississippi. Storks from a colony in south-central Georgia have wintered between southern Georgia and southern Florida. This U.S. nesting population of wood storks was listed as endangered by the U.S. Fish and Wildlife Service on February 28, 1984 (*Federal Register* 49(4):7332-7335).

Wood storks use freshwater and estuarine wetlands as feeding, nesting, and roosting sites. Although storks are not habitat specialists, their needs are exacting enough, and available habitat is limited enough, so that nesting success and the size of regional populations are closely regulated by year-to-year differences in the quality and quantity of suitable habitat. Storks are especially sensitive to environmental conditions at feeding sites; thus, birds may fly relatively long distances either daily or between regions annually, seeking adequate food resources.

All available evidence suggests that regional declines in wood stork numbers have been largely due to the loss or degradation of essential wetland habitat. An understanding of the qualities of good stork habitat should help to focus protection efforts on those sites

that are seasonally important to regional populations of wood storks. Characteristics of feeding, nesting, and roosting habitat, and management guidelines for each, are presented here by habitat type.

#### **I. Feeding habitat.**

A major reason for the wood stork decline has been the loss and degradation of feeding habitat. Storks are especially sensitive to any manipulation of a wetland site that results in either reduced amounts or changes in the timing of food availability.

Storks feed primarily (often almost exclusively) on small fish between 1 and 8 inches in length. Successful foraging sites are those where the water is between 2 and 15 inches deep. Good feeding conditions usually occur where water is relatively calm and uncluttered by dense thickets of aquatic vegetation. Often a dropping water level is necessary to concentrate fish at suitable densities. Conversely, a rise in water, especially when it occurs abruptly, disperses fish and reduces the value of a site as feeding habitat.

The types of wetland sites that provide good feeding conditions for storks include: drying marshes or stock ponds, shallow roadside or agricultural ditches, narrow tidal creeks or shallow tidal pools, and depressions in cypress heads or swamp sloughs. In fact, almost any shallow wetland depression where fish tend to become concentrated, either through local reproduction or the consequences of area drying, may be used by storks.

Nesting wood storks do most of their feeding in wetlands between 5 and 40 miles from the colony, and occasionally at distances as great as 75 miles. Within this colony foraging range and for the 110-150 day life of the colony, and depending on the size of the colony and the nature of the surrounding wetlands, anywhere from 50 to 200 different feeding sites may be used during the breeding season.

Non-breeding storks are free to travel much greater distances and remain in a region only for as long as sufficient food is available. Whether used by breeders or non-breeders, any single feeding site may at one time have small or large numbers of storks (1 to 100+), and be used for one to many days, depending on the quality and quantity of available food. Obviously, feeding sites used by relatively large numbers of storks, and/or frequently used areas, potentially are the more important sites necessary for the maintenance of a regional population of birds.

Differences between years in the seasonal distribution and amount of rainfall usually mean that storks will differ between years in where and when they feed. Successful nesting colonies are those that have a large number of feeding site options, including sites that may be suitable only in years of rainfall extremes. To maintain the wide range of feeding site options requires that many different wetlands, with both relatively short and long annual hydroperiods, be preserved. For example, protecting only the larger wetlands, or those with longer annual hydroperiods, will result in the eventual loss of smaller, seemingly less important wetlands. However, these small scale wetlands are crucial as the only available feeding sites during the wetter periods when the larger habitats are too deeply flooded to be used by storks.

## II. Nesting habitat.

Wood storks nest in colonies, and will return to the same colony site for many years so long as that site and surrounding feeding habitat continue to supply the needs of the birds. Storks require between 110 and 150 days for the annual nesting cycle, from the period of courtship until the nestlings become independent. Nesting activity may begin as early as December or as late as March in southern Florida colonies, and between late February and April in colonies located between central Florida and South Carolina. Thus, full term colonies may be active until June-July in south Florida, and as late as July-August at more northern sites. Colony sites may also be used for roosting by storks during other times of the year.

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Almost all recent nesting colonies in the southeastern U.S. have been located either in woody vegetation over standing water, or on islands surrounded by broad expanses of open water. The most dominant vegetation in swamp colonies has been cypress, although storks also nest in swamp hardwoods and willows. Nests in island colonies may be in more diverse vegetation, including mangroves (coastal), exotic species such as Australian pine (*Casuarina*) and Brazilian Pepper (*Schinus*), or in low thickets of cactus (*Opuntia*). Nests are usually located 15-75 feet above ground, but may be much lower, especially on island sites when vegetation is low.

Since at least the early 1970's, many colonies in the southeastern U.S. have been located in swamps where water has been impounded due to the construction of levees or roadways. Storks have also nested in dead and dying trees in flooded phosphate surface mines, or in low, woody vegetation on mounded, dredge islands. The use of these altered wetlands or completely "artificial" sites suggests that in some regions or years storks are unable to locate natural nesting habitat that is adequately flooded during the normal breeding season. The readiness with which storks will utilize water impoundments for nesting also suggests that colony sites could be intentionally created and maintained through long-term site management plans. Almost all impoundment sites used by storks become suitable for nesting only fortuitously, and therefore, these sites often do not remain available to storks for many years.

In addition to the irreversible impacts of drainage and destruction of nesting habitat, the greatest threats to colony sites are from human disturbance and predation. Nesting storks show some variation in the levels of human activity they will tolerate near a colony. In general, nesting storks are more tolerant of low levels of human activity near a colony when nests are high in trees than when they are low, and when nests contain partially or completely feathered young than during the period between nest construction and the early nestling period (adults still brooding). When adult storks are forced to leave their nests, eggs or downy young may die quickly (<20 minutes) when exposed to direct sun or rain.

Colonies located in flooded environments must remain flooded if they are to be successful. Often water is between 3 and 5 feet deep in successful colonies during the nesting season. Storks rarely form colonies, even in traditional nesting sites, when they are dry, and may abandon nests if sites become dry during the nesting period. Flooding in colonies may be most important as a defense against mammalian predators. Studies of stork colonies in Georgia and

Florida have shown high rates of raccoon predation when sites dried during the nesting period. A reasonably high water level in an active colony is also a deterrent against both human and domestic animal intrusions.

Although nesting wood storks usually do most feeding away from the colony site (>5 miles), considerable stork activity does occur close to the colony during two periods in the nesting cycle. Adult storks collect almost all nesting material in and near the colony, usually within 2500 feet. Newly fledged storks, near the end of the nesting cycle, spend from 1-4 weeks during the fledging process flying locally in the colony area, and perched in nearby trees or marshy spots on the ground. These birds return daily to their nests to be fed. It is essential that these fledging birds have little or no disturbance as far out as one-half mile within at least one or two quadrants from the colony. Both the adults, while collecting nesting material, and the inexperienced fledglings, do much low, flapping flight within this radius of the colony. At these times, storks potentially are much more likely to strike nearby towers or utility lines.

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Habitat Assessment Guidelines on Wood Storks

Colony sites are not necessarily used annually. Regional populations of storks shift nesting locations between years, in response to year-to-year differences in food resources. Thus, regional populations require a range of options for nesting sites, in order to successfully respond to food availability. Protection of colony sites should continue, therefore, for sites that are not used in a given year.

### **III. Roosting habitat.**

Although wood storks tend to roost at sites that are similar to those used for nesting, they also use a wider range of site types for roosting than for nesting. Non-breeding storks, for example, may frequently change roosting sites in response to changing feeding locations, and in the process, are inclined to accept a broad range of relatively temporary roosting sites. Included in the list of frequently used roosting locations are cypress "heads" or swamps (not necessarily flooded if trees are tall), mangrove islands, expansive willow thickets or small, isolated willow "islands" in broad marshes, and on the ground either on levees or in open marshes.

Daily activity patterns at a roost vary depending on the status of the storks using the site. Non-breeding adults or immature birds may remain in roosts during major portions of some days. When storks are feeding close to a roost, they may remain on the feeding grounds until almost dark before making the short flight. Nesting storks traveling long distances (>40 miles) to feeding sites may roost at or near the latter, and return to the colony the next morning. Storks leaving roosts, especially when going long distances, tend to wait for mid-morning thermals to develop before departing.

### **IV. Management zones and guidelines for feeding sites.**

To the maximum extent possible, feeding sites should be protected by adherence to the following protection zones and guidelines:

- A. There should be no human intrusion into feeding sites when storks are present. Depending upon the amount of screening vegetation, human activity should be no closer than between 300 feet (where solid vegetation screens exist) and 750 feet (no vegetation screen).

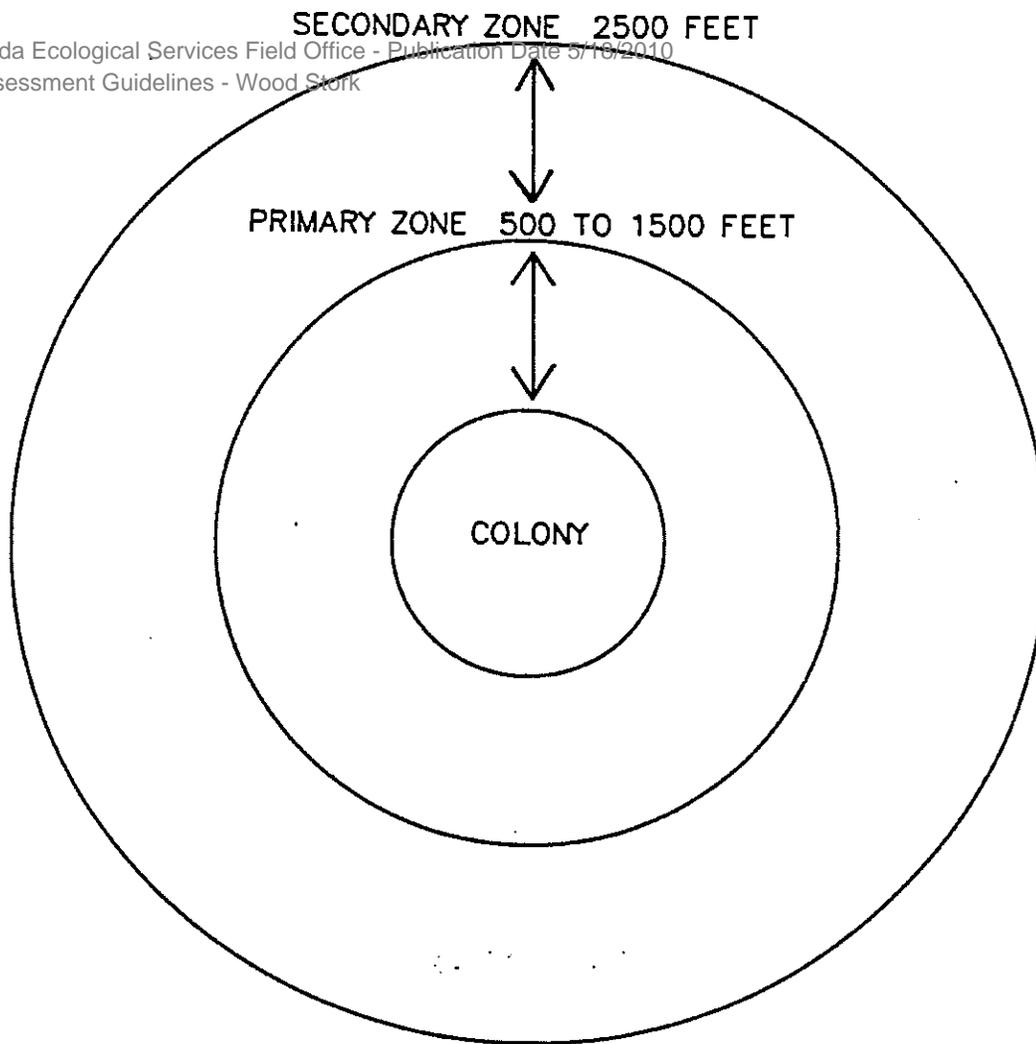
- B. Feeding sites should not be subjected to water management practices that alter traditional water levels or the seasonally normal drying patterns and rates. Sharp rises in water levels are especially disruptive to feeding storks.
- C. The introduction of contaminants, fertilizers, or herbicides into wetlands that contain stork feeding sites should be avoided, especially those compounds that could adversely alter the diversity and numbers of native fishes, or that could substantially change the characteristics of aquatic vegetation. Increase in the density and height of emergent vegetation can degrade or destroy sites as feeding habitat.

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 D. Construction of tall towers (especially with guy wires) within three miles, or high power lines (especially across long stretches of open country) within one mile of major feeding sites should be avoided.

**V. Management zones and guidelines for nesting colonies.**

- A. Primary zone: This is the most critical area, and must be managed according to recommended guidelines to insure that a colony site survives.
  - 1. Size: The primary zone must extend between 1000 and 1500 feet in all directions from the actual colony boundaries when there are no visual or broad aquatic barriers, and never less than 500 feet even when there are strong visual or aquatic barriers. The exact width of the primary zone in each direction from the colony can vary within this range, depending on the amount of visual screen (tall trees) surrounding the colony, the amount of relatively deep, open water between the colony and the nearest human activity, and the nature of the nearest human activity. In general, storks forming new colonies are more tolerant of existing human activity, than they will be of new human activity that begins after the colony has formed.
  - 2. Recommended Restrictions:
    - a. Any of the following activities within the primary zone, at any time of the year, are likely to be detrimental to the colony:
      - (1) Any lumbering or other removal of vegetation, and
      - (2) Any activity that reduces the area, depth, or length of flooding in wetlands under and surrounding the colony, except where periodic (less than annual) water control may be required to maintain the health of the aquatic, woody vegetation, and
      - (3) The construction of any building, roadway, tower, power line, canal, etc.
    - b. The following activities within the primary zone are likely to be detrimental to a colony if they occur when the colony is active:
      - (1) Any unauthorized human entry closer than 300 feet of the colony, and

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- (2) Any increase or irregular pattern in human activity anywhere in the primary zone, and
- (3) Any increase or irregular pattern in activity by animals, including livestock or pets, in the colony, and
- (4) Any aircraft operation closer than 500 feet of the colony.

B. **Secondary Zone:** Restrictions in this zone are needed to minimize disturbances that might impact the primary zone, and to protect essential areas outside of the primary zone. The secondary zone may be used by storks for collecting nesting material, for roosting, loafing, and feeding (especially important to newly fledged young), and may be important as a screen between the colony and areas of relatively intense human activities.

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1. **Size:** The secondary zone should range outward from the primary zone 1000-2000 feet, or to a radius of 2500 feet of the outer edge of the colony.
2. **Recommended Restrictions:**
  - a. Activities in the secondary zone which may be detrimental to nesting wood storks include:
    - (1) Any increase in human activities above the level that existed in the year when the colony first formed, especially when visual screens are lacking, and
    - (2) Any alteration in the area's hydrology that might cause changes in the primary zone, and
    - (3) Any substantial (>20 percent) decrease in the area of wetlands and woods of potential value to storks for roosting and feeding.
  - b. In addition, the probability that low flying storks, or inexperienced, newly-fledged young will strike tall obstructions, requires that high-tension power lines be no closer than one mile (especially across open country or in wetlands) and tall transmission towers no closer than 3 miles from active colonies. Other activities, including busy highways and commercial and residential buildings may be present in limited portions of the secondary zone at the time that a new colony first forms. Although storks may tolerate existing levels of human activities, it is important that these human activities not expand substantially.

## VI. Roosting site guidelines.

The general characteristics and temporary use-patterns of many stork roosting sites limit the number of specific management recommendations that are possible:

- A. Avoid human activities within 500-1000 feet of roost sites during seasons of the year and times of the day when storks may be present. Nocturnal activities in active roosts may be especially disruptive.

- B. Protect the vegetative and hydrological characteristics of the more important roosting sites--those used annually and/or used by flocks of 25 or more storks. Potentially, roosting sites may, some day, become nesting sites.

## VII. Legal Considerations.

### A. Federal Statutes

The U.S. breeding population of the wood stork is protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act). The population was listed as endangered on February 28, 1984 (49 Federal Register 7332); wood storks breeding in Alabama, Florida, Georgia, and South Carolina are protected by the Act.

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Section 9 of the Endangered Species Act of 1973, as amended, states that it is unlawful for any person subject to the jurisdiction of the United States to take (defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.") any listed species anywhere within the United States.

The wood stork is also federally protected by its listing (50 CFR 10.13) under the Migratory Bird Treaty Act (167 U.S.C. 703-711), which prohibits the taking, killing or possession of migratory birds except as permitted.

### B. State Statutes

#### 1. State of Alabama

Section 9-11-232 of Alabama's Fish, Game, and Wildlife regulations curtails the possession, sale, and purchase of wild birds. "Any person, firm, association, or corporation who takes, catches, kills or has in possession at any time, living or dead, any protected wild bird not a game bird or who sells or offers for sale, buys, purchases or offers to buy or purchase any such bird or exchange same for anything of value or who shall sell or expose for sale or buy any part of the plumage, skin, or body of any bird protected by the laws of this state or who shall take or willfully destroy the nests of any wild bird or who shall have such nests or eggs of such birds in his possession, except as otherwise provided by law, shall be guilty of a misdemeanor..."

Section 1 of the Alabama Nongame Species Regulation (Regulation 87-GF-7) includes the wood stork in the list of nongame species covered by paragraph (4). " It shall be unlawful to take, capture, kill, possess, sell, trade for anything of monetary value, or offer to sell or trade for anything of monetary value, the following nongame wildlife species (or any parts or reproductive products of such species) without a scientific collection permit and written permission from the Commissioner, Department of Conservation and Natural Resources,..."

#### 2. State of Florida

Rule 39-4.001 of the Florida Wildlife Code prohibits "taking, attempting to take, pursuing, hunting, molesting, capturing, or killing (collectively defined as "taking"), transporting, storing, serving, buying, selling,

possessing, or wantonly or willingly wasting any wildlife or freshwater fish or their nests, eggs, young, homes, or dens except as specifically provided for in other rules of Chapter 39, Florida Administrative Code.

Rule 39-27.011 of the Florida Wildlife Code prohibits "killing, attempting to kill, or wounding any endangered species." The "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida" dated 1 July 1988, includes the wood stork, listed as "endangered" by the Florida Game and Fresh Water Fish Commission.

### 3. State of Georgia

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Section 27-1-28 of the Conservation and Natural Resources Code states that "Except as otherwise provided by law, rule, or regulation, it shall be unlawful to hunt, trap, fish, take, possess, or transport any nongame species of wildlife..."

Section 27-1-30 states that, "Except as otherwise provided by law or regulation, it shall be unlawful to disturb, mutilate, or destroy the dens, holes, or homes of any wildlife; "

Section 27-3-22 states, in part, "It shall be unlawful for any person to hunt, trap, take, possess, sell, purchase, ship, or transport any hawk, eagle, owl, or any other bird or any part, nest, or egg thereof..."

The wood stork is listed as endangered pursuant to the Endangered Wildlife Act of 1973 (Section 27-3-130 of the Code). Section 391-4-13-.06 of the Rules and Regulations of the Georgia Department of Natural Resources prohibits harassment, capture, sale, killing, or other actions which directly cause the death of animal species protected under the Endangered Wildlife Act. The destruction of habitat of protected species on public lands is also prohibited.

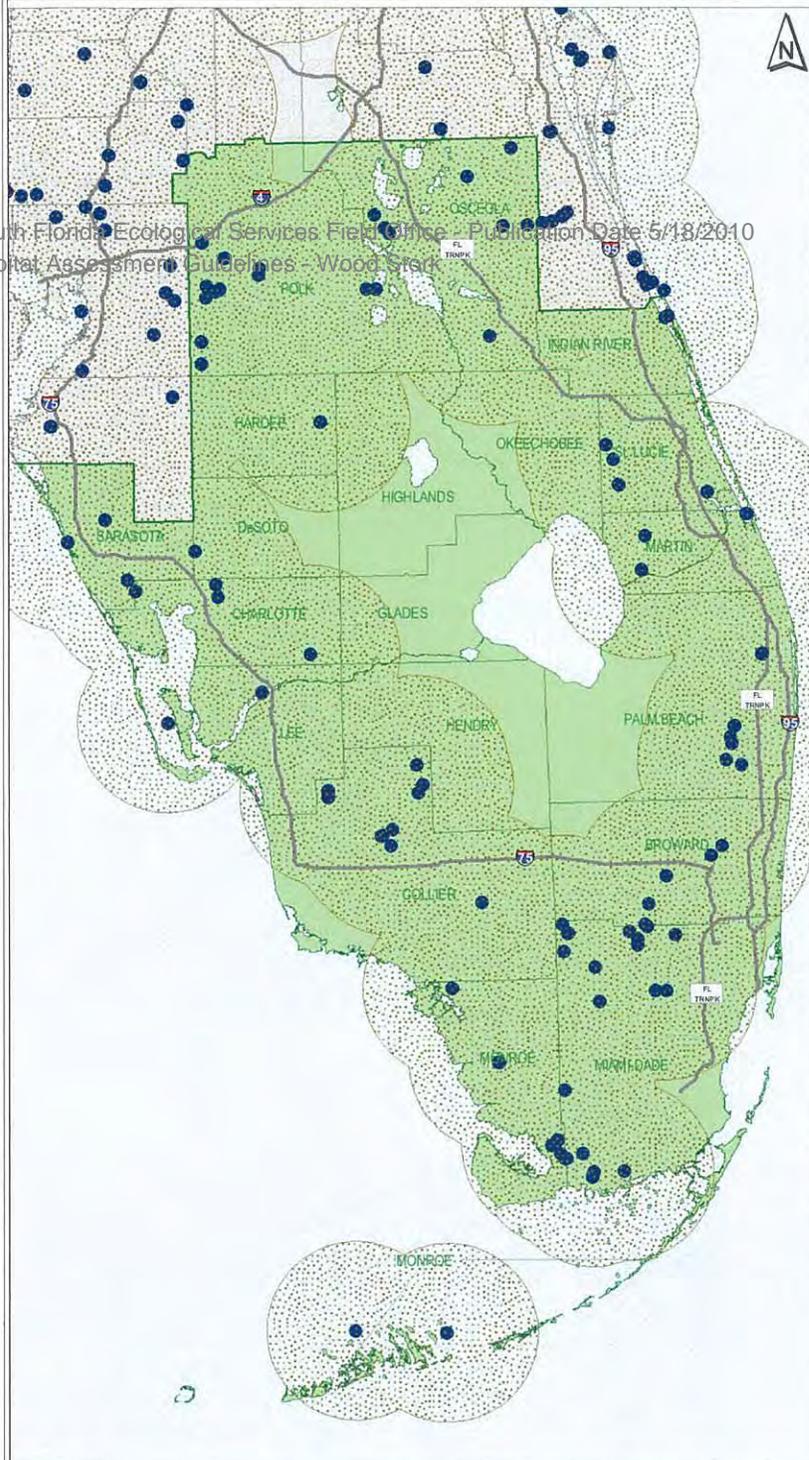
### 4. State of South Carolina

Section 50-15-40 of the South Carolina Nongame and Endangered Species Conservation Act states, "Except as otherwise provided in this chapter, it shall be unlawful for any person to take, possess, transport, export, process, sell, or offer of sale or ship, and for any common or contract carrier knowingly to transport or receive for shipment any species or subspecies of wildlife appearing on any of the following lists: (1) the list of wildlife indigenous to the State, determined to be endangered within the State...(2) the United States' List of Endangered Native Fish and Wildlife... (3) the United States' List of Endangered Foreign Fish and Wildlife ..."



# Wood Stork

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## Nesting Colonies Core Foraging Areas

1999 to 2005

- Colony Location
- Core Foraging Area
- South Florida Service Area



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 South Florida Ecological Services Office  
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## Enclosure 3

**Wood Stork Foraging Analysis:** Excerpts of concepts and procedure as presented by the Service in this appendix may be viewed in detail in any one of our recent Biological Opinions for project related impacts to the wood stork. These documents can be found at the internet website address <http://www.fws.gov/filedownloads/ftp%5verobeach>.

### Foraging Habitat

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Researchers have shown that wood storks forage most efficiently and effectively in habitats where prey densities are high and the water shallow and canopy open enough to hunt successfully (Ogden et al. 1978, Browder 1984, Coulter 1987). Prey availability to wood storks is dependent on a composite variable consisting of density (number or biomass/m<sup>2</sup>) and the vulnerability of the prey items to capture (Gawlik 2002). For wood storks, prey vulnerability appears to be largely controlled by physical access to the foraging site, water depth, the density of submerged vegetation, and the species-specific characteristics of the prey. For example, fish populations may be very dense, but not available (vulnerable) because the water depth is too deep (greater than 30 cm) for storks or the tree canopy at the site is too dense for storks to land. Calm water, about 5-40 cm (2-16 in) in depth, and free of dense aquatic vegetation is ideal (Coulter and Bryan 1993).

Coulter and Bryan's (1993) study suggested that wood storks preferred ponds and marshes, and visited areas with little or no canopy more frequently. Even in foraging sites in swamps, the canopy tended to be sparse. They suggested that open canopies may have contributed to detection of the sites and more importantly may have allowed the storks to negotiate landing more easily than at closed-canopy sites. In their study, the median amount of canopy cover where wood stork foraging was observed was 32 percent. Other researchers (P.C. Frederick, University of Florida, personal communication 2006; J.A. Rodgers, FWC, personal communication 2006) also confirm that wood storks will forage in woodlands, though the woodlands have to be fairly open and vegetation not very dense. Furthermore, the canopies must be open enough for wood storks to take flight quickly to avoid predators.

**Melaleuca-infested Wetlands:** As discussed previously, wetland suitability for wood stork foraging is partially dependent on vegetation density. Melaleuca is a dense-stand growth plant species, effectively producing a closed canopy and dense understory growth pattern that generally limits a site's accessibility to foraging by wading birds. However, O'Hare and Dalrymple (1997) suggest moderate infestations of melaleuca may have little effect on some species' productivity (*i.e.*, amphibians and reptiles) as long as critical abiotic factors such as hydrology remain. They also note as the levels of infestation increase, usage by wetland dependent species decreases. Their studies also showed that the number of fish species present in a wetland system remain stable at certain levels of melaleuca. However, the availability of the prey base for wood storks and other foraging wading birds is reduced by the restriction of access caused from dense and thick exotic vegetation. Wood storks and other wading birds can forage in these systems in open area pockets (*e.g.*, wind blow-downs), provided multiple conditions are optimal (*e.g.*, water depth, prey density). In O'Hare and Dalrymple's study (1997), they identify five cover types (Table 1) and

provide information on the number of wetland dependent bird species and the number of individuals observed within each of these vegetation classes (Table 2).

**Table 1: Vegetation classes**

DMM	75-100 percent mature dense melaleuca coverage
DMS or (SDM)	75-100 percent sapling dense melaleuca coverage
P75	50-75 percent melaleuca coverage
P50	0-50 percent melaleuca coverage
MAR (Marsh)	0-10 percent melaleuca coverage

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The number of wetland-dependent species and individuals observed per cover type is shown below in columns 1, 2, and 3 (Table 2). To develop an estimate of the importance a particular wetland type may have (based on density and aerial coverage by exotic species) to wetland dependent species, we developed a foraging suitability value using observational data from O'Hare and Dalrymple (1997). The Foraging Suitability Value as shown in column 5 (Table 2) is calculated by multiplying the number of species by the number of individuals and dividing this value by the maximum number of species and individuals combined ( $12 \times 132 = 1,584$ ). The results are shown below for each of the cover types in O'Hare and Dalrymple (1997) study (Table 1). As an example, for the P50 cover type, the foraging suitability is calculated by multiplying 11 species times 92 individuals for a total of 1,012. Divide this value by 1,584, which is the maximum number of species times the maximum number of individuals ( $12 \times 132 = 1,584$ ). The resultant is 0.6389 or 64 percent  $11 \times 92 = 1012 / 1584 \times 100 = 63.89$ .

**Table 2: Habitat Foraging Suitability**

Cover Type	# of Species (S)	# of Individuals (I)	S*I	Foraging Suitability
DMM	1	2	2	0.001
DMS	4	10	40	0.025
P75	10	59	590	0.372
P50	11	92	1,012	0.639
MAR	12	132	1,584	1.000

This approach was developed to provide us with a method of assessing wetland acreages and their relationship to prey densities and prey availability. We consider wetland dependent bird use to be a general index of food availability. Based on this assessment we developed an exotic foraging suitability index (Table 3):

**Table 3. Foraging Suitability Percentages**

Exotic Percentage	Foraging Suitability (percent)
Between 0 and 25 percent exotics	100
Between 25 and 50 percent exotics	64
Between 50 and 75 percent exotics	37
Between 75 and 90 percent exotics	3
Between 90 and 100 percent exotics	0

In our assessment however, we consider DMM to represent all exotic species densities between 90 and 100 percent and DMS to represent all exotic species densities between 75 and 90 percent. In our evaluation of a habitat's suitability, the field distinction between an exotic coverage of

90 percent and 100 percent in many situations is not definable, therefore unless otherwise noted in the field reports and in our analysis; we consider a suitability value of 3 percent to represent both densities.

**Hydroperiod:** The hydroperiod of a wetland can affect the prey densities in a wetland. For instance, research on Everglades fish populations using a variety of quantitative sampling techniques (pull traps, throw traps, block nets) have shown that the density of small forage fish increases with hydroperiod. Marshes inundated for less than 120 days of the year average  $\pm 4$  fish/m<sup>2</sup>; whereas, those flooded for more than 340 days of the year average  $\pm 25$  fish/m<sup>2</sup> (Loftus and Eklund 1994, Trexler et al. 2002).

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The Service (1999) described a short hydroperiod wetland as wetlands with between 0 and 180-day inundation, and long hydroperiod wetlands as those with greater than 180-day inundation. However, Trexler et al. (2002) defined short hydroperiod wetlands as systems with less than 300 days per year inundation. In our discussion of hydroperiods, we are considering short hydroperiod wetlands to be those that have an inundation of 180 days or fewer.

The most current information on hydroperiods in south Florida was developed by the SFWMD for evaluation of various restoration projects throughout the Everglades Protection Area. In their modeling efforts, they identified the following seven hydroperiods:

**Table 4. SFWMD Hydroperiod Classes – Everglades Protection Area**

Hydroperiod Class	Days Inundated
Class 1	0-60
Class 2	60-120
Class 3	120-180
Class 4	180-240
Class 5	240-300
Class 6	300-330
Class 7	330-365

**Fish Density per Hydroperiod:** In the Service's assessment of project related impacts to wood storks, the importance of fish data specific to individual hydroperiods is the principle basis of our assessment. In order to determine the fish density per individual hydroperiod, the Service relied on the number of fish per hydroperiod developed from throw-trap data in Trexler et al.'s (2002) study and did not use the electrofishing data also presented in Trexler et al.'s study that defined fish densities in catch per unit effort, which is not hydroperiod specific. Although the throw-trap sampling generally only samples fish 8 cm or less, the Service believes the data can be used as a surrogate representation of all fish, including those larger than 8 cm, which are typically sampled by either electrofishing or block net sampling.

We base this evaluation on the following assessment. Trexler et al.'s (2002) study included electrofishing data targeting fish greater than 8 cm, the data is recorded in catch per unit effort and in general is not hydroperiod specific. However, Trexler et al. (2002) notes in their assessment of the electrofishing data that in general there is a correlation with the number of fish per unit effort per changes in water depth. In literature reviews of electrofishing data by Chick et

al. (1999 and 2004), they note that electrofishing data provides a useful index of the abundance of larger fish in shallow, vegetated habitat, but length, frequency, and species compositional data should be interpreted with caution. Chick et al. (2004) also noted that electrofishing data for large fish (> 8cm) provided a positive correlation of the number of fish per unit effort (abundance) per changes in hydroperiod. The data in general show that as the hydroperiod decreases, the abundance of larger fishes also decreases.

Studies by Turner et al. (1999), Turner and Trexler (1997), and Carlson and Duever (1979) also noted this abundance trend for fish species sampled. We also noted in our assessment of prey consumption by wood storks in the Ogden et al. (1976) study (Figure 4) (discussed below), that the wood stork's general preference is for fish measuring 1.5 cm to 9 cm, although we also acknowledged that wood storks consume fish larger than the limits discussed in the Ogden et al. (1976) study. A similar assessment is reference by Trexler and Goss (2009) noting a diversity of size ranges of prey available for wading birds to consume, with fish ranging from 6 to 8 cm being the preferred prey for larger species of wading birds, particularly wood storks (Kushlan et al. 1975).

Therefore, since data were not available to quantify densities (biomass) of fish larger than 8 cm to a specific hydroperiod, and Ogden et al.'s (1976) study notes that the wood stork's general preference is for fish measuring 1.5 cm to 9 cm, and that empirical data on fish densities per unit effort correlated positively with changes in water depth, we believe that the Trexler et al. (2002) throw-trap data represents a surrogate assessment tool to predict the changes in total fish density and the corresponding biomass per hydroperiod for our wood stork assessment.

In consideration of this assessment, the Service used the data presented in Trexler et al.'s (2002) study on the number of fish per square-meter per hydroperiod for fish 8 cm or less to be applicable for estimating the total biomass per square-meter per hydroperiod for all fish. In determining the biomass of fish per square-meter per hydroperiod, the Service relied on the summary data provided by Turner et al. (1999), which provides an estimated fish biomass of 6.5 g/m<sup>2</sup> for a Class 7 hydroperiod for all fish and used the number of fish per square-meter per hydroperiod from Trexler et al.'s data to extrapolate biomass values per individual hydroperiods.

Trexler et al.'s (2002) studies in the Everglades provided densities, calculated as the square-root of the number of fish per square meter, for only six hydroperiods; although these cover the same range of hydroperiods developed by the SFWMD. Based on the throw-trap data and Trexler et al.'s (2002) hydroperiods, the square-root fish densities are:

**Table 5. Fish Densities per Hydroperiod from Trexler et al. (2002)**

Hydroperiod Class	Days Inundated	Fish Density
Class 1	0-120	2.0
Class 2	120-180	3.0
Class 3	180-240	4.0
Class 4	240-300	4.5
Class 5	300-330	4.8
Class 6	330-365	5.0

Trexler et al.'s (2002) fish densities are provided as the square root of the number of fish per square meter. For our assessment, we squared these numbers to provide fish per square meter, a simpler calculation when other prey density factors are included in our evaluation of adverse effects to listed species from the proposed action. We also extrapolated the densities over seven hydroperiods, which is the same number of hydroperiods characterized by the SFWMD. For example, Trexler et al.'s (2002) square-root density of a Class 2 wetland with three fish would equate to a SFWMD Model Class 3 wetland with nine fish. Based on the above discussion, the following mean annual fish densities were extrapolated to the seven SFWMD Model hydroperiods:

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Table 6. Extrapolated Fish Densities for SFWMD Hydroperiods

Hydroperiod Class	Days Inundated	Extrapolated Fish Density
Class 1	0-60	2 fish/m <sup>2</sup>
Class 2	60-120	4 fish/m <sup>2</sup>
Class 3	120-180	9 fish/m <sup>2</sup>
Class 4	180-240	16 fish/m <sup>2</sup>
Class 5	240-300	20 fish/m <sup>2</sup>
Class 6	300-330	23 fish/m <sup>2</sup>
Class 7	330-365	25 fish/m <sup>2</sup>

**Fish Biomass per Hydroperiod:** A more important parameter than fish per square-meter in defining fish densities is the biomass these fish provide. In the ENP and WCA-3, based on studies by Turner et al. (1999), Turner and Trexler (1997), and Carlson and Duever (1979), the standing stock (biomass) of large and small fishes combined in unenriched Class 5 and 6 hydroperiod wetlands averaged between 5.5 to 6.5 grams-wet-mass/m<sup>2</sup>. In these studies, the data was provided in g/m<sup>2</sup> dry-weight and was converted to g/m<sup>2</sup> wet-weight following the procedures referenced in Kushlan et al. (1986) and also referenced in Turner et al. (1999). The fish density data provided in Turner et al. (1999) included both data from samples representing fish 8 cm or smaller and fish larger than 8 cm and included summaries of Turner and Trexler (1997) data, Carlson and Duever (1979) data, and Loftus and Eklund (1994) data. These data sets also reflected a 0.6 g/m<sup>2</sup> dry-weight correction estimate for fish greater than 8 cm based on Turner et al.'s (1999) block-net rotenone samples.

Relating this information to the hydroperiod classes developed by the SFWMD, we estimated the mean annual biomass densities per hydroperiod. For our assessment, we considered Class 7 hydroperiod wetlands based on Turner et al. (1999) and Trexler et al. (2002) studies to have a mean annual biomass of 6.5 grams-wet-mass/m<sup>2</sup> and to be composed of 25 fish/m<sup>2</sup>. The remaining biomass weights per hydroperiod were determined as a direct proportion of the number of fish per total weight of fish for a Class 7 hydroperiod (6.5 grams divided by 25 fish equals 0.26 grams per fish).

For example, given that a Class 3 hydroperiod has a mean annual fish density of 9 fish/m<sup>2</sup>, with an average weight of 0.26 grams per fish, the biomass of a Class 3 hydroperiod would be 2.3 grams/m<sup>2</sup> (9\*0.26 = 2.3). Based on the above discussion, the biomass per hydroperiod class is:

**Table 7. Extrapolated Mean Annual Fish Biomass for SFWMD Hydroperiods**

Hydroperiod Class	Days Inundated	Extrapolated Fish Biomass
Class 1	0-60	0.5 gram/m <sup>2</sup>
Class 2	60-120	1.0 gram/m <sup>2</sup>
Class 3	120-180	2.3 grams/m <sup>2</sup>
Class 4	180-240	4.2 grams/m <sup>2</sup>
Class 5	240-300	5.2 grams/m <sup>2</sup>
Class 6	300-330	6.0 grams/m <sup>2</sup>
Class 7	330-365	6.5 grams/m <sup>2</sup>

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**Wood stork suitable prey size:** Wood storks are highly selective in their feeding habits and in studies on fish consumed by wood storks, five species of fish comprised over 85 percent of the number and 84 percent of the biomass of over 3,000 prey items collected from adult and nestling wood storks (Ogden et al. 1976). Table 8 lists the fish species consumed by wood storks in Ogden et al. (1976).

**Table 8. Primary Fish Species consumed by Wood Storks from Ogden et al. (1976)**

Common name	Scientific name	Percent Individuals	Percent Biomass
Sunfishes	<i>Centrarchidae</i>	14	44
Yellow bullhead	<i>Italurus natalis</i>	2	12
Marsh killifish	<i>Fundulus confluentus</i>	18	11
Flagfish	<i>Jordenella floridae</i>	32	7
Sailfin molly	<i>Poecilia latipinna</i>	20	11

These species were also observed to be consumed in much greater proportions than they occur at feeding sites, and abundant smaller species [e.g., mosquitofish (*Gambusia affinis*), least killifish (*Heterandria formosa*), bluefin killifish (*Lucania goodei*)] are under-represented, which the researchers believed was probably because their small size did not elicit a bill-snapping reflex in these tactile feeders (Coulter et al. 1999). Their studies also showed that, in addition to selecting larger species of fish, wood storks consumed individuals that are significantly larger (>3.5 cm) than the mean size available (2.5 cm), and many were greater than 1-year old (Ogden et al. 1976, Coulter et al. 1999). However, Ogden et al. (1976) also found that wood storks most likely consumed fish that were between 1.5 and 9.0 cm in length (Figure 4 in Ogden et al. 1976).

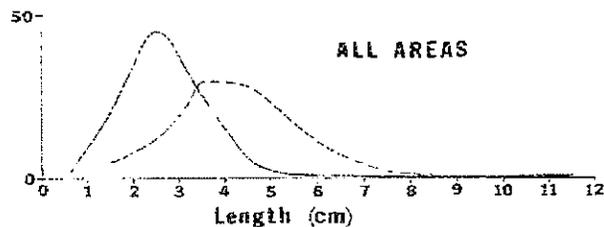


FIGURE 4. Length frequency distribution of fish available to and consumed by Wood Storks in different habitats.

In Ogden et al.'s (1976) Figure 4, the dotted line is the distribution of fish consumed and the solid line is the available fish. Straight interpretation of the area under the dotted line curve

represents the size classes of fish most likely consumed by wood storks and is the basis of our determination of the amount of biomass that is within the size range of fish most likely consumed by wood storks, which in this example is a range size of 1.5 to 9.0 cm in length.

**Wood stork suitable prey base (biomass per hydroperiod):** To estimate that fraction of the available fish biomass that might be consumed by wood storks, the following analysis was conducted. Trexler et al.'s (2002) 2-year throw trap data of absolute and relative fish abundance per hydroperiod distributed across 20 study sites in the ENP and the WCAs was considered to be representative of the Everglades fish assemblage available to wood storks (n = 37,718 specimens of 33 species). Although Trexler et al.'s (2002) data was based on throw-trap data and representative of fish 8 cm or smaller, the Service believes the data set can be used to predict the biomass/m<sup>2</sup> for total fish (those both smaller and larger than 8 cm). This approach is also supported, based on our assessment of prey consumption by wood storks in Ogden et al.'s (1976) study (Figure 4), that the wood storks general preference is for fish measuring 1.5 cm to 9 cm and is generally inclusive of Trexler et al.'s (2002) throw-trap data of fish 8 cm or smaller.

To estimate the fraction of the fish biomass that might be consumed by wood storks, the Service, using Trexler et al.'s (2002) throw-trap data set, determined the mean biomass of each fish species that fell within the wood stork prey size limits of 1.5 to 9.0 cm. The mean biomass of each fish species was estimated from the length and wet mass relationships for Everglades' ichthyofauna developed by Kushlan et al. (1986). The proportion of each species that was outside of this prey length and biomass range was estimated using the species mean and variance provided in Table 1 in Kushlan et al. (1986). These biomass estimates assumed the length and mass distributions of each species was normally distributed and the fish biomass could be estimated by eliminating that portion of each species outside of this size range. These biomass estimates of available fish prey were then standardized to a sum of 6.5 g/m<sup>2</sup> for Class 7 hydroperiod wetlands (Service 2009).

For example, Kushlan et al. (1986) lists the warmouth (*Lepomis gulosus*) with a mean average biomass of 36.76 g. In fish samples collected by Trexler et al. (2002), this species accounted for 0.048 percent ( $18/37,715=0.000477$ ) of the Everglades freshwater ichthyofauna. Based on an average biomass of 36.76 g (Kushlan et al. 1986), the 0.048 percent representation from Trexler et al. (2002) is equivalent to an average biomass of 1.75 g ( $36.76*0.048$ ) or 6.57 percent ( $1.75/26.715$ ) of the estimated average biomass (26.715 g) of Trexler et al.'s (2002) samples (Service 2009).

Standardizing these data to a sample size of 6.5 g/m<sup>2</sup>, the warmouth biomass for long hydroperiod wetlands would be about 0.427 g (Service 2009). However, the size frequency distribution (assumed normal) for warmouth (Kushlan et al. 1986) indicate 48 percent are too large for wood storks and 0.6 percent are too small (outside the 1.5 cm to 9 cm size range most likely consumed), so the warmouth biomass within the wood stork's most likely consumed size range is only 0.208 g ( $0.427*(0.48+0.006)=0.2075$ ) in a 6.5 g/m<sup>2</sup> sample. Using this approach summed over all species in long hydroperiod wetlands, only 3.685 g/m<sup>2</sup> of the 6.5 g/m<sup>2</sup> sample consists of fish within the size range likely consumed by wood storks or about 57 percent ( $3.685/6.5*100=56.7$ ) of the total biomass available.

An alternative approach to estimate the available biomass is based on Ogden et al. (1976). In their study (Table 8), the sunfishes and four other species that accounted for 84 percent of the biomass eaten by wood storks totaled 2.522 g of the 6.5 g/m<sup>2</sup> sample (Service 2009). Adding the remaining 16 percent from other species in the sample, the total biomass would suggest that 2.97 g of a 6.5 g/m<sup>2</sup> sample are most likely to be consumed by wood storks or about 45.7 percent (2.97/6.5=0.4569)

The mean of these two estimates is 3.33g/m<sup>2</sup> for long hydroperiod wetlands (3.685 + 2.97 = 6.655/ 2 = 3.33). This proportion of available fish prey of a suitable size (3.33 g/m<sup>2</sup> / 6.5 g/m<sup>2</sup> = 0.51 or 51 percent) was then multiplied by the total fish biomass in each hydroperiod class to provide an estimate of the total biomass of a hydroperiod that is the appropriate size and species composition most likely consumed by wood storks.

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As an example, a Class 3 SFWMD model hydroperiod wetland with a biomass of 2.3 grams/m<sup>2</sup>, adjusted by 51 percent for appropriate size and species composition, provides an available biomass of 1.196 grams/m<sup>2</sup>. Following this approach, the biomass per hydroperiod potentially available to predation by wood storks based on size and species composition is:

**Table 9. Wood Stork Suitable Prey Base (fish biomass per hydroperiod)**

Hydroperiod Class	Days Inundated	Fish Biomass
Class 1	0-60	0.26 gram/m <sup>2</sup>
Class 2	60-120	0.52 gram/m <sup>2</sup>
Class 3	120-180	1.196 grams/m <sup>2</sup>
Class 4	180-240	2.184 grams/m <sup>2</sup>
Class 5	240-300	2.704 grams/m <sup>2</sup>
Class 6	300-330	3.12 grams/m <sup>2</sup>
Class 7	330-365	3.38 grams/m <sup>2</sup>

**Wood Stork-Wading Bird Prey Consumption Competition:** In 2006, (Service 2006), the Service developed an assessment approach that provided a foraging efficiency estimate that 55 percent of the available biomass was actually consumed by wood storks. Since the implementation of this assessment approach, the Service has received comments from various sources concerning the Service's understanding of Fleming et al.'s (1994) assessment of prey base consumed by wood storks versus prey base assumed available to wood stork and the factors included in the 90 percent prey reduction value.

In our original assessment, we noted that, "*Fleming et al. (1994) provided an estimate of 10 percent of the total biomass in their studies of wood stork foraging as the amount that is actually consumed by the storks. However, the Fleming et al. (1994) estimate also includes a second factor, the suitability of the foraging site for wood storks, a factor that we have calculated separately. In their assessment, these two factors accounted for a 90 percent reduction in the biomass actually consumed by the storks. We consider these two factors as equally important and are treated as equal components in the 90 percent reduction; therefore, we consider each factor to represent 45 percent of the reduction. In consideration of this approach, Fleming et al.'s (1994) estimate that 10 percent of the biomass would actually be consumed by the storks would be added to the 45 percent value for an estimate that 55 percent (10 percent plus the remaining 45 percent) of the available biomass would actually be consumed by the storks and is the factor we believe represents the amount of the prey base that is actually consumed by the stork.*"

In a follow-up review of Fleming et al.'s (1994) report, we noted that the 10 percent reference is to prey available to wood storks, not prey consumed by wood storks. We also noted the 90 percent reduction also includes an assessment of prey size, an assessment of prey available by water level (hydroperiod), an assessment of suitability of habitat for foraging (openness), and an assessment for competition with other species, not just the two factors considered originally by the Service (suitability and competition). Therefore, in re-evaluating of our approach, we identified four factors in the 90 percent biomass reduction and not two as we previously considered. We believe these four factors are represented as equal proportions of the 90 percent reduction, which corresponds to an equal split of 22.5 percent for each factor. Since we have accounted previously for three of these factors in our approach (prey size, habitat suitability, and hydroperiod) and they are treated separately in our assessment, we consider a more appropriate foraging efficiency to represent the original 10 percent and the remaining 22.5 percent from the 90 percent reduction discussed above. Following this revised assessment, our competition factor would be 32.5 percent, not the initial estimate of 55 percent.

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Other comments reference the methodology's lack of sensitivity to limiting factors, i.e., is there sufficient habitat available across all hydroperiods during critical life stages of wood stork nesting and does this approach over emphasize the foraging biomass of long hydroperiod wetlands with a corresponding under valuation of short hydroperiod wetlands. The Service is aware of these questions and is examining alternative ways to assess these concerns. However, until further research is generated to refine our approach, we continue to support the assessment tool as outlined.

Following this approach, Table 10 has been adjusted to reflect the competition factor and represents the amount of biomass consumed by wood storks and is the basis of our effects assessments ( Class 1 hydroperiod with a biomass 0.26 g, multiplied by 0.325, results in a value of 0.08 g [0.25\*.325=0.08]) (Table 10).

**Table 10 Actual Biomass Consumed by Wood Storks**

Hydroperiod Class	Days Inundated	Fish Biomass
Class 1	0-60	0.08 gram/m <sup>2</sup>
Class 2	60-120	0.17 gram/m <sup>2</sup>
Class 3	120-180	0.39 grams/m <sup>2</sup>
Class 4	180-240	0.71 grams/m <sup>2</sup>
Class 5	240-300	0.88 grams/m <sup>2</sup>
Class 6	300-330	1.01 grams/m <sup>2</sup>
Class 7	330-365	1.10 grams/m <sup>2</sup>

**Sample Project of Biomass Calculations and Corresponding Concurrence Determination**

***Example 1:***

An applicant is proposing to construct a residential development with unavoidable impacts to 5 acres of wetlands and is proposing to restore and preserve 3 acres of wetlands onsite. Data on the onsite wetlands classified these systems as exotic impacted wetlands with greater than 50

percent but less than 75 percent exotics (Table 3) with an average hydroperiod of 120-180 days of inundation.

The equation to calculate the biomass lost is: The number of acres, converted to square-meters, times the amount of actual biomass consumed by the wood stork (Table 10), times the exotic foraging suitability index (Table 3), equals the amount of grams lost, which is converted to kg.

Biomass lost  $(5 * 4,047 * 0.39 \text{ (Table 10)} * 0.37 \text{ (Table 3)}) = 2,919.9 \text{ grams or } 2.92 \text{ kg}$

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In the example provided, the 5 acres of wetlands, converted to square-meters (1 acre = 4,047 m<sup>2</sup>) would provide 2.9 kg of biomass  $(5 * 4,047 * 0.39 \text{ (Table 10)} * 0.37 \text{ (Table 3)}) = 2,919.9 \text{ grams or } 2.9 \text{ kg}$ , which would be lost from development.

The equation to calculate the biomass from the preserve is the same, except two calculations are needed, one for the existing biomass available and one for the biomass available after restoration.

Biomass Pre:  $(3 * 4,047 * 0.39 \text{ (Table 10)} * 0.37 \text{ (Table 3)}) = 1,751.95 \text{ grams or } 1.75 \text{ kg}$

Biomass Post:  $(3 * 4,047 * 0.39 \text{ (Table 10)} * 1 \text{ (Table 3)}) = 4,734.99 \text{ grams or } 4.74 \text{ kg}$

Net increase:  $4.74 \text{ kg} - 1.75 \text{ kg} = 2.98 \text{ kg Compensation Site}$

Project Site Balance  $2.98 \text{ kg} - 2.92 \text{ kg} = 0.07 \text{ kg}$

The compensation proposed is 3 acres, which is within the same hydroperiod and has the same level of exotics. Following the calculations for the 5 acres, the 3 acres in its current habitat state, provides 1.75 kg  $(3 * 4,047 * 0.39 \text{ (Table 10)} * 0.37 \text{ (Table 3)}) = 1,751.95 \text{ grams or } 1.75 \text{ kg}$  and following restoration provides 4.74 kg  $(3 * 4,047 * 0.39 \text{ (Table 10)} * 1 \text{ (Table 3)}) = 4,734.99 \text{ grams or } 4.74 \text{ kg}$ , a net increase in biomass of 2.98 kg  $(4.74 - 1.75 = 2.98)$ .

Example 1: 5 acre wetland loss, 3 acre wetland enhanced – same hydroperiod - NLAA

Hydroperiod	Existing Footprint		On-site Preserve Area				Net Change*	
			Pre Enhancement		Post Enhancement			
	Acres	Kgrams	Acres	Kgrams	Acres	Kgrams	Acres	Kgrams
Class 1 - 0 to 60 Days								
Class 2 - 60 to 120 Days								
Class 3 - 120 to 180 Days	5	2.92	3	1.75	3	4.74	(5)	0.07
Class 4 - 180 to 240 Days								
Class 5 - 240 to 300 Days								
Class 6 - 300 to 330 Days								
Class 7 - 330 to 365 days								
<b>TOTAL</b>	<b>5</b>	<b>2.92</b>	<b>3</b>	<b>1.75</b>	<b>3</b>	<b>4.74</b>	<b>(5)</b>	<b>0.07</b>

\*Since the net increase in biomass from the restoration provides 2.98 kg and the loss is 2.92 kg, there is a positive outcome (4.74-1.75-2.92=0.07) in the same hydroperiod and Service concurrence with a NLAA is appropriate.

**Example 2:**

In the above example, if the onsite preserve wetlands were a class 4 hydroperiod, which has a value of 0.71. grams/m<sup>2</sup> instead of a class 3 hydroperiod with a 0.39 grams/m<sup>2</sup> [Table 10]), there would be a loss of 2.92 kg of short hydroperiod wetlands (as above) and a net gain of 8.62 kg of long-hydroperiod wetlands.

Biomass lost: (5\*4,047\*0.39 (Table 10)\*0.37 (Table 3)=2,919.9 grams or 2.92 kg)

The current habitat state of the preserve provides 3.19 kg (3\*4,047\*0.71 (Table 10)\*0.37 (Table 3)=3,189.44 grams or 3.19 kg) and following restoration the preserve provides 8.62 kg (3\*4,047\*0.71 (Table 10)\*1 (Table 3)= 8,620.11 grams or 8.62 kg, thus providing a net increase in class 4 hydroperiod biomass of 5.43 kg (8.62-3.19=5.43).

Biomass Pre: (3\*4,047\*0.71 (Table 10)\*0.37 (Table 3) = 3,189.44 grams or 3.19 kg)

Biomass Post: (3\*4,047\*0.71 (Table 10)\*1 (Table 3)=8,620.11 grams or 8.62 kg)

Net increase: 8.62 kg-3.19 kg = 5.43 kg

Project Site Balance 5.43 kg- 2.92 kg = 2.51 kg

Example 2: 5 acre wetland loss, 3 acre wetland enhanced – different hydroperiod – May Affect

Hydroperiod	Existing Footprint		On-site Preserve Area				Net Change*	
			Pre Enhancement		Post Enhancement			
	Acres	Kgrams	Acres	Kgrams	Acres	Kgrams	Acres	Kgrams
Class 1 - 0 to 60 Days								
Class 2 - 60 to 120 Days								
Class 3 - 120 to 180 Days		2.92					(5)	-2.92
Class 4 - 180 to 240 Days			3	3.19	3	8.62	0	5.43
Class 5 - 240 to 300 Days								
Class 6 - 300 to 330 Days								
Class 7 - 330 to 365 days								
<b>TOTAL</b>	<b>5</b>	<b>2.92</b>	<b>3</b>	<b>3.19</b>	<b>3</b>	<b>8.62</b>	<b>(5)</b>	<b>2.51</b>

In this second example, even though there is an overall increase in biomass, the biomass loss is a different hydroperiod than the biomass gain from restoration, therefore, the Service could not concur with a NLAA and further coordination with the Service is appropriate.

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## Panther Habitat Assessment Methodology

September 24, 2012

The Service developed the panther habitat assessment methodology in 2006 and updated the methodology in 2009. To evaluate project effects to the Florida panther, the Service considers the contributions the project lands provide to the Florida panther, recognizing not all habitats provide the same functional value. Kautz et al. (2006) also recognized not all habitats provide the same habitat value to the Florida panther and developed cost surface values for various habitat types, based on use by and presence in home ranges of panthers. The FWC (2006), using a similar concept, assigned likely use values of habitats to dispersing panthers. The FWC's habitats were assigned habitat suitability ranks between 0 and 10, with higher values indicating higher likely use by dispersing panthers.

The Service chose to evaluate project effects to the Florida panther through a similar process. We incorporated many of the same habitat types referenced in Kautz et al. (2006) and FWC (2006) with several adjustments to the assigned habitat use values reflecting consolidation of similar types of habitats and the inclusion of Comprehensive Everglades Restoration Plan (CERP) water treatment and retention areas. We used these values (Tables PM1 and PM2) as the basis for habitat evaluations and the recommended compensation values to minimize project effects to the Florida panther, as discussed below.

Base ratio: To develop a base ratio that will provide for the protection of sufficient acreage of primary zone equivalent lands for a population of 90 panthers (31,923 acres per panther [Kautz et al. (2006)]) from the acreage of primary zone equivalent non-urban lands at risk, we developed the following approach.

The available primary zone equivalent lands at the time the methodology was developed (2006) were estimated at 3,276,563 acres (ac) (see Tables PM3 and PM4), with 2,073,865 ac of primary zone equivalent, non-urban lands preserved. The remaining non-urban, at-risk, private lands were estimated at 1,202,698 ac of primary zone equivalent lands. To meet the protected and managed lands threshold for a population of 90 panthers, an additional 799,205 ac of primary zone equivalent lands are needed. The base ratio is determined by dividing the primary equivalents of at-risk habitat to be secured (799,205 ac) by the result of the acres of at-risk habitat in the primary zone (610,935 ac) times the value of the primary zone (1); plus the at-risk acres in the dispersal zone (27,883 ac) times the value of the dispersal zone (1); plus the at-risk acres in the secondary zone (503,481 ac) times the value of the secondary zone (0.69); plus the at-risk acres in the other zone (655,996 ac) times the value of the other zone (0.33); minus the at-risk ac of habitat to be protected (799,205 ac). The results of this formula provide a base value of 1.98.

$$799,205 / [(610,935 \times 1.0) + (27,883 \times 1) + (503,481 \times 0.69) + (655,996 \times 0.33)] - 799,205 = 1.98$$

In evaluating habitat losses in the consultation area, we used an estimate of 0.8 percent loss of habitat per year (Kautz, personal communication, 2004) to predict the amount of habitat loss anticipated in south Florida during the next 5 years (*i.e.*, 6,000 hectares/year [14,820 ac/ year]). We conservatively assume that we would be aware of half of the development projects that occur within the primary zone and the secondary zone combined. We further assume that 50 percent of these projects would be located in the primary zone and 50 percent would be located in the secondary zone. Based on these assumptions, we estimated that over a 5-year period about 37,000 ac (primary zone

equivalent of 31,265 ac) would be developed without Federal review. To reflect this loss of habitat we adjusted the base acreage density of 31,923 acres per panther (Kautz et al. [2006]) to a new base density of 32,275 ac per panther, an increase of 352 acres ( $31,265/90=352+31,923=32,275$ ). This adjustment results in a base ratio change from 1.98 to 2.23.

The Service realizes habitat losses from individual single-family residential developments will collectively compromise the Service's landscape scale effort to secure sufficient lands for a population of 90 panthers. We believe that, on an individual basis, single-family residential developments by individual lot owners on lots no larger than 5.0 ac will not result in take of panthers on a lot-by-lot basis; however, collectively these losses may affect the panther. Panthers are a wide-ranging species, and individually a 5.0-acre habitat change will not have a measurable impact. Compensation for such small-scale losses on a lot-by-lot basis is unlikely to result in meaningful conservation benefits for the panther versus the more holistic landscape level conservation strategy used in our habitat assessment methodology. To account for these losses, based on the 0.08 percent annual loss referenced by Kautz (2004), we estimated the development of vacant lands (2003) in northern Golden Gate Estates and Lehigh Acres in Collier and Lee counties, respectively, at about 2,590 ac per year per development, or about 12,950 ac per development over a 5-year period. As above, to reflect this loss we adjusted the revised base acreage density to 32,563 ac, an increase of 288 acres ( $25,900/90=288+352+31,923=32,563$ ). To account for this loss, we further adjusted the base value from 2.23 to 2.48.

There is also a need for road crossings in strategic locations and we believe there are projects that may not have habitat loss factors but will have traffic generation factors. The Service considers increases in traffic as an indirect effect from a project, which can contribute to panther mortality. For assessment purposes, since our habitat methodology does not provide a mechanism to address this type of effect directly, we are providing a habitat surrogate of 500 ac per year of habitat loss for these types of projects, with a not to exceed value of 2,500 ac over the 5-year period. The 500 ac per year is based on average cost of FDOT bridge/box culvert crossings (3.6 to 5 million dollars) converted to acreage equivalent costs (8,500/ac). This 2,500 acre habitat surrogate adds an additional 28 acres per panther to the above adjusted base for a new base of 32,951 ac per panther ( $2,500/90=28+288+352+31,923=32,951$ ). Therefore, we have added another 0.02 to the base ratio to address traffic impacts, which could provide an incentive to implement crossings in key locations. Following the same approach shown above, we adjusted the base ratio from 2.48 to 2.5. The Service intends to re-evaluate this base ratio periodically and adjust as needed to make sure all adverse effects are adequately ameliorated and offset as required under section 7 of the act and to achieve the Service's landscape scale effort for the Florida panther.

The Service uses a very conservative density of panthers per area of habitat to calculate the compensation ratio for impacts south of the Caloosahatchee River. Specifically, the Service relied on the low estimate in the range presented in Kautz et al. (2006) to reach its factor of 2.5. This low estimate density value was calculated by dividing the documented number of panthers in 2000, or 62 panthers, by an estimate of the habitat in the primary zone that was most consistently occupied by panthers from 1981 to 2000. As previously mentioned, it is clear the

panther population south of the river has increased notably since 2000, in 2001 = 78 panthers; in 2002 = 80; in 2003 = 87; in 2004 = 78; in 2005 = 82; in 2006 = 97; in 2007 = 117; and 2008=104. In 2007 more panthers were documented in south Florida than have been documented since current verified estimates have been collected. Furthermore, none of the panthers recorded south of the Caloosahatchee River lives exclusively outside of the primary zone, although some do venture outside of it on occasion (McBride, personal communication, 2007).

The average population size south of the Caloosahatchee River over the past 7 years is 86. If we were to use this number instead of 62 to calculate the compensation ratio and to use the entire acreage of the primary zone as the denominator, the revised compensation ratio requirement would be 0.32 ac protected for every acre developed. Furthermore, if we excluded the “other zone” altogether from the analysis, the ratio would be 1.01, still lower than the Service’s current ratio. We believe this conservative approach is warranted because of the inherent importance of habitat protection to panther conservation.

Landscape multiplier: As stated in the above section on primary zone equivalent lands, the location of a project in the landscape of the core area of the Florida panther is important. As we have previously discussed, lands in the primary and dispersal zones are of the highest importance in a landscape context to the Florida panther, with lands in the secondary zone of less importance, and lands in the other zone of lower importance. These zones affect the level of compensation the Service believes is necessary to minimize a project’s effects to Florida panther habitat. Table PM5 provides the landscape compensation multipliers for various compensation scenarios. As an example, if a project is in the other zone and compensation is proposed in the primary zone, a primary zone equivalent multiplier of 0.33 is applied to the PHUs (see discussion below) developed for the project. If the project is in the secondary zone and compensation is in the primary zone, then a primary zone equivalent multiplier of 0.69 is applied to the PHUs developed for the project.

Panther Habitat Units – habitat functional value: Prior to applying the base ratio and landscape multipliers discussed above, we evaluate the project site and assign functional values to the habitats present. This is done by assigning each habitat type on-site a habitat suitability value from the habitats shown in Tables PM1 and PM2. The habitat suitability value for each habitat type is then multiplied by the acreage of that habitat type resulting in a number representing PHUs. These PHUs are summed for a site total, which is used as a measurement of the functional value the habitat provides to the Florida panthers. This process is also followed for the compensation sites.

As of January 2005, the Service has been using a panther habitat suitability ranking system based in part on methods in publications by Swanson et al. (2005) and Kautz et al. (2006) and adjusted by the Service to consolidate similar types of habitats and to include CERP water treatment and retention areas located in the panther’s range (Table PM1). Since the implementation of this ranking system, the Service has received two additional, published habitat assessment studies (Cox et al. [2006] and Land et al. [2008]) that further assess habitat usage by the Florida panther. As it is the Service’s policy to incorporate the most current peer-reviewed science into our assessment

and review of project effects on the Florida panther, we have revised the current habitat suitability ranking system.

To revise these values, the Service, in coordination with FWC, examined the habitat ranking values in the two new papers referenced above and Kautz et al. (2006) publication and developed a spreadsheet. The spreadsheet was developed to: (1) compare the results of each of these published analyses; and (2) provide a habitat ranking system for each of the assessments. On the first page of the spreadsheet, labeled “panther habitat selection analysis - habitat papers comparison,” we summarized the types of analyses performed as to whether it was second order (selection of a home range with a large study area) or third order (selection of habitats within a home range). For each of these analyses, we then listed the habitat types reported in each paper and their order of selection by panthers (Table PM6). We used the cost surface scores and the rank differences from the Kautz et al. (2006) analyses as the selection order and for a measure of statistical differences among the habitat types. Selected habitat types are represented as bold black numbers and avoided habitats are bold red numbers. Habitats that were neither selected nor avoided are shown as normal font black numbers. Ranks with the same letter are not different from each other. Results from the Cox et al. (2006) and Land et al. (2008) papers using Euclidean analyses are shown in a similar fashion.

On the second page of the spreadsheet, labeled “summary of ranking values,” we ranked the habitat types on a scale from 0 to 10 according the results from each study and professional judgment (Table PM7). We used our original ranking for the Kautz et al. analyses (with the ranking scale reversed such that the best habitat received a “10” and the lowest quality habitat was “0”).

We developed similar rankings for the habitat analyses reported in Cox et al. (2006) and Land et al. (2008). Selected habitats fell in the range of 7 to 10; habitats that were used in proportion to availability were ranked from 4 to 6; and habitats that were avoided by panthers were ranked from 0 to 3. Ranks for habitats within each of the 3 outcomes began at the top of each of the ranges (selected = 10, used in proportion to availability = 6, avoided = 3). Some shifting of the ranks occurred based on the letter-coded statistical ranking. For instance, under *Land GPS Euclidean third order* both upland and wetland forests were selected by panthers and were not statistically different from each other (note the ranking of a and ab for upland and wetland forest, respectively). However, wetland forest and dry prairie also were not significantly different from each other. To show these relationships, we ranked upland forest as a 10, wetland forest as a 9, and we increased dry prairie from a 6 (top of the neither selected nor avoided ranking) to a 7 to reflect the interplay between dry prairie and wetland forest based on professional judgment.

To generate a new ranking of panther habitats for use as a habitat assessment measure, we simply averaged the ranks of the six different analyses presented in the spreadsheet to the first decimal place. Half of these results were second order habitat analyses (Kautz et al. compositional, Kautz et al. Euclidean and Cox et al. Euclidean) and the other half were third order analyses (Cox et al. Euclidean; Land et al. VHF Euclidean; Land et al. GPS Euclidean).

In our assessment, we noted several outlier habitat rankings that, based on our understanding of habitat needs of the Florida panther and our concern for human/panther interactions, appear to provide conflicting values. These habitats and their associated rankings are: (1) barren/disturbed – 5.2; (2) urban – 5.0; (3) open water – 3.3; and (4) coastal wetlands – 1.0. We believe adjustments are warranted for these four categories and our adjusted values are based on the following:

Barren/disturbed: Barren/disturbed lands may include many temporary changes to land use, such as crop rotation and prescribed fires that likely have little impact on the value to panthers. Areas disturbed by human impact on a longer-term basis (*e.g.*, parking of equipment and material storage areas) have chronic effects on panthers that we judge decrease the value of these lands for panthers. Barren/disturbed lands include disturbed lands (Florida land use and cover classification system [FLUCCS] 740) and spoil areas (FLUCCS 733). Based on the above reasons, we assigned barren/disturbed land a value of 3.

Urban: Panther habitat models typically include urban in the “other” category that was neither avoided nor selected by panthers. Highly urbanized areas are not found in the panther core area that was used in assessing habitat use, as panthers have already selected against these land use types by reducing their range. However, urbanizing areas in more rural settings may appear in the assessment of habitat use. Nevertheless, we believe that potential human/panther interactions are important conflict factors to consider as well. Therefore, we assigned both developed rural and highly urbanized areas a value of 0.

Open water: Open water has been found to be either avoided by panthers or included in the “other” category that was neither avoided nor selected by panthers. We believe open water in any setting provides little to no value to panthers. However, open water edges and berms can be a valuable foraging area or dispersal pathway in more rural settings, although these edges in an urbanized setting could promote human/panther conflicts. Therefore, we assigned open water in an urban setting, with or without emergent vegetation, and surrounding berms a value of 0. However, in rural settings, the littoral edges and berms may provide species benefit and are further addressed under the reservoir discussion below.

Coastal wetlands: There are few strictly coastal wetlands, such as salt marshes and mangrove swamps, within the panther focus area. Where these occur, they are closely interspersed with other upland habitats. In this context, we believe that these areas are of greater value to the panther than the models indicate. These areas may, for the most part, be avoided by panthers; but, they can be of value in the proper landscape context to higher value habitats. Therefore we assigned these areas a value of 3.

We also note that three additional land uses and or habitat types referenced in our original habitat rankings were not components addressed directly in the model. These include: (1) exotic/nuisance plants; (2) stormwater treatment areas (STAs); and (3) reservoirs. We believe these categories are important in our assessment of panther habitat values and warrant consideration in our habitat ranking system.

Exotic/nuisance plants: Although exotic plants can be suitable for providing denning cover and habitat connectivity between other land types for panthers and panther prey, they generally do not provide the preferred foraging base of plants consumed by deer and other herbivores (Fleming et al. 1994). We believe prey foraging value, or lack thereof, is an important constraint in our habitat assessments. Therefore, we assigned these habitats a value of 3. Likewise, some native plant species can become so dominant and dense, especially under altered hydrologic and fire suppression regimes, that they no longer provide high habitat value for the panther even though occasional use may occur. The most common example is dense, nearly monotypic cattail stands, which are of reduced value relative to less altered marsh communities. Another example of this type of nuisance species dominance is dense stands of cabbage palm dominated communities. For systems represented by this habitat profile, we also assigned a value of 3.

STAs (Everglades restoration): STAs are generally designed to provide a water quality treatment function for nutrient removal from received upstream discharges and may include multiple berms and adjacent littoral shelves. Depending on the design and mode of operation, they can become vegetated by dense monotypic stands of cattails or can incorporate a diverse mosaic of wetland communities and hydroperiods that support sawgrass and shrub/scrub species. Therefore, they can provide various levels of resource benefit to panthers and panther prey species as discussed below. For this reason, the final value of an STA is determined in a case-by-case basis during project review.

The Service participates in planning efforts that encourage location of STAs at sites with minimal areas of natural habitat, with a preference for sites that are currently in agriculture. Because these facilities by design are located in areas that currently provide a reduced value to panthers and panther prey species, the Service values these systems pre and post project development as a neutral effect on panthers. In these situations, the development of an STA from existing agriculture land uses would be evaluated as if the agriculture land use was present following project development, with no increase or decrease in habitat value to the panther.

However, this neutral effect assessment is only applicable to land conversions from nonnative habitats to STAs. For those projects that remove natural habitats, the Service considers STA functional values to mimic the value of the natural system the STA is designed to achieve. As an example, an STA design that results in a dense monotypic stand of cattails would be appropriately evaluated following the exotic/nuisance species profile. Similarly, a system designed to provide a diverse mosaic of wetland communities and hydroperiods would be evaluated following the wet prairie/marsh profile. Another system design that incorporates internal and external berms could include an edge benefit evaluation identifying the berms and adjacent littoral shelves and their benefit to the Florida panther and panther prey species, and follow the values provided for improved pasture for the berms and or wet prairie/marsh values for the littoral shelves. An individual project assessment of pre and post habitat impacts will identify whether the project as designed results in loss of functional value or provides benefit to the Florida panther and panther prey species.

Reservoirs (Everglades restoration, large water storage area, mines): Reservoirs were originally classified as their own category in our 2003 assessment method. They differ from open-water systems primarily with their location in the landscape. In urban areas, reservoirs have always been considered open water and given a value of 0. In rural areas, the open water portion of the reservoir provides no habitat value, although the edges and the berms can provide valuable foraging area or dispersal pathways for the panther and panther prey species. Therefore, the 2003 methodology assigned a value of 1.5 to reservoirs to attempt to account for these benefits.

After further consideration, we believe a more appropriate way to evaluate the value of reservoirs is to evaluate the open water component separately from the reservoir edges and berms. Therefore, we are no longer assigning a value to reservoirs as their own habitat classification. When large-scale reservoir projects are proposed in the rural landscape, all open water areas should be classified as such (value = 0). Berms and edges should be classified as the habitat they will most resemble in the post-project condition. For example: a 1,000-acre reservoir with 50 ac of grassed berms and 50 ac of berms with roads along the top would be evaluated as 900 ac of open water, 50 ac of pasture, and 50 ac of urban.

We also recognized the habitat matrix (Table PM7) lists four native habitats similar in functional habitat value to panthers as non-native habitats: marsh/wet prairie – 4.7; xeric scrub – 4.5; shrub and brush – 5.5; and dry prairie – 6.3. These habitat ratings, which are between 4 and 6, are classified as being neither selected nor avoided by panthers. The Service's Florida Panther Recovery Plan's (Service 2008) action 1.1.1.2.3 recommends habitat preservation and restoration within the primary zone be provided in situations where land use intensification cannot be avoided. We view this recommendation as a key parameter in our conservation goal to locate, preserve, and restore lands containing sufficient area and appropriate land cover types to ensure the long-term survival of a population of Florida panthers south of the Caloosahatchee River.

Therefore, for assessment purposes, if a project is proposing restoration of non-native habitats (e.g., pasture, row crops, groves, etc.) to native habitats, we believe that a restoration lift to a value of 7 is appropriate. The functional value of 7 corresponds to that value found in the literature where panthers begin to select for that habitat attribute (Table PM7). We also believe a full functional lift credit for these restorations is appropriate as the time lag from restoration to full functional value is estimated to be relatively short (less than 5 years) for non-forested systems. However, the calculation of forested restoration values remains the same as in the previous methodology, which is one-half the difference between pre- and post-restoration.

In summary, we believe appropriate adjustments to our original PHU values are warranted based on the most current peer-reviewed science and our category specific discussions above. Therefore, we have incorporated the above referenced values into our revised habitat assessment matrix and these values are the current basis for habitat evaluations and the recommended compensation values to minimize project effects to the Florida panther (Table PM2).

Exotic species assessment: since many habitat types in south Florida are infested with exotic plant species, which affects the functional value a habitat type provides to foraging wildlife

species (*i.e.*, primarily deer and hog), we believe the presence of these species and the value these species provide to foraging wildlife needs to be considered in the habitat assessment methodology. As shown in Table PM2, we have a habitat type and functional value shown for exotic species. This category includes not only the total acres of pure exotic species habitats present but also the percent-value acreages of the exotic species present in other habitat types.

For example, a site with 100 ac of pine flatwoods with 10 percent exotics would be treated in our habitat assessment methodology as 90 ac of pine flatwoods and 10 ac of exotics. Adding another 100 ac of cypress swamp with 10 percent exotics would change our site from 90 ac of pine flatwoods and 10 ac of exotics to 90 ac of pine flatwoods, 90 ac of cypress swamp, and 20 ac of exotics.

Habitat assessment methodology application – example: To illustrate the use of our habitat assessment methodology, we provide the following example. A 100-acre project site is proposed for a residential development. Plans call for the entire site to be cleared. The project site contains 90 ac of hydric pine flatwoods and 10 ac of exotic vegetation, and is located in the “secondary zone.” The applicant has offered habitat compensation in the “primary zone” to minimize the impacts of the project to the Florida panther. To calculate the PHUs provided by the site, we multiply the habitat acreage by the “habitat suitability value” for each habitat type and add those values to obtain a value of 885 PHUs ((90 ac of pine flatwoods x 9.5 [the habitat suitability value for pine flatwoods] = 855 PHUs) + (10 ac of exotic vegetation x 3 [the habitat suitability value for exotics] = 30 PHUs) = 885 PHUs). The value of 885 PHUs is then multiplied by the 2.5 (the base ratio) and 0.69 (the landscape multiplier) resulting in a value of 1,527 PHUs for the project site. In this example, the acquisition of lands in the primary zone containing at least 1,527 PHUs is recommended to compensate for the loss of habitat to the Florida panther resulting from this project.

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**Table PM1.** Original panther habitat unit values for use in assessing habitat value to the Florida panther.

Land Cover Type	Value	Land Cover Type	Value	Land Cover Type	Value
Water	0	STA	4.5	Cypress swamp	9
Urban	0	Shrub swamp	5	Sand pine scrub	9
Coastal strand	1	Shrub and brush	5	Sandhill	9
Reservoir	1.5	Dry prairie	6	Hardwood-Pine forest	9
Mangrove swamp	2	Grassland/pasture	7	Pine forest	9
Salt marsh	2	Freshwater marsh	9	Xeric oak scrub	10
Exotic/nuisance plants	3	Bottomland hardwood	9	Hardwood forest	10
Cropland	4	Bay swamp	9		
Orchards/groves	4	Hardwood swamp	9		

**Table PM2.** Revised panther habitat unit values for use in assessing habitat value to the Florida panther.

Land Cover Type	Value	Land Cover Type	Value	Land Cover Type	Value
Reservoirs	*	Xeric scrub	4.5	Dry prairie	6.3
STAs	**	Orchards/groves	4.7	Upland Hardwood Forest	9.0
Urban	0	Marsh/ wet prairie	4.7	Cypress swamp	9.2
Water	0	Cropland	4.8	Hardwood swamp	9.2
Barren/Disturbed lands	3	Improved pasture	5.2	Hardwood-Pine	9.3
Coastal wetlands	3	Shrub swamp/brush	5.5	Upland-Hydric Pine forest	9.5
Exotic/nuisance plants	3	Unimproved pasture	5.7		

\* PHU values for reservoirs are evaluated based on open water for the main water areas and the appropriate categories for berms and other non-water sections. Refer to pages 5- 7 for the accompanying text for guiding criteria for these systems.

\*\* PHU values for stormwater treatment areas vary depending on design criteria, mode of operation, location in native or non-native habitats, and other landscape features. Refer to page 6 for the accompanying text for guiding criteria for these systems.

**Table PM3.** Land Held for Conservation within the Florida Panther Core Area.

	Acres	Primary Equivalent Factor	Primary Equivalent Acres
Primary	1,659,657	1.00	1,659,657
Dispersal	0	1.00	0
Secondary	308,623	0.69	212,950
Other	609,872	0.33	201,258
<b>TOTAL</b>	<b>2,578,152</b>	<b>TOTAL</b>	<b>2,073,865</b>

**Table PM4.** Undeveloped Privately Owned Land within Florida Panther Core Area.

	Acres	Primary Equivalent Factor	Primary Equivalent Acres
Primary	610,935	1.00	610,935
Dispersal	27,883	1.00	27,883
Secondary	503,481	0.69	347,402
Other	655,996*	0.33	216,479
<b>TOTAL</b>	<b>1,962,294</b>	<b>TOTAL</b>	<b>1,202,699</b>

\* About 819,995 ac are at-risk in the other zone with about 80 percent with resource value. Total ac of at-risk privately owned lands are 1,962,294 ac.

**Table PM5.** Landscape Compensation Multipliers.

Zone of Impacted Lands	Zone of Compensation Lands	Multiplier
Primary	Secondary	1.45
Secondary	Primary	0.69
Other	Secondary	0.48
Other	Primary	0.33

**Table PM6.** Panther Habitat Selection Analyses – Habitat Papers Comparison.

Habitats	Kautz compositional second order		Kautz Euclidean second order		Habitats	Cox Euclidean second order		Cox Euclidean third order		Habitats	Land VHF Euclidean third order		Land GPS Euclidean third order	
	second order	rank	second order	rank		second order	rank	third order	rank		third order	rank	third order	rank
Hardwood swamp	<b>1</b>	A	<b>3</b>	A	Coniferous forest	<b>1</b>	A	<b>1</b>	A	Upland forest	<b>1</b>	A	<b>1</b>	A
Pineland	<b>2</b>	A	<b>2</b>	AB	pineland					pine/hardwood				
Cypress swamp	<b>3</b>	AB	<b>1</b>	BC	Hardwood forest	<b>3</b>	C	<b>2</b>	A	hardwood hammock				
Upland forest	<b>1</b>	B	<b>4</b>	CD	hardwood hammock					pinelands				
Dry prairie	<b>5</b>	B	<b>5</b>	DE	mixed pine/hardwood					tropical hammock				
Shrub and brush	<b>4</b>	C	<b>7</b>	EF	palm/oak					palm/hardwood				
Xeric scrub	<b>3</b>	CD	<b>9</b>	F	tropical hammock					Wetland forest	<b>2</b>	A	<b>2</b>	AB
Marsh	<b>5</b>	CD	<b>9</b>	F	Forested wetland	<b>2</b>	B	<b>3</b>	A	cypress swamp				
Unimproved pasture	<b>7</b>	DE	<b>7</b>	G	cypress swamp					cypress/pine/palm				
Barren	<b>6</b>	E	<b>9</b>	G	mixed forest					mixed swamp				
Improved pasture	<b>9</b>	EF	<b>6</b>	G	shrub swamp					hardwood swamp				
Urban	<b>8</b>	F	<b>8</b>	G	hardwood swamp					Dry prairie/grass	<b>3</b>	B	<b>3</b>	BC
Cropland	<b>9</b>	F	<b>8</b>	H	other wet forest					grassland				
Citrus	<b>10</b>	G	<b>8</b>	H	Dry prairie/grass	<b>4</b>	C	<b>4</b>	B	unimproved pasture				
Coastal wetlands	<b>11</b>	G	<b>8</b>	H	dry prairie					improved pasture				
Open water	<b>10</b>	H	<b>10</b>	I	grassland					Marsh/shrub	<b>6</b>	B	<b>4</b>	C
Exotic plants					Open wetland	<b>7</b>	E	<b>7</b>	C	marsh/wet prairie				
STA					marsh and wet prairie					sawgrass				
Reservoir					sawgrass					cattail				
					cattail					shrub swamp				
					Agricultural	<b>5</b>	D	<b>5</b>	B	Other	<b>4</b>	B	<b>5</b>	C
second order - selection of home range with entire study area					improved pasture					open water				
third order - selection of habitats within home range					citrus					shrub/brush				
Bold (black) - habitat used more than availability (selection)					row crop					barren				
Bold (red) - habitat used less than availability (avoidance)					other agriculture					high impact urban				
rank - habitats with same letters did not differ in preference					Urban/barren	<b>6</b>	E	<b>6</b>	B	low impact urban				
					bare soil					extractive				
					high-impact urban					Agriculture	<b>5</b>	B	<b>6</b>	C
					low-impact urban					citrus				
					extractive					row crop				
										other agriculture				

**Table PM7.** Summary of Ranking Values

Habitats	Kautz compositional second order	Kautz Euclidean second order	Cox Euclidean second order	Cox Euclidean third order	Land VHF Euclidean third order	Land GPS Euclidean third order	Average
Hardwood swamp	10	7	9	10	10	9	9.2
Pineland	9	8	10	10	10	10	9.5
Cypress swamp	8	9	9	10	10	9	9.2
Upland forest	10	6	8	10	10	10	9.0
Dry prairie	6	5	8	6	6	7	6.3
Shrub and brush	7	3	no data	no data	6	6	5.5
Xeric scrub	8	1	no data	no data	no data	no data	4.5
Marsh	6	1	6	3	6	6	4.7
Unimproved pasture	4	3	8	6	6	7	5.7
Barren	5	1	7	6	6	6	5.2
Improved pasture	2	4	7	6	6	6	5.2
Urban	3	2	7	6	6	6	5.0
Cropland	2	2	7	6	6	6	4.8
Citrus	1	2	7	6	6	6	4.7
Coastal wetlands	0	2	no data	no data	no data	no data	1.0
Open water	1	0	no data	no data	6	6	3.3
Exotic plants							
STA							
Reservoir							

habitat selection	7,8,9,10
neither selected nor avoided	4,5,6
habitat avoidance	0,1,2,3

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

Miccosukee Tribal Youth Conservation Camp

### LOCATION

Miami-Dade County, Florida



### DESCRIPTION

The Miccosukee are seeking federal funding to hold a conservation camp for tribal youth. Youth will learn about conservation, restoration and sustainable resource management.

## Local office

South Florida Ecological Services Field Office

☎ (772) 562-3909

 (772) 562-4288

1339 20th Street  
Vero Beach, FL 32960-3559

<http://fws.gov/verobeach>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

Florida Bonneted Bat <i>Eumops floridanus</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8630">https://ecos.fws.gov/ecp/species/8630</a>	Endangered
Florida Panther <i>Puma (=Felis) concolor coryi</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1763">https://ecos.fws.gov/ecp/species/1763</a>	Endangered
Puma (=mountain Lion) <i>Puma (=Felis) concolor</i> (all subsp. except <i>coryi</i> ) No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6049">https://ecos.fws.gov/ecp/species/6049</a>	SAT
West Indian Manatee <i>Trichechus manatus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4469">https://ecos.fws.gov/ecp/species/4469</a>	Threatened Marine mammal

## Birds

NAME	STATUS
Bachman's Warbler (=wood) <i>Vermivora bachmanii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3232">https://ecos.fws.gov/ecp/species/3232</a>	Endangered
Cape Sable Seaside Sparrow <i>Ammodramus maritimus mirabilis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6584">https://ecos.fws.gov/ecp/species/6584</a>	Endangered
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="https://ecos.fws.gov/ecp/species/7713">https://ecos.fws.gov/ecp/species/7713</a>	Endangered
Ivory-billed Woodpecker <i>Campephilus principalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8230">https://ecos.fws.gov/ecp/species/8230</a>	Endangered
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Wood Stork <i>Mycteria americana</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>	Threatened

## Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/776">https://ecos.fws.gov/ecp/species/776</a>	SAT
American Crocodile <i>Crocodylus acutus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6604">https://ecos.fws.gov/ecp/species/6604</a>	Threatened
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a>	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a>	Threatened

## Fishes

NAME	STATUS
Atlantic Sturgeon (gulf Subspecies) <i>Acipenser oxyrinchus</i> (=oxyrhynchus) <i>desotoi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/651">https://ecos.fws.gov/ecp/species/651</a>	Threatened

## Insects

NAME	STATUS
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<p>Bartram's Hairstreak Butterfly <i>Strymon acis bartrami</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/4837">https://ecos.fws.gov/ecp/species/4837</a></p>	Endangered
<p>Florida Leafwing Butterfly <i>Anaea troglodyta floridalis</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/6652">https://ecos.fws.gov/ecp/species/6652</a></p>	Endangered
<p>Miami Blue Butterfly <i>Cyclargus (=Hemiargus) thomasi bethunebakeri</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/3797">https://ecos.fws.gov/ecp/species/3797</a></p>	Endangered

## Flowering Plants

NAME	STATUS
<p>Beach Jacquemontia <i>Jacquemontia reclinata</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/1277">https://ecos.fws.gov/ecp/species/1277</a></p>	Endangered
<p>Blodgett's Silverbush <i>Argythamnia blodgettii</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/6823">https://ecos.fws.gov/ecp/species/6823</a></p>	Threatened
<p>Cape Sable Thoroughwort <i>Chromolaena frustrata</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/4733">https://ecos.fws.gov/ecp/species/4733</a></p>	Endangered
<p>Carter's Mustard <i>Warea carteri</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/5583">https://ecos.fws.gov/ecp/species/5583</a></p>	Endangered
<p>Carter's Small-flowered Flax <i>Linum carteri carteri</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/7208">https://ecos.fws.gov/ecp/species/7208</a></p>	Endangered
<p>Crenulate Lead-plant <i>Amorpha crenulata</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/6470">https://ecos.fws.gov/ecp/species/6470</a></p>	Endangered

Deltoid Spurge <i>Chamaesyce deltoidea</i> ssp. <i>deltoidea</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/199">https://ecos.fws.gov/ecp/species/199</a>	Endangered
Everglades Bully <i>Sideroxylon reclinatum</i> ssp. <i>austrofloridense</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4735">https://ecos.fws.gov/ecp/species/4735</a>	Threatened
Florida Brickell-bush <i>Brickellia mosieri</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/956">https://ecos.fws.gov/ecp/species/956</a>	Endangered
Florida Pineland Crabgrass <i>Digitaria pauciflora</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3728">https://ecos.fws.gov/ecp/species/3728</a>	Threatened
Florida Prairie-clover <i>Dalea carthagenensis floridana</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2300">https://ecos.fws.gov/ecp/species/2300</a>	Endangered
Florida Semaphore Cactus <i>Consolea corallicola</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4356">https://ecos.fws.gov/ecp/species/4356</a>	Endangered
Garber's Spurge <i>Chamaesyce garberi</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8229">https://ecos.fws.gov/ecp/species/8229</a>	Threatened
Pineland Sandmat <i>Chamaesyce deltoidea pinetorum</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1914">https://ecos.fws.gov/ecp/species/1914</a>	Threatened
Sand Flax <i>Linum arenicola</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4313">https://ecos.fws.gov/ecp/species/4313</a>	Endangered
Small's Milkpea <i>Galactia smallii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3360">https://ecos.fws.gov/ecp/species/3360</a>	Endangered
Tiny Polygala <i>Polygala smallii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/996">https://ecos.fws.gov/ecp/species/996</a>	Endangered

## Ferns and Allies

NAME	STATUS
Florida Bristle Fern <i>Trichomanes punctatum</i> ssp. <i>floridanum</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8739">https://ecos.fws.gov/ecp/species/8739</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> <a href="https://ecos.fws.gov/ecp/species/7713#crithab">https://ecos.fws.gov/ecp/species/7713#crithab</a>	Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your

location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**American Kestrel** *Falco sparverius paulus*  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 1 to Aug 31

**Bald Eagle** *Haliaeetus leucocephalus*  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  
<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

**Common Ground-dove** *Columbina passerina exigua*  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 1 to Dec 31

**King Rail** *Rallus elegans*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/8936>

Breeds May 1 to Sep 5

**Least Tern** *Sterna antillarum*  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 20 to Sep 10

<b>Lesser Yellowlegs</b> <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere
<b>Limpkin</b> <i>Aramus guarauna</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 15 to Aug 31
<b>Magnificent Frigatebird</b> <i>Fregata magnificens</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Oct 1 to Apr 30
<b>Prairie Warbler</b> <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Prothonotary Warbler</b> <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
<b>Reddish Egret</b> <i>Egretta rufescens</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/7617">https://ecos.fws.gov/ecp/species/7617</a>	Breeds Mar 1 to Sep 15
<b>Short-billed Dowitcher</b> <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>	Breeds elsewhere
<b>Short-tailed Hawk</b> <i>Buteo brachyurus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8742">https://ecos.fws.gov/ecp/species/8742</a>	Breeds Mar 1 to Jun 30
<b>Swallow-tailed Kite</b> <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8938">https://ecos.fws.gov/ecp/species/8938</a>	Breeds Mar 10 to Jun 30
<b>Willet</b> <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5

Yellow Warbler *Dendroica petechia gundlachi*

Breeds May 20 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

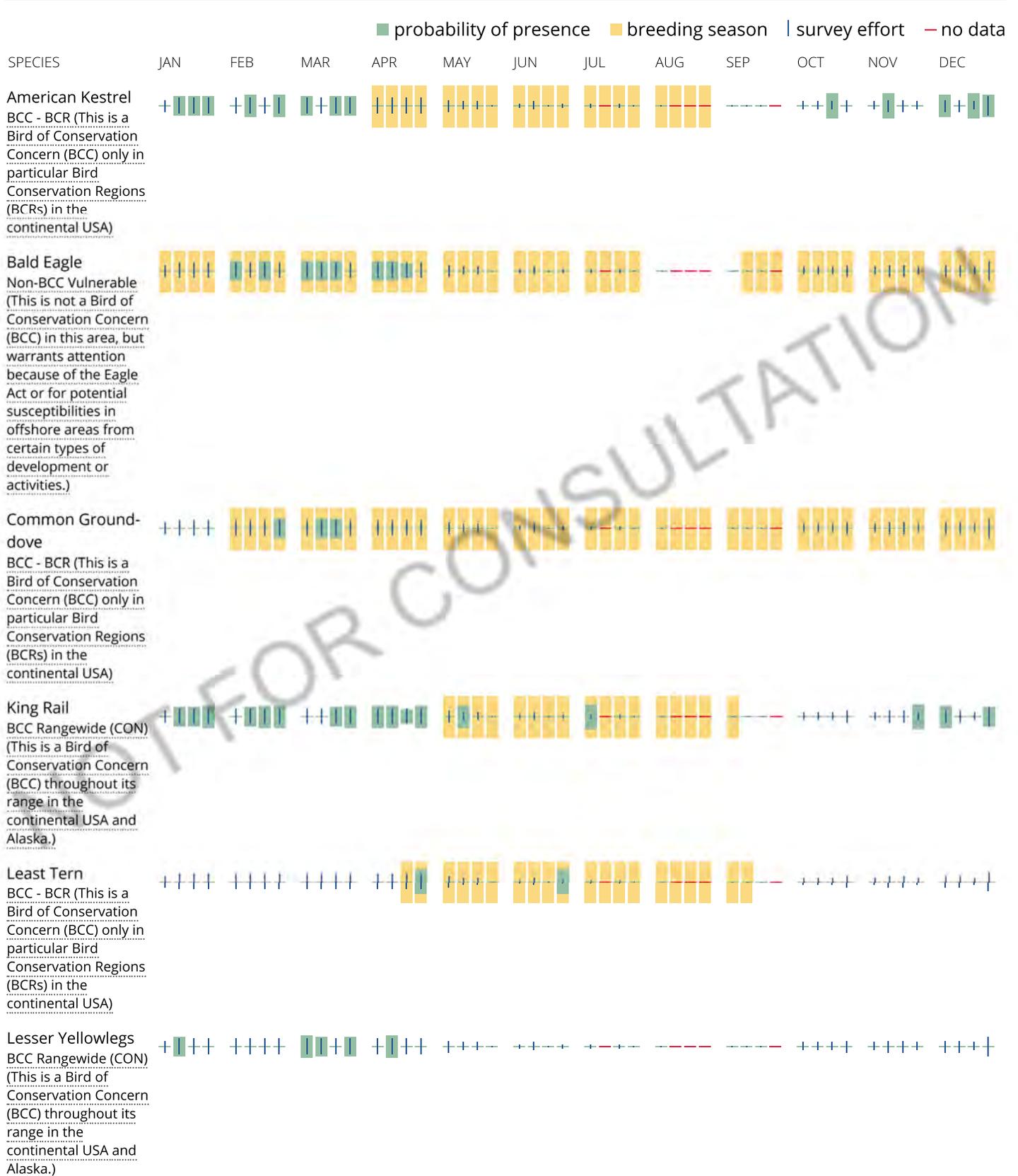
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

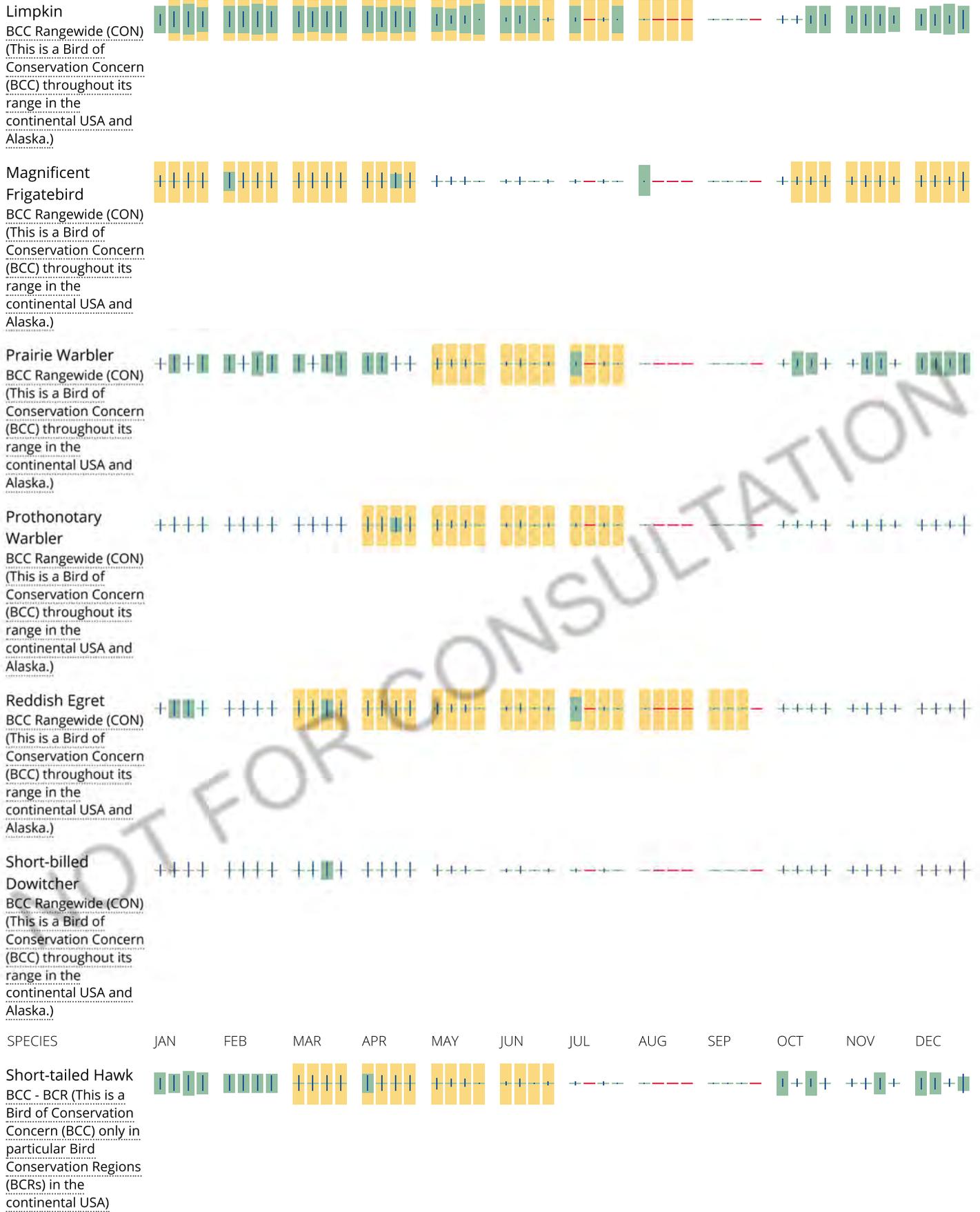
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal

bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

# Marine mammals

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act<sup>1</sup> and the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>2</sup>.

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries<sup>3</sup> [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*  
<https://ecos.fws.gov/ecp/species/4469>

## Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM5C](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFO3A](#)

[PSS1F](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



## Miccosukee Tribal Youth Program Conservation Initiative

Award requested: \$100,000

Project Period: 2 years (RESTORE 2020-2021)

Point of Contact

Ivis Billie, MS

Miccosukee Tribe of Indians of Florida

P.O. Box 440021 Miami, Florida 33144

The Miccosukee Tribe of Indians of Florida, Employment & Training Department (E&T Dept.) proposes to train and enroll the services of Miccosukee Tribal youth to engage in conservation and restoration practices within the Everglades ecosystem.

The Miccosukee Tribe is one of two federally recognized Indian Tribes in Florida, and the only permanent resident of the Everglades. Tribal members reside on both the 74,812-acre Federal Indian Reservation and the 667-acre Miccosukee Reserved Area (MRA), which are located within the designated Everglades Protection Area. Additionally, the Tribe maintains a perpetual lease agreement with the State of Florida for ~189,000 acres of protected wetlands in Water Conservation Area 3A (WCA-3A) which is adjacent to both the Federal Reservation, and the Miccosukee Reserved Area.

The program proposed by the Miccosukee Tribe would solicit the participation of Tribal youth to receive training by professionals for various work projects in the environmental field. Tribal youth will be recruited during our Summer Youth Program announcement of the paid summer opportunity.

### **Collaborative Departments & Programs**

Miccosukee Business Council

Miccosukee Corporation Board

Miccosukee Community

Miccosukee Water Resources

Miccosukee Real Estate Services

Miccosukee Fish & Wildlife Department

Miccosukee Indian School

Miccosukee Community Water Department

The Youth Program Conservation Initiative will be a collaborative effort to engage the Miccosukee youth in conservation practices and wetlands restoration. The initiative will draw from the organization, knowledge, and in-kind services of the existing, established Tribal Programs. Participants will be parsed into small groups of 5 youth worker trainees with one youth senior classman supervisor and one cultural advisor to create a work unit. Work units will focus on challenging tasks as a unit to build leadership skills and cooperation skills. Collaborating Departments and Programs will provide GPS support, species identification support, scientific support and construction support. Support services will be to teach, and provide on the job training in the green job sector. Collaborating partners will be providing support and completing the tasks. This project relates to the goals of RESTORE by contributing to protecting and restoring natural resources, ecosystems, wildlife habitats and wetlands of the greater RESTORE region.

The E&T Department estimates the number of youth to be employed during 2020 at 12 youth, and 12 youth for 2021. The comparable internship compensation for youth participation is \$12/hour. The program length is estimated at 6 weeks, with an average of 28 hours per week. Total personnel costs are estimated at \$50,000. The annual budget also includes funding for transportation, contractual services (airboat/buggy rental, field workshops hosted by professionals) and supplies as follows:

<u>Personnel:</u> 12 youth @\$12/hour (6 weeks total estimated 28 hours/wk/youth)	\$24,192.00
<u>Contractual Services:</u>	\$12,000.00
<u>Supplies:</u> (sun shirts with logo/field books/training materials/ hats/sunscreen)	\$8,308.00
<u>Transportation/Meals:</u>	\$5,500.00
<u>Total Estimated Budget per year:</u>	\$50,000.00
<u>Total Estimated Budget 2 years:</u>	\$100,000.00



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Mississippi Band of Choctaw Indians, Youth Conservation Corps Grant Funding FY20

Exclusion category: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Mississippi Band of Choctaw Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC is an exciting comprehensive youth program that will provide tribal youth work-based opportunities in the field of environmental conservation, natural resources management, and related aspects of the outdoor professional study through a 4-week long summer project that strengthens the protection, conservancy, and maintenance of natural resources on the Choctaw tribal lands, with an emphasis on the preserving cultural significant locations, such as Nanih Waiya. Crew members will participate in actual natural resources management work tasks, participate in educational and environmental learning, and participate in hands-on activities in order to build on tribal stewardship.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR§ 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR§ 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary circumstances are defined for the Department of the Interior at *43 CFR §46.215*. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 1-27-20  
Regional Environmental Scientist

Concur:  Date: 1/24/2020  
Regional Archeologist

Concur:  Date: 1/28/2020  
Regional Director **Acting**

## Attachment 1

### Extraordinary Circumstance Review

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature and the youth will be working under adult supervision.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Environmental effects of any activities would be minimal in context and intensity and will benefit the local watershed.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The activities planned are simply educational in nature.</p>	X	

<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. Please see attached correspondence from the Tribal Archeologist.</p>	X	
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe. In fact, the proposed work would help access for tribal members to Nanih Waiya.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.</p>	X	



## Historic Preservation/Archaeology

Mississippi Band of Choctaw Indians

P.O. Box 6257

Choctaw, MS 39350

601.650.7316

601.650.7454 – FAX

[kcarleton@choctaw.org](mailto:kcarleton@choctaw.org)

March 3, 2016

Mitzi Reed, Director  
Choctaw Wildlife and Parks Department  
Mississippi Band of Choctaw Indians  
125 River Ridge Circle  
Choctaw, MS 39350

RE: Youth Conservation Corps Initiative; Maintenance of the Nature Trails on the park will have No Effect under Section 106, National Historic Preservation Act.

Dear Ms Reed:

I have reviewed your grant project to have the YCCI participants clear new growth along the existing nature trails in the Nanih Waiya park. Since there will be no ground disturbance associated with it, this project has no potential to affect any historic properties in the area of potential effect. As such, it really isn't an Undertaking under the National Historic Preservation Act. I am writing up a report for the SHPO; unfortunately, it will take up to 30 days to get their response. I have already spoken to their Review and Compliance Officer and know that they agree with my determination in this matter. Hopefully this letter will serve for the Bureau of Indian Affairs until we get the SHPO's response.

Sincerely,

Kenneth H. Carleton  
Tribal Historic Preservation Officer/Archaeologist



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### Memorandum

Date: December 11, 2019

To: Project File

From: Chet McGhee, BIA Regional Environmental Scientist

Subject: T&E species/critical habitat species impact determination review –  
Mississippi Band of Indians RESTORE Grant

**Proposed Action:** The Mississippi Band of Choctaw Indians has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The TYCC is an exciting comprehensive youth program that will provide tribal youth work-based opportunities in the field of environmental conservation, natural resources management, and related aspects of the outdoor professional study through a 4-week long summer project that strengthens the protection, conservancy, and maintenance of natural resources on the Choctaw tribal lands, with an emphasis on the preserving cultural significant locations, such as Nanih Waiya. Crew members will participate in actual natural resources management work tasks, participate in educational and environmental learning, and participate in hands-on activities in order to build on tribal stewardship.

A review of potential impacts to threatened and endangered species and/or critical habitat was conducted for the project using the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPAC) Database. IPAC allows federal managers to obtain a species and critical habitat list for the proposed project area. IPAC also assists federal agencies by providing specific information so managers are able to make species effect determinations from their projects.

Based on all of the information evaluated from the IPAC Database review (attached), it is my determination that the proposed action will have “no effect” on threatened or endangered species or their critical habitat. The activities proposed by the Tribe are educational in nature and any field work conducted tribal youth would be limited in context and intensity. With this “no effect” determination, no further consultation is considered necessary.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Mississippi Ecological Services Field Office  
6578 Dogwood View Parkway, Suite A  
Jackson, MS 39213-7856  
Phone: (601) 965-4900 Fax: (601) 965-4340  
<http://www.fws.gov/mississippiES/endsp.html>

In Reply Refer To:

December 11, 2019

Consultation Code: 04EM1000-2020-SLI-0216

Event Code: 04EM1000-2020-E-00472

Project Name: Mississippi Band of Choctaw RESTORE Youth Camp

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
  - Wetlands
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Mississippi Ecological Services Field Office**

6578 Dogwood View Parkway, Suite A

Jackson, MS 39213-7856

(601) 965-4900

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## Project Summary

Consultation Code: 04EM1000-2020-SLI-0216

Event Code: 04EM1000-2020-E-00472

Project Name: Mississippi Band of Choctaw RESTORE Youth Camp

Project Type: Federal Grant / Loan Related

Project Description: MBCI are seeking a federal grant to hold an educational camp for Choctaw youth. The camp will teach youth about natural resources management, conservation, and cultural preservation.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/32.92329846550639N88.92274420362804W>



Counties: Neshoba, MS

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## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Birds

NAME	STATUS
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31

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## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

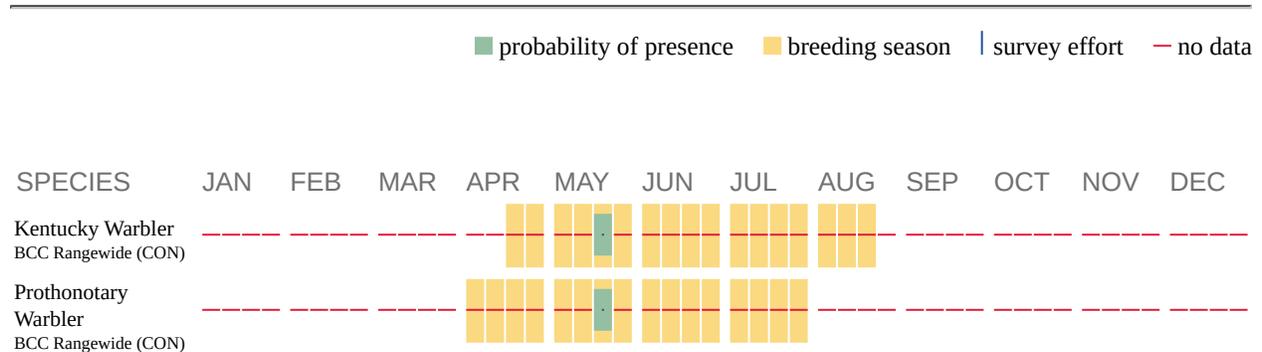
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

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Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

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The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

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1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
  2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
  3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

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# Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

## FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1/4A](#)
- [PFO6F](#)
- [PFO1C](#)

## RIVERINE

- [R5UBH](#)
-

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

Mississippi Band of Choctaw RESTORE Youth Camp

### LOCATION

Neshoba County, Mississippi



### DESCRIPTION

MBCI are seeking a federal grant to hold an educational camp for Choctaw youth. The camp will teach youth about natural resources management, conservation, and cultural preservation.

## Local office

Mississippi Ecological Services Field Office

☎ (601) 965-4900

 (601) 965-4340

6578 Dogwood View Parkway, Suite A  
Jackson, MS 39213-7856

<http://www.fws.gov/mississippiES/endsp.html>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

Northern Long-eared Bat *Myotis septentrionalis*  
 No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/9045>

Threatened

## Birds

NAME

STATUS

Wood Stork *Mycteria americana*  
 No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/8477>

Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have

sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Kentucky Warbler *Oporornis formosus*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 20

Prothonotary Warbler *Protonotaria citrea*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

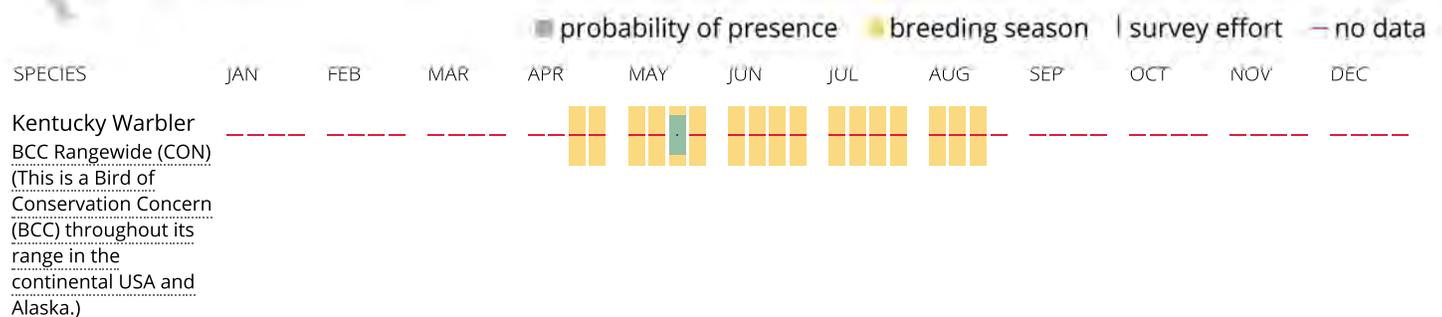
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

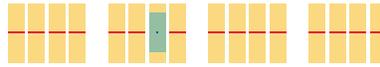


Prothonotary

Warbler

BCC Rangewide (CON)

(This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

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## Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some

deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Chitimacha Tribe of Louisiana, Youth Conservation Corps Grant Funding FY20

Exclusion category: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Chitimacha Tribe of Louisiana has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The mission of the camp is to provide Chitimacha youth, 14-25 years of age, an opportunity to learn work skills while gaining tribal/community pride through work aimed at maintaining and beautifying the tribal community. The duties performed included cleaning drainage ditches, removing trash from Bayou Teche, and helping the Public Works Department with their duties related to maintaining tribal lands and assets.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR § 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR § 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary circumstances are defined for the Department of the Interior at *43 CFR §46.215*. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical

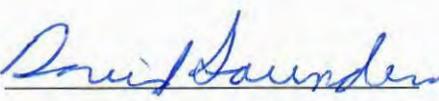
exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

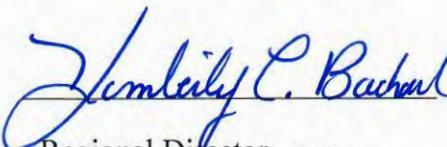
Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 1/9/2020  
Regional Environmental Scientist

Concur:  Date: 1/8/2020  
Regional Archeologist

Concur:  Date: 1/9/20  
Regional Director **Acting**

## Attachment 1

### Extraordinary Circumstance Review

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature and the youth will be working under adult supervision.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Environmental effects of any activities would be minimal in context and intensity and will benefit the local watershed.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The activities planned are simply educational in nature.</p>	X	

<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. Please see attached correspondence from the Tribal Historic Preservation Officer.</p> <p>The BIA has determined that the proposed project is a type of activity that does not have the potential to cause effects on historic properties.</p>	X	
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds.</p>	X	

# RESTORE

## Tribal Youth Conservation Corps



## Chitimacha Summer Youth Program

In June of 1998, the Chitimacha Tribe of Louisiana created and funded the Summer Youth Program for tribal youth ages 14 to 18. The purpose of the program was to give tribal youth the opportunity to learn work skills while gaining tribal/community pride through work aimed at maintaining and beautifying our community. The duties performed included cleaning drainage ditches, pressure washing tribal buildings and parking lots, landscaping, and helping the Public Works Department with their duties related to maintaining tribal lands and assets. The program has historically run for 4 weeks. With funding the Tribe would be able to continue this successful program, serve additional community members and perform more meaningful projects. We are requesting funds to continue what we have done.

Through the previous RESTORE grant, the Chitimacha Tribe was able to expand the age group employed from age 14 to 25, extend the program by two weeks, and include conservation programming and activities. Every year the Tribe has to make a decision whether or not to fund this program as Tribal funds are spread so thin. Funding would ensure the continuation of this beneficial program at an elevated level. The **\$52,081.88** annual budget for the program is divided primarily into Salaries and related expenses, in the amount of **\$47,452.57** (youth and supervisor salaries, fringe, indirect, postage, etc.), and **\$4,629.31** for related supplies (routine supplies, i.e. gloves, tools, first aid kit refills, etc., drinks and snacks).

The Gulf region is of extreme importance to the Chitimacha Tribe of Louisiana. The Chitimacha have lived in the region for thousands of years. Currently, our tribal land base is located on Bayou Teche, part of the Teche Watershed which ties into the Gulf of Mexico that is less than 25 miles away. Tribal members historically and still today enjoy the connection with these waters. After all, the name Chitimacha or Sitimaxa means "People of the Many Waters" due to the Tribe's presence among the many bayous, rivers, and the Gulf within our aboriginal homeland. Tribal members use this region for fishing and recreation. It also ties into one of our drinking water intakes. It is unfortunately listed as an impaired waterway. The Bayou Teche has also been designated a historic waterway, and has gained popularity nationally and internationally in the last few years for an annual canoe race called Tour du Teche.

The Tribe would like to do our part in keeping the Bayou Teche clean for conservation reasons, as well as for recreational use. For this reason, the program will also include cleanup of the bayou-side portion of the reservation along Bayou Teche, continuing into other segments as well as into Lake Fausse Point, the location of Chitimacha village sites. In years' past, this has been the highlight of the cleanup activities. This activity connects natural resource/environmental issues with cultural resource concerns when the participants remove trash near these important sites. Also, we will utilize this opportunity to engage the participants in the Rivercane Restoration Program. They will assist in planting and/or cleaning up the site by removing trash, limbs and competitive vegetation, if conditions are favorable.

During the employee orientation, the mission of RESTORE will be presented. We will also attempt to schedule a presentation by a conservation partner, such as the local USDA Natural Resources Conservation Service. In years' past, speakers have come present on the agency's conservation activities, as well as opportunities to volunteer, intern and work for their agency. This can get the participants to consider a career in conservation, environmental work and also working for a federal agency.

**CHITIMACHA TRIBE OF LOUISIANA  
SUMMER YOUTH PROGRAM  
BUDGET NARRATIVE**

**Salaries:**

Salaries -	
25 Chitimacha Youth @ \$7.25/hr. x 5 hrs./day x 4 days/wk. x 6 wks. = \$870 x 25	21,750.00
8 Chitimacha Adult Workers @ \$9.50/hr. x 5 hrs./day x 4 days/wk. x 6 wks. = \$1800 x 2	9,120.00
3 Supervisors @ \$15.00/hr. x 5 hrs./day x 4 days/wk. x 6 wks. = \$1800 x 2	4,500.00
<b>Total Salaries</b>	<b>35,370.00</b>

**Fringe:**

	<b>P/T</b>
FICA	7.65%
State Unemployment	0.00%
Health/Life Insurance	0.00%
Retirement	0.00%
Workman's Compensation	0.00%
<b>Total Fringe</b>	<b>7.65%</b>
P/T - \$35,370 x 7.65% =	2,705.81
<b>Total Fringe</b>	<b>2,705.81</b>

**Professional:**

Pre-employment Drug Testing/Background Checks: to cover the cost of drug testing @ \$55/ Person X 11 adults – (\$605)	
<b>Total Professional</b>	<b>605</b>

**Supplies & Materials:**

Program Supplies - to cover the cost of routine supplies including but not limited to: gloves, first aid kit refills, paint, rakes, shovels, insect repellent, etc.	2,679.31
<b>Total Supplies &amp; Materials</b>	<b>2,679.31</b>

**Improvements, Maint. & Repairs:**

Vehicle Fuel & Maint. - To cover the cost of fuel	350.00
Building M & R - dumpster rental	550.00
<b>Total I, M &amp; R</b>	<b>900.00</b>

**Other Expenditures:**

Postage -	100.00
Employee Health & Morale - to cover the cost of water, Gatorade and snacks for summer youth workers	900.00
<b>Total Other Expenditures</b>	<b>1,000.00</b>

<b>TOTAL DIRECT COSTS</b>	<b>43,260.12</b>
<b>TOTAL INDIRECT COSTS (24.8% of Salaries)</b>	<b>8771.76</b>
<b>TOTAL PROGRAM COSTS</b>	<b>\$52,031.88</b>



**CHITIMACHA**  
TRIBE OF LOUISIANA  
CULTURAL DEPARTMENT

January 8, 2020

Dear Mr. McGhee,

We are in receipt of your request for Cultural Review of the proposed RESTORE Summer Youth Program activities. The Tribal Historic Preservation Office has no concern regarding the cleanup activities to be performed by the summer youth workers. None of these are earth disturbing and therefore have no potential to impact cultural resources.

Sincerely,

Kimberly S. Walden, M.Ed.,  
Tribal Historic Preservation Officer

[Regulatory review](#) / Endangered species / Species determinations

# Species determinations

For listed species<sup>1</sup> not covered by determination keys, an impact analysis should be performed to reach a conclusion about how this project will impact the species. These conclusions will result in *determinations* for each species, which will be used in consultation with the U.S. Fish and Wildlife Service.

## Mammals

West Indian Manatee  
Trichechus manatus

None

The BIA reviewed potential impacts to the West Indian Manatee and determined that there will be "No Effect" on the species.

## Critical habitats

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

**CHESTER MCGHEE** Digitally signed by CHESTER MCGHEE  
Date: 2019.12.04 08:57:32 -06'00'

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Louisiana Ecological Services Field Office  
200 Dulles Drive  
Lafayette, LA 70506  
Phone: (337) 291-3100 Fax: (337) 291-3139

In Reply Refer To:

December 03, 2019

Consultation Code: 04EL1000-2020-SLI-0226

Event Code: 04EL1000-2020-E-00529

Project Name: Chitimacha Summer Youth Camp

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered and candidate species, as well as designated and proposed critical habitat that may occur within the boundary of your proposed project and may be affected by your proposed project. The Fish and Wildlife Service (Service) is providing this list under section 7 (c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Changes in this species list may occur due to new information from updated surveys, changes in species habitat, new listed species and other factors. Because of these possible changes, feel free to contact our office (337/291-3126) for more information or assistance regarding impacts to federally listed species. The Service recommends visiting the ECOS-IPaC site or the Louisiana Ecological Services website ([www.fws.gov/lafayette](http://www.fws.gov/lafayette)) at regular intervals during project planning and implementation for updated species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect Federally listed species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may

affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected (e.g. adverse, beneficial, insignificant or discountable) by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the “Endangered Species Consultation Handbook” at <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF> or by contacting our office at the number above.

Bald eagles have recovered and were removed from the List of Endangered and Threatened Species as of August 8, 2007. Although no longer listed, please be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 *et seq.*). The Service developed the National Bald Eagle Management (NBEM) Guidelines to provide landowners, land managers, and others with information and recommendations to minimize potential project impacts to bald eagles, particularly where such impacts may constitute “disturbance,” which is prohibited by the BGEPA. A copy of the NBEM Guidelines is available at: <http://www.fws.gov/southeast/es/baldeagle/NationalBaldEagleManagementGuidelines.pdf>. Those guidelines recommend: (1) maintaining a specified distance between the activity and the nest (buffer area); (2) maintaining natural areas (preferably forested) between the activity and nest trees (landscape buffers); and (3) avoiding certain activities during the breeding season. On-site personnel should be informed of the possible presence of nesting bald eagles within the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest occurs or is discovered within or adjacent to the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at: <http://www.fws.gov/southeast/es/baldeagle>. Following completion of the evaluation, that website will provide a determination of whether additional consultation is necessary. The Division of Migratory Birds for the Southeast Region of the Service (phone: 404/679-7051, e-mail: [SEmigratorybirds@fws.gov](mailto:SEmigratorybirds@fws.gov)) has the lead role in conducting any necessary consultation. Should you need further assistance interpreting the guidelines or performing an on-line project evaluation, please contact this office.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g. cellular, digital television, radio and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm> ; <http://www.towerkill.com>; and <http://fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

Activities that involve State-designated scenic streams and/or wetlands are regulated by the Louisiana Department of Wildlife and Fisheries and the U.S. Army Corps of Engineers, respectively. We, therefore, recommend that you contact those agencies to determine their interest in proposed projects in these areas.

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Activities that would be located within a National Wildlife Refuge are regulated by the refuge staff. We, therefore, recommend that you contact them to determine their interest in proposed projects in these areas.

Additional information on Federal trust species in Louisiana can be obtained from the Louisiana Ecological Services website at: [www.fws.gov/lafayette](http://www.fws.gov/lafayette) or by calling 337/291-3100.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Louisiana Ecological Services Field Office**

200 Dulles Drive

Lafayette, LA 70506

(337) 291-3100

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## Project Summary

Consultation Code: 04EL1000-2020-SLI-0226

Event Code: 04EL1000-2020-E-00529

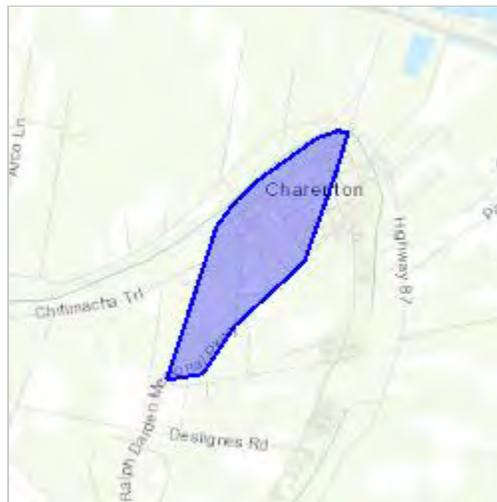
Project Name: Chitimacha Summer Youth Camp

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: The Chitimacha have requested federal funding to host a tribal youth camp on the reservation. Tribal youth will help the Tribe's Public Work Department in removing trash in Bayou Teche, cleaning drainage ditches and other activities to help maintain tribal lands and resources.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/29.877452151160682N91.53653479755918W>



Counties: St. Mary, LA

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## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
West Indian Manatee <i>Trichechus manatus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <b><i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i></b> Species profile: <a href="https://ecos.fws.gov/ecp/species/4469">https://ecos.fws.gov/ecp/species/4469</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

Chitimacha Summer Youth Camp

### LOCATION

St. Mary County, Louisiana



### DESCRIPTION

The Chitimacha have requested federal funding to host a tribal youth camp on the reservation. Tribal youth will help the Tribe's Public Work Department in removing trash in Bayou Teche, cleaning drainage ditches and other activities to help maintain tribal lands and resources.

## Local office

Louisiana Ecological Services Field Office

 (337) 291-3100

 (337) 291-3139

200 Dulles Drive  
Lafayette, LA 70506

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

## West Indian Manatee *Trichechus manatus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Marine mammal

<https://ecos.fws.gov/ecp/species/4469>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Prothonotary Warbler *Protonotaria citrea*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence ( )

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any

week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

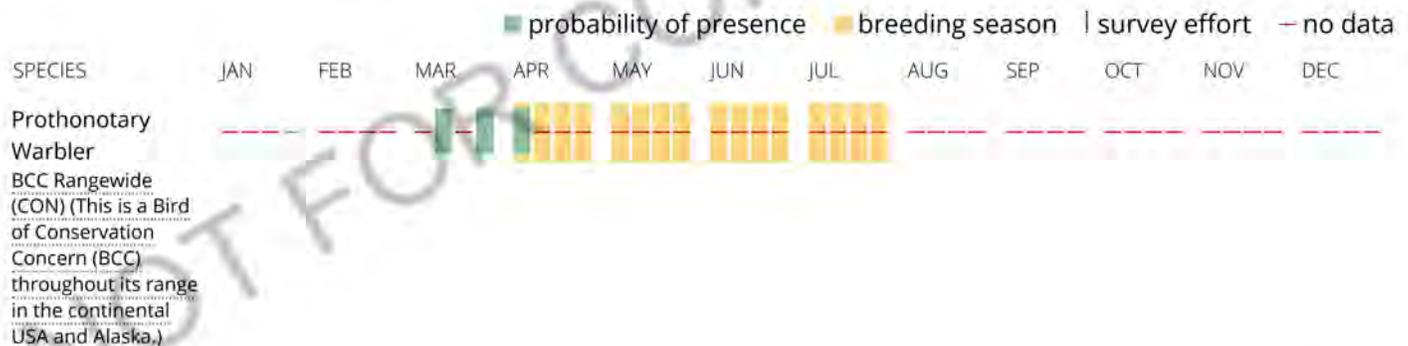
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Marine mammals

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act<sup>1</sup> and the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>2</sup>.

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries<sup>3</sup> [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*  
<https://ecos.fws.gov/ecp/species/4469>

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1A](#)

RIVERINE

[R2UBH](#)

[R4SBC](#)

[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### CATEGORICAL EXCLUSION REVIEW

#### A. Background

Project Name: Seminole Tribe of Florida, Youth Conservation Corps Grant Funding FY20

Exclusion category: 43 CFR § 46.210 (e) and (j)

#### B. Description of Proposed Action:

The Seminole Tribe of Florida has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The Seminole Tribe of Florida Heritage and Environmental Resource Office (HERO), Environmental Resource Management Department (ERMD) proposes to train and enlist the services of Seminole Tribe youth to perform environmental data collection to support the needs of the Tribe. Summer youth will work alongside assigned HERO/ERMD staff, receiving training as required and necessary. RESTORE summer youth will collect data which may include soil, surface water, aquatic species including macroinvertebrates and periphyton. All samples will be analyzed by NELAC certified laboratories.

#### C. Compliance with NEPA:

Due to the need for federal approvals/funding, this project has been reviewed in accordance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The Tribe's proposed activities qualify for a "categorical exclusion" review under DOI policies and procedures for implementing NEPA. Meaning the proposed action is categorically excluded from further analysis under NEPA in accordance with 43 CFR § 46.210 (e) and (j).

*43 CFR§ 46.210 (e) - Nondestructive data collection, inventory, study, research and monitoring activities.*

*43 CFR§ 46.210 (j) - Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals, or the general public.*

As part of the categorical exclusion process, BIA environmental staff must consider and document an "extraordinary circumstances" review. This review and the extraordinary circumstances are defined for the Department of the Interior at *43 CFR §46.215*. Documentation from the extraordinary circumstances review for this project has been attached as Attachment 1.

Based on the extraordinary circumstances review it has been determined that a categorical exclusion review is the appropriate level of review in accordance with NEPA. The categorical exclusion is appropriate because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

Providing funding to the Tribe to host the youth conservation camp will have no adverse environmental impacts on public health or safety, wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, prime or unique farmlands, and historic properties. The proposed project will not have any highly controversial or uncertain effects on the environment or pose any unique or unknown environmental risks to the immediate and surrounding environment. This action will not establish a precedent.

In addition to NEPA, this project was also evaluated and found to be in compliance with the following: Endangered Species Act, National Historic Preservation Act, Magnuson-Stevens Act, Fish and Wildlife Coordination Act, Executive Order 11988, Executive Order 11990, Executive Order 12898, Coastal Zone Management Act, Coastal Barrier Resources Act, Farmland Protection Policy Act, Clean Water Act Section 404, Rivers and Harbors Act Section 10, Marine Protection, Research and Sanctuaries Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Clean Air Act.

**D. Signatures:**

Preparer:  Date: 1-30-2020  
Regional Environmental Scientist

Concur:  Date: 1/29/2020  
Regional Archeologist

Concur:  Date: 1/30/2020  
**Acting** Regional Director

**Attachment 1****Extraordinary Circumstance Review**

Extraordinary Circumstances	NO	YES
<p><b>1. This action will have significant adverse effects on public health or safety.</b></p> <p><u>Rationale:</u> This action would not have a significant adverse effect on public health and safety. The activities planned are educational in nature and the youth will be working under adult supervision.</p>	X	
<p><b>2. This action will have an adverse effect on unique geographical features such as wetlands, wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.</b></p> <p><u>Rationale:</u> The proposed action will not result in any adverse effects on unique geographical features. The activities planned are educational in nature. Environmental effects of any activities would be minimal in context and intensity and will benefit the local watershed.</p>	X	
<p><b>3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.</b></p> <p><u>Rationale:</u> There are no highly controversial environmental effects associated with the proposed action.</p>	X	
<p><b>4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</b></p> <p><u>Rationale:</u> The proposed action would not result in any highly uncertain and potentially significant effects.</p>	X	
<p><b>5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action would not be precedent setting or represent a decision in principle about future actions with potentially significant environmental effects. The Department has previously supported and funded many YCC activities.</p>	X	
<p><b>6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.</b></p> <p><u>Rationale:</u> The proposed action has no direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. The activities planned are simply educational in nature.</p>	X	

<p><b>7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. Please see attached correspondence from the Tribal Historic Preservation Office.</p>	X	
<p><b>8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</b></p> <p><u>Rationale:</u> The proposed action will have no significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species. The activities planned are educational in nature.</p>	X	
<p><b>9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</b></p> <p><u>Rationale:</u> The proposed action would not violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.</p>	X	
<p><b>10. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).</b></p> <p><u>Rationale:</u> The Tribe is an Environmental Justice community and the proposed action has been requested by the Tribe because it would result in a positive impact. No construction is being proposed, so there will be no impact to the surrounding community.</p>	X	
<p><b>11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).</b></p> <p><u>Rationale:</u> The proposed action would not result in limited access to and ceremonial use of sacred sites by the Tribe.</p>	X	
<p><b>12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).</b></p> <p><u>Rationale:</u> The proposed action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.</p>	X	

# SEMINOLE TRIBE OF FLORIDA

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**MITCHELL CYPRESS**, Vice Chairman

**ANDREW J. BOWERS, JR.**, Brighton Councilman

**CHRISTOPHER OSCEOLA**, Hollywood Councilman

**MANUEL M. TIGER**, Big Cypress Councilman

**LAVONNE ROSE**, Secretary

**PETER A. HAHN**, Treasurer

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## RESTORE 2020 Youth Corps Proposal

The Seminole Tribe of Florida Heritage and Environmental Resource Office (HERO), Environmental Resource Management Department (ERMD) proposes to train and enlist the services of Seminole Tribe youth to perform environmental data collection to support the needs of the Tribe. This project relates to the goals of RESTORE as the data collection contributes to protecting and restoring natural resources, ecosystems, wildlife habitats and wetlands of the greater RESTORE region. The Seminole Tribe's Big Cypress Reservation is part of the greater Everglades ecosystem and hydrologically connect to, and upstream of the Big Cypress National Preserve, the Miccosukee Indian Reservation and the State of Florida Water Conservation Area 3A. The Seminole Tribe's Brighton Reservation is located within the upstream watershed of Lake Okeechobee. Lake Okeechobee is at the center of Florida Everglades restoration, as well as a vital resource for Florida's fresh water supply, wildlife and environment.

The project proposed by the Seminole Tribe would solicit the participation of Tribal youth to receive training by professionals for various environmental data collection efforts. Tribal schools and Tribal youth will be targeted through the Tribe's internal e-mail server with notification of the paid summer opportunity. The Seminole Tribe coordinated RESTORE Summer Youth Corps programs in 2017 and 2018, and the internal email notification was effective. Summer youth will work alongside assigned HERO/ERMD staff, receiving training as required and necessary. RESTORE summer youth will collect data which may include soil, surface water, aquatic species including macroinvertebrates and periphyton. All samples will be analyzed by NELAC certified laboratories. ERMD will report at the end of the program period documenting training, youth participation, data collection, and discussion on how the data collection will be incorporated into the Tribe's HERO/ERMD programs.

ERMD estimates the number of youth to be employed during 2020 at 12 youth, and 12 youth for 2021. The comparable internship compensation for youth participation is \$12/hour. The program length is estimated at 8.4 weeks, with an average of 24 hours per week. Total personnel costs are estimated at \$62,900.00. The annual budget also includes funding for transportation, contractual services (ie laboratory analyses, field workshops hosted by professionals) and supplies follows:

Personnel: 10 youth \$12/hour 8.4 weeks total estimated 24 hours/wk/youth = \$24,192.00

Contractual Services: \$18,000.00

Supplies: (sun shirts with logo, snake boots, hats, sunscreen, bug spray, etc) \$5,808.00

Transportation/Meals: \$2,000.00

(transporting students between BR, BC and HWD for trainings/field work, events, and meals for organized trainings)

Total Estimated Budget per year \$50,000.00

Total Estimated Budget 2 years: \$100,000.00

# SEMINOLE TRIBE OF FLORIDA

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**LAVONNE ROSE**, Secretary  
**PETER A. HAHN**, Treasurer

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## MEMORANDUM

**TO:** Whitney Sapienza, Assistant Director - ERMD

**FROM:** Roberto Luque, Environmental Protection Specialist III- ERMD

**RE:** Environmental Compliance Review (ECR): RESTORE Grant (ERMD-01-2020-014715)

**DATE:** January 29, 2020

.....  
In accordance with applicable policies, procedures, ordinances and regulations, ERMD has completed an environmental review of this project. The proposed action is the approval of summer youth work activities in accordance with the Restore Grant which includes data collection incorporating soil, surface water, and aquatic species sampling including macroinvertebrates and periphyton. The Seminole Tribe of Florida will solicit the grant project activities for the participation of Tribal youth to receive training by professionals for various environmental data collection efforts. Summer youth will work alongside assigned ERMD staff, receiving training as required and necessary. The proposed project spans Tribal-Wide, incorporating all Seminole Indian Reservations.

Based on details submitted, ERMD has prepared the following Environmental Compliance Review (ECR) package to include the necessary reviews and backup documentation. This concludes the environmental review. The proposed action may proceed in accordance with the conditions listed in this permit, and as referenced in the attached clearance documents. If changes in the project, scope of work, or location occur please contact ERMD for additional assistance at [ERMDRequest@semtribe.com](mailto:ERMDRequest@semtribe.com) or call 954-965-4380.

RL: cj

Cc: Kevin M. Cunniff, Director; file  
Attachments:  
Environmental Compliance Review Checklist  
THPO Clearance Letter

# ENVIRONMENTAL COMPLIANCE REVIEW CHECKLIST

## Required Documentation

### **A. National Environmental Policy Act (NEPA)**

Required  Not Required

- Categorical Exclusion
- Environmental Assessment
- ERMD ECR only - This project will not have an adverse impact to the environment
- ERMD ECR only - This project will have an adverse impact to the environment. Please see conditions below.

\*At this time, based on NEPA requirements, this project does require an Environmental Assessment or Categorical Exclusion. Should any project conditions change, please notify ERMD.

#### *Conditions:*

ERMD is part of the Restore Grant which funds participation of youth in environmental programs. Part of the requirements for this grant is NEPA compliance with Section 106 and NAGPRA (Native American Graves Protection and Repatriation Act).

### **B. Historical Preservation Act – Section 106 (THPO)**

Required  Not Required

*THPO Project # 2020-003*

- Cleared – No historic properties affected in the Area of Potential Effect (APE) as described. No cultural resources affected.
- Not Cleared – Archeological Site found within the Area of Potential Effect.

#### *Conditions:*

If an inadvertent discovery of archeological materials or human remains is made, all work should stop and the discovery must be reported to THPO. In the case of human remains please notify the Seminole Police Department immediately, then call the Office of the THPO.

### **C. Endangered Species Act – Section 7**

Required  Not Required

- Cleared – No listed species and/or designated critical habitat is present in APE
- Cleared – Listed species and/or designated habitat is present in the APE but appropriate mitigation measures have been obtained.
- Not Cleared – Listed species and/or designated habitat is present in the APE and the project cannot proceed without additional work.

### **D. Wetlands**

Required  Not Required

- Cleared - Jurisdictional wetlands are not located within the identified project boundary. Conditions required for approval. See below.

- Cleared – Wetlands identified with project APE but appropriate mitigation or avoidance has been conducted.
- Not Cleared – Wetlands have been identified within the APE and the project cannot proceed without additional work.

**E. National Pollutant Discharge Elimination System**  Required  Not Required

- Notice of Intent (NOI) under Construction General Permit
- Individual NPDES permit

**F. Seminole Water Commission**  Required  Not Required

- Well Construction\Abandonment Permit Required [Permit #: \_\_\_\_\_]
- Storm Water Management Permit Required
- Seminole Water Commission [Permit #: \_\_\_\_\_ Approval Date: \_\_\_\_\_]

**G. Spill Prevention Control & Countermeasure (SPCC)**  Required  Not Required

- Self-Certified SPCC Plan (< 10,000 gallons)
- PE sealed SPCC Plan (> 10,000 gallons)

**H. Historical Review/ Contamination Assessment**  Required  Not Required

Historical Review

- Not Completed – Historical review has not been completed for this APE
- Completed – Historical review indicates that no additional review is required within this APE
- Completed – Historical review indicates that site inspection and contamination assessment be conducted

Contamination Assessment

- Not Completed – Contamination assessment has not been completed for this APE
- Completed – Assessment indicates no contaminants present or contaminant levels are within allowable EPA limits and no remediation activities are required
- Completed – Assessment indicates that contaminant levels are above allowable EPA limits and remediation activities are required for the project to proceed.

*Conditions:*

During any activity, if soil or groundwater contamination is encountered or a spill of a hazardous material or oil/gasoline occurs, stop work in the area and contact ERMD at 954-965-4380 or 863-763-4128 immediately.

Project Description: RESTORE Grant  
Authorized Activities: Solicit the participation of Tribal youth to receive training by professionals for various environmental data collection efforts  
Project Location: Tribal Wide Reservation  
Date of Issuance: January 8, 2020  
Clearance Duration: 1 Year from Date of Clearance

This Clearance is issued pursuant to THPO File No: 2019-421, dated January 8, 2020. This Clearance is issued under the provisions of Seminole Tribe of Florida Ordinance C-01-16, Cultural Resource Ordinance (“CRO”), and, to the extent they are relevant, the agreements with the United States National Park Service and the Advisory Council on Historic Preservation.

The THPO has reviewed **RESTORE Grant** project and has determined that this “undertaking” [36 CFR 800.16(y)] is not the type of activity that could affect cultural resources [STOF Cultural Resource Ordinance (C-01-16)]. This clearance applies to the area of potential effects (APE) as described. Should that change a new survey may be required.

All activities authorized by this Clearance must be implemented as set forth, in compliance with the CRO, and in a manner respectful of the Seminole Tribe of Florida’s culture. All information related to this Clearance is by this reference incorporated herein, regardless of attachment hereto.

All terms contained in this Clearance have the meanings given to them in the CRO except that references to “cultural resources” shall, herein refer collectively to “cultural resources” and “historic properties.” Where a term is not defined in the CRO, the term will have its ordinary meaning. This Clearance shall be subject to the General and Special Conditions below.

#### **Unanticipated Discoveries**

Should future activities in this APE uncover any archaeological remains, activity in the immediate area must be stopped until a professional archaeologist from the TAS can evaluate the discovery. In the event that human remains are found during construction or maintenance activities, the STOF maintains compliance with provisions of the Native American Graves and Repatriation Act (NAGPRA). If human remains, funerary objects, or sacred objects are discovered inadvertently, the Tribal Historic Preservation Officer (THPO), Tribal Bioarchaeologist, and the Seminole Police Department must be notified immediately by telephone and all further activity ceased. Additionally, a reasonable effort must be made to leave the discovery in place.

### NOTICE OF RIGHTS

*Unless otherwise provided for by Seminole Tribe of Florida Ordinance C-01-16, Cultural Resource Ordinance ("CRO"), any person whose interests are substantially affected by any decision, determination, action (including the issuance of permits), or enforcement action (including the imposition of administrative remedies) under the CRO may request an administrative hearing with thirty (30) days after the receipt of said decision, determination, action or enforcement action or receipt of a Notice of Violation, Cease and Desist Order, or Citation under the CRO. All requests for an administrative hearing must be timely filed by certified mail within the Seminole Tribe of Florida Tribal Historic Preservation Office ("THPO") and the Seminole Tribe of Florida Office of the General Counsel ("General Counsel").*

*Tribal Historic Preservation Office  
30290 Josie Billie Highway  
PMB 1004  
Clewiston, Florida 33440*

*Seminole Tribe of Florida  
Office of the General Counsel Office  
6300 Stirling Road  
Hollywood, Florida 33024*

*All requests for an administrative hearing must comply with the requirements of the CRO and implementing Administrative Procedures, which are available by request from the THPO or the General Counsel. For purposes of computing time, the day of the triggering act shall not be included. Further, the last day of the prescribed period (30 days) shall be included unless it is a Saturday or Sunday, or a designated Seminole Tribe of Florida holiday or other official closure of the Seminole Tribe of Florida government offices, in which event the period shall be extended to the next business day. Tribal holidays are those designated by the Seminole Tribe for closure of the Seminole Tribe's government offices and as published on the Tribal Historic Preservation Office website, [www.stofthpo.com](http://www.stofthpo.com).*

*All persons waive the right to a hearing or any other legal remedy for failure to timely request an administrative hearing under the CRO. All administrative review and hearings must be exhausted before any person subject to the Seminole Tribe of Florida's jurisdiction can file a legal action in a civil court of competent jurisdiction. Failure to initiate an administrative review under the CRO will act as a waiver of any rights to file an action in any court of competent jurisdiction.*

*Any enrolled member of the Seminole Tribe of Florida whose interests are substantially affected may, in lieu of an administrative hearing under the CRO, request that the matter in question be decided by a traditional community-based decision-making process consistent with the Seminole Tribe's traditions. Such requests will be honored at the discretion of the Tribal Council of the Seminole Tribe of Florida. Decisions from a traditional community-based decision-making process are final and cannot be appealed nor can an administrative hearing be initiated. Any person requesting a traditional community-based decision-making process waives all rights to file an action in or appeal to any court of competent jurisdiction and agrees to be bound by the decision resulting from the traditional community-based decision making process.*



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Regional Office  
545 Marriott Drive, Suite 700  
Nashville, TN 37214

### Memorandum

Date: December 9, 2019

To: Project File

From: Chet McGhee, BIA Regional Environmental Scientist 

Subject: T&E species/critical habitat species impact determination review –  
Seminole Tribe of Florida RESTORE Grant

**Proposed Action:** The Seminole Tribe of Florida has submitted a federal grant proposal to acquire funding through the Department of the Interior/Bureau of Indian Affairs in order to host a Tribal Youth Conservation Camp (TYCC). The funding is being made available through the Gulf Coast Ecosystem Restoration Council.

The Seminole Tribe of Florida Heritage and Environmental Resource Office (HERO), Environmental Resource Management Department (ERMD) proposes to train and enlist the services of Seminole Tribe youth to perform environmental data collection to support the needs of the Tribe. Summer youth will work alongside assigned HERO/ERMD staff, receiving training as required and necessary. RESTORE summer youth will collect data which may include soil, surface water, aquatic species including macroinvertebrates and periphyton. The students will work and be supervised by environmental professionals with ERMD during any data collection event.

A review of potential impacts to threatened and endangered species and/or critical habitat was conducted for the project. Based on the internal review conducted, it is my determination that the proposed action will have “no effect” on threatened or endangered species or their critical habitat. The activities are educational in nature. With this “no effect” determination, no further consultation is considered necessary.



**Spill Impact Component**  
**Application for Financial Assistance**

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**APPLICATION INFORMATION**

**Project Details**

RAAMS ID	129
Project Title	State Expenditure Plan #16: Three Mile Creek Watershed Restoration
Project Start Date	02/01/2020
Project End Date	01/31/2023
Requested Funds	\$12,081,884.00

**Project Abstract**

The City of Mobile will complete the engineering and construction for the restoration and protection of water quality of the Gulf Coast Region's fresh, estuarine, and marine water resources by providing bank and stream stabilization along Twelve Mile Creek and the dredging and restoration of Langan Park Lake, both of which drain into Three Mile Creek and Mobile Bay. The project begins along Twelve Mile Creek at East Drive and ends at the outlet control structure of Langan Park Lake in Langan Municipal Park near Zeigler Boulevard in Mobile, Alabama. Increased velocities due to stormwater conveyance systems have contributed to degradation of the banks, destabilization of the creek, undercutting of sanitary sewer crossings and sedimentation in the creek and Langan Park Lake. The engineering and construction of this project would provide reinforcement of the creek against further erosion and remove existing sedimentation, thereby stabilizing Twelve Mile Creek and increasing the recreational, educational, and cultural activities in Langan Municipal Park.

**PERSONNEL**

<b>Primary Organization Personnel</b>			
<b>Primary</b>	<b>Role</b>	<b>Name</b>	<b>Organization Name</b>
Yes	Project Lead / Point of Contact	Amy Hunter, E	Alabama Department of Conservation and Natural Resources
No	Project Lead / Point of Contact	Jaime Miller, E	Alabama Department of Conservation and Natural Resources
No	Project Lead / Point of Contact	Jennifer Robinson,	Alabama Department of Conservation and Natural Resources
No	Agency Responsible Official	Christopher Blankenship	Alabama Department of Conservation and Natural Resources

<b>Other Personnel (Partners, Subrecipients, and Contractors)</b>		
<b>Role</b>	<b>Name</b>	<b>Organization Name</b>
Contractor	Bethany Kraft, Anne	Volkert, Inc.

## ORGANIZATIONS

Primary	Role	Organization Name
Yes	Prime	Alabama Department of Conservation and Natural Resources
No	Contractor	Volkert, Inc.
No	Subrecipient	City of Mobile

**PROJECT LOCATION**

<b>Project Location Countries:</b>	United States
<b>Project Location States:</b>	Alabama
<b>Project Location Counties:</b>	Mobile County
<b>Project Location Districts:</b>	District 1 (AL)
<b>Project Location Description:</b>	The project begins along Twelve Mile Creek at East Drive and ends at the outlet control structure of Langan Park Lake in Langan Municipal Park near Zeigler Boulevard in Mobile, Alabama.

## BUDGET SUMMARY

	<b>Amount</b>
<b>Personnel</b>	\$51,824.00
Personnel	\$37,050.00
AGCRC Executive Director	\$4,764.00
DWH Restoration Coordinator	\$15,537.00
Biologist III	\$9,244.00
GCO	\$4,221.00
Administrative Assistant	\$3,284.00
<b>Fringe Benefits</b>	\$14,774.00
AGCRC Executive Director	\$1,558.00
DWH Restoration Coordinator	\$5,345.00
Biologist III	\$3,858.00
GCO	\$2,186.00
Administrative Assistant	\$1,827.00
<b>Travel</b>	\$234.00
Travel	\$234.00
Project Oversight	\$234.00
<b>Construction</b>	\$0.00
Construction management/legal expenses	\$0.00
Land, structures, rights-of-way, appraisals, etc.	\$0.00
Relocation expenses and payments	\$0.00
Architectural and engineering fees	\$0.00
Other architectural and engineering fees	\$0.00
Project inspection fees	\$0.00
Site work	\$0.00
Demolition and removal	\$0.00
Construction	\$0.00
Contingencies	\$0.00
<b>Equipment</b>	\$0.00
Equipment	\$0.00
<b>Supplies</b>	\$100.00
Supplies	\$100.00
Postage	\$100.00
<b>Other Direct Costs</b>	\$0.00
Other Direct Costs	\$0.00
Miscellaneous	\$0.00
<b>Subrecipients and Contractors</b>	\$12,017,185.00
Subrecipient	\$11,960,940.00
City of Mobile	\$11,960,940.00
Contractor	\$56,245.00
Volkert & Associates Inc.	\$56,245.00
<b>Total Direct Costs</b>	\$12,069,343.00
<b>Indirect Charges</b>	\$12,541.00
Indirect Charges	\$12,541.00
Total direct costs, less capital expenditures and passthrough funds. Passthrough funds are normally defined as payments to participants, stipends to eligible recipients, or subawards, all of which normally require minimal administrative effort. Fixed	\$12,541.00
<b>Total Indirect Costs</b>	\$12,541.00
<b>Total GCERC Costs</b>	\$12,081,884.00
<b>Co-Funding</b>	\$0.00
Co-Funding	\$0.00
<b>Total Project Costs</b>	\$12,081,884.00
<b>Income</b>	\$0.00

Project (program) income	\$0.00
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**CO-FUNDING BUDGET**

**Name:**

**Role:**

**Amount**

\$

**LEVERAGED FUNDING**

<b>Planned Amount</b>	\$1,150,000.00
<b>Type:</b>	Builds on Other Work
<b>Status:</b>	Proposed
<b>Source:</b>	Mobile Bay National Estuary Program
<b>Source Type:</b>	Not For Profit
<b>Description:</b>	The proposed project leverages RESTORE Bucket 2 funds allocated (\$1.15M) to the MBNEP for restoration activities in Twelve Mile Creek, upstream of Langan Lake Park. Also, the grant for the MBNEP funds hydrologic modeling and invasive species manage

<b>Planned Amount</b>	\$320,000.00
<b>Type:</b>	Co-Funding
<b>Status:</b>	Pledged
<b>Source:</b>	City of Mobile
<b>Source Type:</b>	Local Funder (e.g., city, county, parish)
<b>Description:</b>	- The City of Mobile is providing funds for grant management, project management, technical oversight, and \$320,000 (FY18) in engineering services.

<b>Total Planned</b>	\$1,470,000.00
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**TRIBAL SUPPORT**

<b>01. Has the application been prepared or submitted on behalf of a federally recognized Indian Tribe?</b>	No
<b>02. Does the project or program provide a direct benefit to a federally recognized Tribe?</b>	No
<b>03. Please check federally recognized Tribes supported or benefitted. If not applicable, please check "NA."</b>	,NA

**CASH DRAWDOWN PROJECTION**

<b>Project Start Date:</b>	02/01/2020
<b>Project End Date:</b>	01/31/2023
<b>Requested Amount:</b>	\$12,081,884.00

<b>From:</b>	<b>To:</b>	<b>Cash Projection:</b>	<b>Running Total:</b>
02/01/2020	03/31/2020	\$150,000.00	\$150,000.00
04/01/2020	09/30/2020	\$2,316,377.00	\$2,466,377.00
10/01/2020	03/31/2021	\$2,316,377.00	\$4,782,754.00
04/01/2021	09/30/2021	\$2,316,377.00	\$7,099,131.00
10/01/2021	03/31/2022	\$2,316,377.00	\$9,415,508.00
04/01/2022	09/30/2022	\$2,316,376.00	\$11,731,884.00
10/01/2022	01/31/2023	\$350,000.00	\$12,081,884.00

<b>Projection Sum:</b>	\$12,081,884.00
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**COMPREHENSIVE PLAN CRITERIA**

<b>Watershed:</b>	Other Watershed
<b>Primary Goal:</b>	Restore and Conserve Habitat
<b>Primary Objective:</b>	Restore, Enhance, and Protect Habitats
<b>Project or Program:</b>	Project
<b>Primary Eligible Activity:</b>	Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region

<b>Phase(s):</b>	Implementation, Planning
<b>Other Watershed Name (if applicable)</b>	

**MILESTONES**

<b>Milestone</b>	<b>Area of Effort</b>	<b>Description</b>	<b>Start Date</b>	<b>Expected Date</b>	<b>Amount</b>	<b>Deliverable</b>
Project Management	Project Oversight and Grants Management	Project Management	02/01/2020	01/31/2023	\$120,944.00	Yes
Engineering and Design	Engineering and Design	Engineering and Design	02/01/2020	02/28/2021	\$1,192,080.00	Yes
Construction	Construction	Construction	03/01/2021	01/31/2023	\$10,768,860.00	Yes

## METRICS

<b>Template Name:</b>	Community Resilience
<b>Metric Name:</b>	RES002 - Community Resilience - # upgrades to stormwater and/or wastewater systems

<b>Baseline</b>	0.00
<b>Current</b>	0.00
<b>Completion</b>	1.00

<b>Notes:</b>	
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<b>Template Name:</b>	Habitat Restoration
<b>Metric Name:</b>	HR010 - Riparian buffer restoration - Miles restored

<b>Baseline</b>	0.00
<b>Current</b>	0.00
<b>Completion</b>	1.00

<b>Notes:</b>	
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**ENVIRONMENTAL COMPLIANCE CHECKLIST**

<b>01a. National Environmental Policy Act</b>	Yes
<b>01b. Compliance Notes (NEPA)</b>	
<b>02a. Endangered Species Act</b>	No
<b>02b. Compliance Notes (Endangered Species Act)</b>	
<b>03a. National Historic Preservation Act</b>	No
<b>03b. Compliance Notes (NHPA)</b>	
<b>04a. Magnuson-Stevens Act (Essential Fish Habitat)</b>	No
<b>04b. Compliance Notes (Magnuson-Stevens Act)</b>	
<b>05a. Fish and Wildlife Coordination Act</b>	No
<b>05b. Compliance Notes (Fish and Wildlife Coordination Act)</b>	
<b>06a. Coastal Zone Management Act</b>	No
<b>06b. Compliance Notes (Coastal Zone Management Act)</b>	
<b>07a. Coastal Barrier Resources Act</b>	No
<b>07b. Compliance Notes (Coastal Barrier Resources Act)</b>	
<b>08a. Farmland Protection Policy Act</b>	No
<b>08b. Compliance Notes (Farmland Protection Policy Act)</b>	
<b>09a. Clean Water Act Section 404</b>	Yes
<b>09b. Compliance Notes (Clean Water Act Section 404)</b>	Individual permit application was submitted October 18, 2019.
<b>10a. Clean Water Act Section 401</b>	No
<b>10b. Compliance Notes (Clean Water Act Section 401)</b>	
<b>11a. Rivers and Harbors Act Section 10</b>	No
<b>11b. Compliance Notes (Rivers and Harbors Act Section 10)</b>	
<b>12a. Marine Protection, Research and Sanctuaries Act</b>	No
<b>12b. Compliance Notes (Marine Protection, Research and Sanctuaries Act)</b>	
<b>13a. Marine Mammal Protection Act</b>	No
<b>13b. Compliance Notes (Marine Mammal Protection Act)</b>	
<b>14a. National Marine Sanctuaries Act</b>	No
<b>14b. Compliance Notes (National Marine Sanctuaries Act)</b>	

<b>15a. Migratory Bird Treaty Act</b>	No
<b>15b. Compliance Notes (Migratory Bird Treaty Act)</b>	
<b>16a. Bald and Golden Eagle Protection Act</b>	No
<b>16b. Compliance Notes (Bald and Golden Eagle Protection Act)</b>	
<b>17a. Clean Air Act</b>	No
<b>17b. Compliance Notes (Clean Air Act)</b>	

<b>ENVIRONMENTAL COMPLIANCE SUPPLEMENTAL CHECKLIST</b>
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Compliance Requirement	E.O. 13112 Invasive Species
Status	Requirement is Not Addressed
Compliance Notes	
Compliance Requirement	E.O. 11988 and E.O. 13690 Floodplain Management
Status	Requirement is Not Addressed
Compliance Notes	

**UPLOADS**

The following files were uploaded by the applicant/recipient:

<b>Upload Type</b>	<b>File Name</b>	<b>Uploaded By</b>	<b>Uploaded Date</b>
Budget Narrative	Budget Narrative12 Mile_Nov27_Final.docx	Robinson, Jennifer	11/27/2019
Certifications and Assurances	Three Mile Creek Certifications_Assurances - Signed.pdf	Robinson, Jennifer	11/26/2019
Data Management Plan	DMP 3Mile 11.25.19.docx	Robinson, Jennifer	11/27/2019
GIS Shapefiles	ThreeMileCreekGrant_Shapefiles. zip	Robinson, Jennifer	11/27/2019
Letter of Authorization	Letter of Authorization.pdf	Robinson, Jennifer	11/26/2019
Observational Data Plan	ODP 3Mile 11.25.19.docx	Robinson, Jennifer	11/27/2019
Project Maps	TwelveMileCreekProjectMap.pdf	Robinson, Jennifer	11/27/2019
SEP Project Narrative	3MC_Project Narrative11.27_final.docx	Robinson, Jennifer	11/27/2019

## Budget Narrative

### 1.0 SUMMARY AND JUSTIFICATION

RESTORE Funding in the amount of \$12,081,884.00 is being requested. The amount is an estimate based on the anticipated scope of work.

This project will reduce further bank destabilization, thereby reducing sedimentation to downstream waterbodies like Langan Park Lake and Three Mile Creek. Improvements in water quality, storm water management, and flood control support the work in Langan Park Lake to restore its capacity and usefulness. Dredging of Langan Park Lake will increase the capacity of the lake, support flood control and aid in the apple snail abatement. RESTORE Funds will be utilized for:

- **Completion of design** of Task 2 Langan Park Lake Dredging.
- **Construction** for Task 2 Langan Park Lake Dredging. Construction to include lake dredging, dredge spoil removal and invasive species abatement.
- **Construction** for Tasks 3 and 4 for Twelve Mile Creek. Construction to include bank stabilization, stream bed stabilization, and invasive species abatement.

Leveraged funds are further described in the attached milestones and budget spreadsheet

<b>TOTAL PROJECT OR PROGRAM FUNDS REQUESTED</b>	<b>\$12,081,884.00</b>
<i>Total Pre-Award Funds Requested</i>	<i>\$5,136.00</i>
<i>Total Direct Costs Requested</i>	<i>\$12,064,207.00</i>
<i>Total Allowable Indirect Costs Requested</i>	<i>\$12,541</i>
<i>Total Program Income Anticipated</i>	<i>\$0.00</i>

### 2.0 PRE-AWARD COSTS (applicable to grant applications only)

The Alabama Gulf Coast Recovery Council's (AGCRC) Biologist IV, dedicated approximately 50 hours and the Biologist III dedicated approximately 50 hours to the draft grant application prior to award. Therefore, estimated pre-award costs for developing the grant application are \$5,136.00 (salary & fringe).

<b>TOTAL PRE-AWARD FUNDS REQUESTED</b>	<b>\$5,136.00</b>
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### 3.0 Budget Object Classes Applicable to All Projects and Programs – DIRECT COSTS

#### 3.1 PERSONNEL

*The **Alabama Gulf Coast Recovery Council Executive Director** is responsible for coordinating and implementing all activities undertaken for project submission, selection, and funding awards for RESTORE Act funding. The ED will provide support for RESTORE Act activities including, but not limited to, subrecipient monitoring; participating in meetings and conference calls, as needed; reviewing subrecipient agreements, procurement documents, contracts, reports, and all other necessary documents for grant administration. Time is traced using CORONA, which allows employees to input tasks by project. The timesheets are electronically approved by assigned supervisors.*

***ADCNR's Deepwater Horizon (DWH) Restoration Coordinator/Biologist IV** will provide support for RESTORE Act activities including, but not limited to, subrecipient monitoring; participating in meetings and conference calls, as needed; reviewing subrecipient agreements, procurement documents, contracts, reports, and all other necessary documents for grant administration. Time is tracked using CORONA, which allows employees to input tasks by project. The timesheets are electronically approved by assigned supervisors.*

***Biologist III/Grants Manager** will assist in preparing draft proposals for Executive Director review, developing budgets and expense details, monitoring, reviewing subrecipient reports and invoices, submitting semi-annual reports and reimbursements to RESTORE Council, and participating in meetings and conference calls as needed. Time is tracked using CORONA, which allows employees to input tasks by project. The timesheets are electronically approved by assigned supervisors.*

***GCO** will provide support for RESTORE Act activities including, but not limited to, all federal grant compliance requirements and subrecipient monitoring. Time is tracked using CORONA, which allows employees to input tasks by project. The timesheets are electronically approved by assigned supervisors.*

***Administrative Assistant** will provide general office support for the Executive Director and Biologist III/Grants Manager as needed. Time is tracked using CORONA, which allows employees to input tasks by project. The timesheets are electronically approved by assigned supervisors.*

Position/Role	Duties and Responsibilities	Unit Cost	Unit	% Time (devoted to project)	Total	Pre-Award Costs?
AGCRC Executive Director	Coordinating & implementing all activities for Spill Impact Component RESTORE Act funding	\$105,866	Per year	1%	\$4,764	<input type="checkbox"/>
DWH Restoration Coordinator	Coordinating & supporting all staff in submission of RESTORE Act grants	\$97,696	Per year	3%	\$2,348	<input checked="" type="checkbox"/>
Bio-III	Prepare documents for all activities for Spill Impact Component RESTORE	\$58,128	Per year	3%	\$1,397	<input checked="" type="checkbox"/>

	<i>Act funding</i>					
<i>DWH Restoration Coordinator</i>	<i>Coordinating &amp; supporting all staff in submission of RESTORE Act grants</i>	\$97,696	<i>Per year</i>	3%	\$13,189	<input type="checkbox"/>
<i>Bio-III</i>	<i>Prepare documents for all activities for Spill Impact Component RESTORE Act funding</i>	\$58,128	<i>Per year</i>	3%	\$7,847.00	<input type="checkbox"/>
<i>GCO</i>	<i>Provide general office support</i>	\$62,530	<i>Per year</i>	1.5%	\$4,221	
<i>Admin. Asst</i>	<i>Provide general office support</i>	\$36,492	<i>Per year</i>	2%	\$3,284	<input type="checkbox"/>

**TOTAL PERSONNEL: \$37,050.00**

### 3.2 FRINGE BENEFITS

This includes FICA, cost of leave, employee insurance, retirement and unemployment benefit plans. The fringe rate percentage varies by employee and will also vary from year to year based upon federal guidance and the state legislative process. For budget purposes, FY18 fringe rates were applied as follows: Employer Healthcare Contribution \$11,160 per employee annually; Employer Retirement Match Contribution 13.94% (Tier I) or 13.29% (Tier II); FICA match 7.65%; and Unemployment Insurance 0.37%.

<b>Position (s)</b>	<b>Total Compensation (life of project)</b>	<b>Fringe %</b>	<b>Total Fringe Benefit (life of project)</b>	<b>Pre-Award Costs?</b>
<i>AGCRC Executive Director</i>	\$4,764	32.7	\$1,558	<input type="checkbox"/>
<i>DWH Restoration Coordinator</i>	\$2,348	34.4	\$808	<input checked="" type="checkbox"/>
<i>Bio-III</i>	\$1,397	41.7	\$583	<input checked="" type="checkbox"/>
<i>DWH Restoration Coordinator</i>	\$13,189	34.4	\$4,537	<input type="checkbox"/>
<i>Bio-III</i>	\$7,847.00	41.7	\$3,275	<input type="checkbox"/>
<i>GCO</i>	\$4,221	51.8	\$2,186	
<i>Admin. Asst.</i>	\$3,284	55.6	\$1,827	<input type="checkbox"/>

**TOTAL FRINGE BENEFITS: \$14,774.00**

### 3.3 TRAVEL

Biologist III will travel 4 times (approx. 2 trips per year) to the work site. Work site trip will be used to ensure scope of work if being followed and invoices reflect work completed.

Purpose of Travel	Destination	# Trips	# Travelers	Item	Quantity or Rate	Total	Pre-Award Costs?
<b>Project Oversight</b>	Mobile, AL	10	1	Mileage	\$0.58 per mile	\$234.00	<input type="checkbox"/>
							<input type="checkbox"/>

**TOTAL TRAVEL: \$234.00**

### 3.4 CONSTRUCTION and LAND ACQUISITION

#### 3.5 EQUIPMENT

No Equipment is expected to be purchased.

#### 3.6 SUPPLIES

No supplies are expected to be required.

#### 3.7 OTHER DIRECT COSTS

No other direct costs will be applied for.

#### 3.8 SUBRECIPIENTS

The City of Mobile will be a subrecipient to the Alabama Department of Conservation and Natural Resources. A sub-award agreement will be issued for \$11,960,940.00 to complete the scope of work.

#### ***Task 1 Design completion- Langan Lake dredging and Invasive Species removal***

1. *Name of Consultant*— To be determined.
  - a. One consultant will be selected for completion of design and bid package.
2. *Method of Selection*—
  - a. Consultant contract (Engineering) – a consultant contract for the dredging of Langan Lake and invasive species removal will be selected through competitive proposals. Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326. Request for Proposals (RFP) will be published on the city's website and other public sites. All RFP's will have documented evaluation methods.
3. *Period of Performance*—February 2020 to January 2023.
4. *Scope of Work* – The scope of the consultant contract for design completion of the Project consists of plan completion and agency interaction for dredging of Langan Park and removal

and abatement of invasive species in the lake. Items addressed by the consultant in its contract will include design completion (including disposal area identification), specification writing associated with the contract documents, contract documents assembling, permit investigation, project coordination, construction contract letting, contractor review & approval and construction observation and recommendations.

5. *Method of Accountability—*

a. Design Contract

Upon selection of an engineering consultant, a deliverable schedule will be agreed upon by both parties which will include partially plan and contract documents submittals. Project progress will be monitored by City personnel and reported to the funding agencies through regular progress reports and payment requests.

Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

6. *Itemized Budget and Justification—*Table 1 summarizes the estimated engineering consultant's contract amount for design completion of Task 2 (Langan Lake dredging design) of the Project

7. NICRA—NA

***Task 1 Construction- Dredging and Invasive species removal at Langan Lake***

1. *Name of Consultants & Contractors—* To be determined.

a. The construction contracts will be competitively bid and qualified contractors will be selected.

2. *Method of Selection—*

a. Construction contracts -Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

3. *Period of Performance—*February 2020 to January 2023.

4. *Scope of Work –* The scope of the Project consists of dredging Langan Lake of sediment. Sediment removal will occur through hydraulic and mechanical means. Pre-dredging and post-dredging field bathymetric surveys will be conducted to confirm the sediment removal volume.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

5. *Method of Accountability—*

a. Construction Contract

City personnel and the Inspection consultant will monitor the contractor's progress and contract adherence for the Project. Inspection consultant will prepare and authorize partial payments that will be verified by /city personnel. Project progress will be monitored by City personnel and reported to the funding agencies through regular progress reports and payment requests.

Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

6. *Itemized Budget and Justification*—Table 1 summarizes the estimated construction costs of the Project.
7. NICRA—NA

***Task 2 Construction- Bank, streambed stabilization and Invasive species removal: University Blvd to Museum Dr.***

1. *Name of Contractor*— To be determined.
  - a. The construction contract will be competitively bid and a qualified contractor will be selected.
2. *Method of Selection*—
  - a. Construction contracts -Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.
3. *Period of Performance*—February 2020 to January 2023.
4. *Scope of Work* – The scope of the Project consists of stabilizing the banks and streambed of Twelve Mile Creek from University Blvd to Museum Drive University Blvd. Approximately 5500 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrary and Williams, 2018). The installed riprap will help decrease velocities and therefore decrease erosional streambanks. Seven existing sewer crossings will be restored and protected through placement of loose Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

5. *Method of Accountability*—
  - a. Construction Contract

City personnel and the Inspection consultant will monitor the contractor's progress and contract adherence for the Project. Inspection consultant will prepare and authorize partial payments that will be verified by /city personnel. Project progress will be monitored by City personnel and reported to the funding agencies through regular progress reports and payment requests.

Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

6. *Itemized Budget and Justification*— Table1 summarizes the estimated construction costs for the Project.
7. NICRA—NA

### ***Task 3 Construction- Bank, streambed stabilization and Invasive species removal: East Drive to University Blvd***

1. *Name of Contractor*— To be determined.
  - a. The construction contract will be competitively bid and a qualified contractor will be selected.
2. *Method of Selection*—
  - a. Construction contracts -Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.
3. *Period of Performance*—February 2020 to January 2023.
4. *Scope of Work* – The scope of the Project consist of stabilizing the banks and streambed of Twelve Mile Creek from East Drive to University Blvd. Approximately 2700 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrary and Williams, 2018). The installed riprap will help decrease velocities and therefore decrease erosional streambanks. Seven existing sewer crossings will be restored and protected through placement of loose Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

5. *Method of Accountability*—
  - a. Construction Contracts

City personnel and the Inspection consultant will monitor the contractor's progress and contract adherence for the Project. Inspection consultant will prepare and authorize partial payments that will be verified by /city personnel. Project progress will be monitored by City personnel and reported to the funding agencies through regular progress reports and payment requests.

Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

6. *Itemized Budget and Justification*—Table 1 summarizes the estimated construction costs for the Project.
7. NICRA—NA

***Task 2, 3 & 4 Construction inspection- Bank, streambed stabilization and Invasive species removal for Langan Lake, Streambank: University Blvd to Museum Drive and Streambank: East Drive to University Blvd)***

1. *Name of Consultant*— To be determined.
  - a. One consultant will be selected for construction inspection and project documentation.
2. *Method of Selection*—
  - a. Consultant contract (Construction Engineering & Inspection) - a consultant contract for construction engineering and inspection for Task 2 (Dredging of Langan Lake), Task 3 (12 Mile Creek stabilization – University Blvd. to Museum Drive) Task 4 (12 Mile Creek stabilization - East Drive to University Blvd.), and invasive species removal within all project task areas will be selected through competitive proposals. Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326. Request for Proposals (RFP) will be published on the city's website and other public sites. All RFP's will have documented evaluation methods.
3. *Period of Performance*—February 2020 to January 2023.
4. *Scope of Work* – The scope of the consultant contract will be for construction engineering & Inspection services for the construction of Task 4 (12 Mile Creek stabilization - East Drive to University Blvd.), Task 3 (12 Mile Creek stabilization – University Blvd. to Museum Drive) and Task 2 (Dredging of Langan Lake) and invasive species removal within all project task areas. Responsibilities of the consultant in its contract will include compliance with plans and specifications adherence, quality assurance, project observation, project reporting, contractor pay estimates, construction recommendations and close out documents.

5. *Method of Accountability*—

a. Inspection Services Contract

Upon selection of an engineering consultant for Inspection services, a scope and fee schedule will be agreed upon by both parties. Project progress will be monitored by City personnel and reported to the funding agencies through regular progress reports and payment requests.

Procurement procedures will follow the State of Alabama and City of Mobile procurement standards, as well as the Federal Procurement Standard 2 CFR Part 200 Sections 200.317-200.326.

6. *Itemized Budget and Justification*—Table 1 summarizes the estimated construction engineering & inspection consultant’s contract amount for the construction engineering & inspection services for Tasks 2, 3 & 4 of the Project

7. NICRA—NA

Table 1. Consultant and Construction Costs Summary

Organization	Description	Unit Cost	Quantity or Rate	Amount	Pre-Award Costs?
TBD	<i>Design completion- Langan Lake dredging and Invasive Species removal</i>	<i>TBD</i>	<i>2% of total disbursements</i>	<i>\$186,040</i>	
TBD	<i>Construction inspection- Bank, streambed stabilization and Invasive species removal</i>	<i>TBD</i>	<i>4% of total disbursements</i>	<i>\$420,000*</i>	
TBD	<i>(East Drive to University Blvd) Construction- Bank, streambed stabilization and Invasive species removal</i>	<i>TBD</i>	<i>21% of total disbursements</i>	<i>\$2,475,000</i>	<input type="checkbox"/>
TBD	<i>Construction (University Blvd to Museum Drive)- Bank, streambed stabilization and Invasive species removal</i>	<i>TBD</i>	<i>29% of total disbursements</i>	<i>\$3,465,000</i>	<input type="checkbox"/>
TBD	<i>Construction- Langan Lake dredging and Invasive Species removal</i>	<i>TBD</i>	<i>49% of total disbursements</i>	<i>\$5,834,900</i>	<input type="checkbox"/>
					<input type="checkbox"/>

**TOTAL CONTRACTUAL: \$11,960,940**

\*This number is reflected in the construction budget line items and is therefore not incorporated into the total contractual amount below.

### 3.9 CONTRACTORS/CONSULTANTS

Volkert & Associates Inc

ADCNR followed State procurement policies and procedures (Code of Alabama 1975 – Article 2 – State Bid Laws (41-16-20) to identify and select Volkert & Associates Inc (Volkert) to provide DWH Program Management Services as needed (contract awarded 2/17/17). ADCNR estimates \$56,244.00 in contract costs for Volkert for this project. Volkert services may be used to provide technical expertise in overall grant administration support. Volkert services will be secured through task orders and reimbursed based upon actual time committed to the project. This estimate represents the top of the range.

1. *Method of Selection*—Volkert & Associates Inc was selected as a result of a Request for Proposal procurement process.
2. *Period of Performance*—March 2, 2017-March 2, 2021
3. *Scope of Work*—Volkert services may be used to provide program management services, including engineering, planning, environmental and construction management and other technical services on an as-needed basis to support restoration efforts on the Alabama coast.
4. *Method of Accountability*—Contractor will bill DCNR monthly for services performed.
5. *Itemized Budget and Justification*—Scope of services, approved documents, an itemized budget will be provided as requested by DCNR.

Organization	Description	Amount	Pre-Award Costs?
<b>Volkert &amp; Associates Inc</b>	<i>Contracted Technical Support</i>	\$56,244.75	<input type="checkbox"/>
			<input type="checkbox"/>

**TOTAL CONTRACTUAL:                    \$56,244.75**

#### 4.0 Budget Object Classes Applicable to All Projects and Programs – INDIRECT COSTS

INDIRECT, OVERHEAD, OR G&A RATE: 24.09%  
BASIS: Negotiated Indirect Cost Rate Agreement  
TOTAL CALCULATED INDIRECT/OVERHEAD COSTS: **\$12,541.00**

**TOTAL OF INDIRECT COSTS \$12,541.00**

#### 5.0 PROGRAM INCOME

There is no program income associated with this project.

#### 6.0 CASH DRAWDOWN PROJECTIONS

Estimated cash drawdown projections are outlined in RAAMS.



The Gulf Coast Ecosystem Restoration Council  
New Orleans, LA 7013

## Certification Instructions

The Gulf Coast Ecosystem Restoration Council (Council) is the independent federal entity responsible for managing a portion of the Gulf Coast Restoration Trust fund. The Council uses the standards set forth in Code of Federal Regulations, Title 2 Part 200, Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (2 CFR 200), and which the Council has adopted in Code of Federal Regulations Title 2, Part 5900.101, Adoption of 2 CFR Part 200.<sup>1</sup>

These certifications are required by federal law, Department of the Treasury (Treasury) regulations and the Restore Act and must be submitted with each application to the Council for financial assistance under the RESTORE Act Comprehensive Plan Component and Spill Impact Component. The certifications must be signed by an authorized senior official of the Applicant who can legally bind the entity and has oversight for the administration and use of the Restore Act funds.

Please read the forms carefully and complete the required certifying information electronically. Once the authorized senior official has signed the documents, please scan the signed certification documents and submit them electronically.

- If submitting the application by email, the completed signed forms must be returned by email to:

For SEP: [sep-grant\\_applications@restorethegulf.gov](mailto:sep-grant_applications@restorethegulf.gov)

For FPL: [fplproposalsubmissions@restorethegulf.gov](mailto:fplproposalsubmissions@restorethegulf.gov)

- If the application is submitted through the Council's automated Restoration Assistance and Award Management System (RAAMS), the scanned certification documents must be uploaded as part of the application process.
- **DO NOT USE** the submit form button that appears at the upper right-hand corner of the form.

Normally, two original certification documents must be submitted with the application, as follows. In addition, these certifications must be submitted to the Council on at least an annual basis.<sup>2</sup>

- RESTORE Council Applicant Certifications - includes the required RESTORE Act certifications, certification regarding debarment, suspension and other responsibility matters, certification regarding drug-free workplace requirements, and required certifications regarding lobbying.
- Assurances (SF-424B or SF-424D) – for projects involving construction or real property/ land acquisition, complete the Assurances for Construction Programs (Standard Form 424D); for non-construction projects, complete the Assurances – Non-Construction Programs (Standard Form 424B). Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Council Grants Officer.

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<sup>1</sup> See also § 200.205, 200.207, 200.300, 200.302, 200.303

<sup>2</sup> See 2 C.F.R. § 200.208

The Gulf Coast Ecosystem Restoration Council  
New Orleans, LA 7013

Additional certifications are required in the following situations throughout the award life cycle

- Disclosure Form to Report Lobbying - in some situations, described in Section D, "Certification Regarding Lobbying," on the Council Applicant Certifications, the Applicant must also submit Standard Form LLL, "Disclosure Form to Report Lobbying"
- Additional Certifications Required for Expenditures - an official signature is required on all expenditures. The official signature certifies and assures that expenditures are proper and in accordance with the terms and conditions of the Federal award and approved project budgets. The annual and final fiscal reports or vouchers requesting payment under the awards must include a certification, signed by an official who is authorized to legally bind the non-Federal entity, which reads as follows: "By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812)." See 2 C.F.R. § 200.415 "Required certifications."

Certification of the Applicant's Authorized Representative

For each of the certification documents, identify the individual who has the authority to commit the organization to the Council's grant management requirements and who can certify the accuracy of the statements made in the forms.



## RESTORE Council Applicant Certifications Gulf Coast Ecosystem Restoration Council

Based on OMB Approval No. 1505-0250

Directions: These certifications are required by federal law and Department of the Treasury (Treasury) regulations to be submitted with each application to The Gulf Coast Ecosystem Restoration Council (the Council) for financial assistance under the RESTORE Act Council-Selected Restoration Component or Spill Impact Component. The certifications must be signed by an authorized senior official of the Applicant who can legally bind the entity and has oversight for the administration and use of the Comprehensive Plan or Spill Impact Component funds.

### A. RESTORE Act Certification

Pursuant to the RESTORE Act, I certify that for any award Agreement resulting from this application:

1. Each activity funded under this Agreement has been primarily designed to plan for or undertake activities to restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, or economy of the Gulf Coast region.
2. Each activity funded under this Agreement is designed to carry out one or more of the eligible activities for the Council Selected Restoration Component or Spill Impact Component.
3. Each activity funded under this Agreement, other than planning assistance, was part of a plan made available for public review and comment in a manner calculated to obtain broad-based participation from individuals, businesses, Indian tribes, and nonprofit organizations, and that the activity was selected after consideration of meaningful input from the public, as described in the grant application.
4. Each activity funded under this Agreement that protects or restores natural resources is based on the best available science, as that term is defined in 31 C.F.R. Part 34.
5. This recipient has procedures in place for procuring property and services under this award that are consistent with the procurement standards applying to Federal grants. This recipient will not request funds under this award for any contract unless this certification remains true and accurate.
6. Pursuant to 2 C.F.R. § 200.303, this recipient will establish and maintain effective internal control over any award made based on this application that provides reasonable assurance that this recipient is managing the award in compliance with Federal statutes, regulations, and the terms and conditions of the award. No material deficiencies in this recipient's internal controls are known.
7. A conflict of interest policy consistent with 2 C.F.R. § 200.318(c) is in effect and covering each activity funded under this Agreement.
8. This recipient will comply with Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, and all other applicable federal laws and regulations concerning anti-discrimination.

I make each of these certifications based on my personal knowledge and belief after reasonable and diligent inquiry, and I affirm that this Applicant maintains written documentation sufficient to support each certification made above, and that this Applicant's compliance with each of these certifications is a condition of this Applicant's initial and continuing receipt and use of the funds provided under this Agreement.

### B. Certification Regarding Debarment, Suspension, and Other Responsibility Matters -- Primary Covered Transactions

Instructions: The inability of an applicant to provide the certification required below will not necessarily result in the denial of participation in

this covered transaction. The prospective Applicant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the Council's approval of the proposed Application. However, failure of the Applicant to furnish a certification or an explanation shall disqualify such person/entity from participation in this transaction. Please be advised of the following:

1. This certification is a material representation of fact upon which reliance is placed when the Council determines to enter into this transaction. If it is later determined that the Applicant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the Council may terminate this transaction for cause or default.
2. The Applicant shall provide immediate written notice to the Council if at any time the Applicant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
3. The terms "covered transactions," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal", and "voluntarily excluded," as used in this clause (certification), have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the Council for assistance in obtaining a copy of those regulations (31 C.F.R. Part 19).
4. The Applicant agrees by submitting this Application that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Council.
5. The Applicant further agrees by submitting this Application that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," to be provided by the Council, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions (see 31 C.F.R. Part 19, Appendix).
6. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
7. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
8. Except for transactions authorized under paragraph 4 of this certification, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this

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According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. This collection is based upon OMB control number 1505-0250. The time required to complete this information collection is estimated to average 10 hours, including the time to review instructions, search existing data resources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments concerning the accuracy of the time estimate and suggestions for reducing this burden should be directed to the Department of the Treasury, RESTORE Act Program, 1500 Pennsylvania Ave., NW, Washington, DC 20005.

transaction, in addition to other remedies available to the Federal government, the Council may terminate this transaction for cause or default.

By signing and submitting this Application, the prospective primary participants (the Applicant) is providing the certification set out below.

**The prospective primary participant (the Applicant) certifies to the best of its knowledge and belief, that it and its principals:**

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this Application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
4. Have not within a three-year period preceding this Application had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the Applicant is unable to certify to any of the statements in this certification, such Applicant shall attach an explanation to this proposal.

**C. Certification Regarding Drug-Free Workplace Requirements**

**The Applicant certifies that it will provide a drug-free workplace by:**

1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Applicant's workplace and specifying the actions that will be taken against employee for violations of such prohibition;
2. Establishing a drug-free awareness program to inform employees about:
  - a. The dangers of drug abuse in the workplace;
  - b. The Applicant's policy of maintaining a drug-free workplace;
  - c. Any available drug counseling, rehabilitation, and employee assistance program;
  - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace
3. Making it a requirement that each employee to be engaged in the performance of the award be given a copy of the statement required by paragraph (1) of this certification;
4. Notifying the employee in the statement required by paragraph (1) of this certification that, as a condition of employment in such grant, the employee will:
  - a. Abide by the terms of the statement; and
  - b. Notify the employer of any criminal drug use statute conviction for a violation occurring in the workplace no later than five calendar days after such conviction;

5. Notifying the granting agency in writing, within ten calendar days after receiving notice of a conviction under paragraph (4)(b) of this certification from an employee or otherwise receiving actual notice of such conviction;

6. Taking one of the following actions, within 30 days of receiving notice under paragraph (4)(b) of this certification, with respect to any employee who is so convicted:

- a. Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs 1 through 6 above.

**D. Certification Regarding Lobbying**

The Applicant certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The Applicant shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by title 31 U.S. Code section 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Project Name: <b>Three Mile Creek Watershed Restoration</b>	
Signature of Authorized Senior Official: 	
Name: <b>Christopher M. Blankenship</b>	Date: <b>6-13-19</b>
Title: <b>Commissioner</b>	Organization: <b>AL. DCNR</b>

## ASSURANCES - CONSTRUCTION PROGRAMS

OMB Number: 4040-0009  
Expiration Date: 06/30/2014

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards of merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
20. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
	Commissioner
APPLICANT ORGANIZATION	DATE SUBMITTED
AL. DCNR	6-13-19

## Data Management Plan

**Project Name:** Three Mile Creek Watershed Restoration

**Agency:** Alabama Department of Environmental Management

**Project Phase:**  Planning  Implementation  Post-Implementation

**Project's Designated Data Steward(s):**

Jaime Miller; (251) 626-1216; Jaime.miller@dcnr.alabama.gov

**Estimated Budget for Data Management:** N/A

**Description of Data Management Costs in Overall Project Budget, Budget Narrative, and/or Milestones:** No RESTORE funding will be utilized for data management

**Expected data collection start date for overall project:** Award date + 36 months.

**Brief project description:** This project will provide bank and stream stabilization along Twelve Mile Creek and dredging and restoration of Langan Park Lake, both of which drain into Three Mile Creek and Mobile Bay. The project has 3 tasks. Task 1 consists of bank and stream stabilization of Twelve Mile Creek from East Drive to University Boulevard. Task 2 consists of bank and stream stabilization from University Boulevard to Museum Drive. Task 3 consists of the dredging and restoration of Langan Park Lake.

**Project location:** City of Mobile, Mobile County, Alabama.

**General description of data collection activities (methods, sampling frequency, etc.):**

Data collection will include an inventory of compilation of construction plans, streambank conditions,

PLEASE SEE CORRESPONDING OBSERVATIONAL DATA PLAN FOR ADDITIONAL DETAILS.

**Do you have in-house data management and metadata capacity?**  Yes  No

1) Stored, 2) Archived (e.g. long-term preservation), 3) made available/provided to the Council, and 4) if it will utilize digital object identifiers (DOI's)? (*Note: If your organization does not utilize DOIs please indicate this as well*)

DCNR will store, archive and provide these data and make them publicly available on DCNR's coastal restoration website: <https://www.alabamacoastalrestoration.org/>

DOIs are not used.

**List the Observational Data Types being collected and, if known at this time, the following information for each:**

**Data type:** Areas stabilized

**GIS Representation:** Shapefile, polygon

- **Projection:** UTM Zone 16
- **POC:** Hank Burch; (251) 625-0814; Hank.Burch@dnr.alabama.gov

**Frequency of Collection:** As data is located or delivered

**Duration of Collection:** Life of project

**Data Storage Format:** Geodatabase

**Units:** Meters

**Horizontal and Vertical Datum:** UTM NAD83

**Data type:** Database of invasive species found and removed.

**GIS Representation:** N/A

- **Projection:** N/A
- **POC:** Hank Burch; (251) 625-0814; Hank.Burch@dnr.alabama.gov

**Frequency of Collection:** Data will be collected following the completion of plans and compliance permit documents.

**Duration of Collection:** One-time collection following the completion of plans and compliance permit documents.

**Data Storage Format:** Data will be stored in pdf and/or Word format

**Units:** N/A

**Horizontal and Vertical Datum:** N/A

**Data type:** Field elevation surveys

**GIS Representation:** CAD file

- **Projection:** Transverse Mercator,  
NAD\_1983\_StatePlane\_Alabama\_West\_FIPS\_0102\_Feet
- **POC:** Hank Burch; (251) 626-1216; Hank.Burch@dnr.alabama.gov

**Frequency of Collection:** Data will be collected following the completion of final implementation.

**Duration of Collection:** TBD

**Data Storage Format:** CAD

**Units:** US Feet

**Horizontal and Vertical Datum:** UTM NAD83



STATE OF ALABAMA  
**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES**  
64 NORTH UNION STREET, SUITE 468  
MONTGOMERY, ALABAMA 36130  
(334) 242-3486

KAY IVEY  
GOVERNOR

CHRISTOPHER M. BLANKENSHIP  
COMMISSIONER

EDWARD F. POOLOS  
DEPUTY COMMISSIONER

October 31, 2019

Ms. Mary Pleffner  
CFO/Director of Administration  
Gulf Coast Ecosystem Restoration Council  
500 Poydras Street, Suite 1117  
New Orleans, LA 70130

Dear Ms. Pleffner:

This letter designates a person or persons authorized to act on behalf of the Alabama Department of Conservation and Natural Resources (ADCNR) as Administrative Agent for the Alabama Gulf Coast Recovery Council, in submitting grant information to the Gulf Coast Ecosystem Restoration Council through the Restoration Assistance and Award Management System (RAAMS) for the Spill Act Component of Bucket 3. This includes all submissions related to the development of a State Expenditure Plan (SEP), a Planning State Expenditure Plan (PSEP), and completion of tasks for any subsequent award.

*Responsible agency:*

State of Alabama, Department of Conservation and Natural Resources

*Authorizing official from that agency:*

Christopher M. Blankenship  
Commissioner, Alabama Department of Conservation and Natural Resources  
chris.blankenship@dcnr.alabama.gov  
(334) 242-3486

I authorize the following Primary Contacts to submit applications for funding and progress reports to the Council on behalf of ADCNR as outlined above and to carry out necessary post-award activities:

*Primary Contact:*

Amy Hunter  
Deepwater Horizon Restoration Coordinator  
Alabama Department of Conservation and Natural Resources  
amy.hunter@dcnr.alabama.gov  
(251) 621-1216

*Authorized Users:*

Jaime Miller  
Coastal Restoration Specialist  
Alabama Department of Conservation and Natural Resources  
jaime.miller@dcnr.alabama.gov  
(251) 621-1216

Jennifer Robinson  
Coastal Restoration Specialist  
Alabama Department of Conservation and Natural Resources  
jennifer.robinson@dcnr.alabama.gov  
(251) 621-1216

Bethany Kraft  
Project Manager  
Volkert, Inc.  
bethany.kraft@volkert.com  
(504) 638-8123

Sincerely,

A handwritten signature in black ink, appearing to read "Chris M. Blankenship". The signature is stylized and cursive, with a large initial "C" and "M".

Christopher M. Blankenship  
Commissioner

## Observational Data Management Plan

**Project Name:** Three Mile Creek Watershed Restoration

**Agency:** Alabama Department of Conservation and Natural Resources

**Project Phase:**  Planning  Implementation  Post-Implementation

**Observational Data Plan Element Type (check all that apply):**

Planning  Implementation  Post-implementation

**Project Observational Data Plan Point of Contact(s):**

Jaime Miller; (251) 621-1216; [jaime.miller@dcnr.alabama.gov](mailto:jaime.miller@dcnr.alabama.gov)

**Expected observational data collection start and end date for overall project:**

Award date + 36 months

**Short description of the project location:** The proposed project will be in the City of Mobile on Three Mile Creek, approximately 7 miles from downtown Mobile.

**Short description of the overall project construction features:** Project will stabilize 8,200 linear feet of 12 Mile Creek and use available funds to dredge approximately 185,640 cubic yards of sediment from Langan Park Lake

**Consistency with Local or Regional Planning/Monitoring Efforts (if applicable):** N/A

**Overall Project Goals and Objectives:** Overall project goals and objectives are consistent with the RESTORE Comprehensive plan goals of Restore and Conserve Habitat as well as Restore Water Quality.

**Specific Goals and Objectives:**

1. Reduce downstream sedimentation by stabilizing Twelve Mile Creek from East Drive to Langan Park Lake
2. Restore and protect existing utility structures and assets caused by downcutting and widening of the stream
3. Manage invasive species; Provide instream structures to reduce stream velocity/energy and increase habitat
4. Dredge Langan Park Lake to improve storage capacity and recreational value.

**Metrics to be reported to RAAMS:**

- Metric 1 – HR010 - Riparian stabilization (i.e., buffers) – length stabilized
- Metric 2 – RES002 - # upgrades to stormwater and/or wastewater systems

**Identification of Metrics and Associated Measures/Variables/Parameters and Success Criteria:**

**Metric 1:** # riparian stabilization – length stabilized

**Metric Success Criteria:** 8200 linear feet of streambank stabilized

**Supporting Measures:**

- **Measure 1.** Length of riparian stabilized
  - **Success Criteria:** Armoring approximately 8200 linear feet of the Three Mile Stream

**Metric 2:** # upgrades to stormwater and/or wastewater systems

**Metric Success Criteria:** Seven sewer crossings upgraded

**Supporting Measures:**

- **Measure 2.** Protect seven sewer crossings
  - **Success Criteria:** Seven sewer crossings restored and protected.

**Identification and Discussion of the Reference Sites/Conditions:** N/A. This project does not include the identification and discussion of reference sites due to the nature of this project.

**Baseline Condition Sampling/Data Mining Plan:**

**Metric 1– # riparian stabilization – length stabilized**

*Measure 1:* The baseline for this metric is 0ft

**Metric 2– # upgrades to stormwater and/or wastewater systems**

*Measure 2:* The baseline for this metric is 0 upgrades

**Potential Corrective Actions:**

**Metric 1 – # riparian stabilization – length stabilized.** Additional stabilization in the form of erosion control, armoring, or grade control will be added to areas of streambank experiencing continual erosion.

**Metric 2 - # upgrades to stormwater and/or wastewater systems.** Additional stabilization in the form of erosion control or armoring will be added to sewer crossing areas experiencing continual erosion.

**Observational Data Collection:**

**Metric 1 – # riparian stabilization – length stabilized**

**Measure 1:** Draft construction drawings

- **Purpose:** Stabilize unstable banks of Three Mile creek watershed to reduce further bank destabilization.
- **Methods:** Approximately 8200 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrary Williams, 2018). The installed riprap will help decrease velocities and therefore decrease erosional streambanks.
- **Schedule/Timing and Frequency:** Observations will be documented for streambank conditions prior to construction and prior to final completion.
- **Sample Size:** 8200 ft
- **Site Locations:** City of Mobile, Three Mile Watershed.
- **Quality Assurance and Quality Control:** E&D designs will provide standard industry protocols for construction and implementation.

## **Metric 2 – # upgrades to stormwater and/or wastewater systems**

### **Measure 2: Protect seven sewer crossings**

- **Purpose:** Extensive sanitary sewer structures lie within the stream banks and stream bottoms. Erosion and mass wasting has accelerated to the point that several of these structures have entirely lost their protective trenching and exposing them to the many hazards of the stream. This exposure of the sewer lines dramatically increases the risk of complete failure which results in sewer spills.
- **Methods:** Restore and protect existing seven crossings through placement of loose AL DOT Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream.
- **Schedule/Timing and Frequency:** Observations of exposed sewer line conditions will be documented prior to construction and prior to final completion.
- **Sample Size:** 7
- **Site Locations:** City of Mobile, Three Mile Watershed.
- **Quality Assurance and Quality Control:** N/A

### **Anticipated Statistical Analysis:**

The statistical analysis described below will enable reporting for this project in RAAMS.

**Metric 1: # riparian stabilization – length stabilized:** N/A

**Metric 2: # upgrades to stormwater and/or wastewater systems:** N/A

### **Unforeseen Event Contingency:**

#### **Metric 1: riparian stabilization – length stabilized:**

- **Measure 1:** Loss of more than 25% of placed Class 2 and Class 3 riprap at year 5. The contingency response would include additional placement of loose Class 2 and Class 3 riprap to prevent erosion.

#### **Metric 2# upgrades to stormwater and/or wastewater systems**

- **Measure 2:** Exposure of sewer crossing due to loss of placed Class 3 riprap at year 1 after construction has completed. The contingency response would be to install additional stabilization measures in the form of erosion control, armoring, or grade control to areas experiencing continual erosion to protect the sewer crossing.

### **Data Review and Reporting:**

Annual observational data reports will be developed and submitted in compliance with the grants reporting cycle as outlined in the RESTORE Council Financial Assistance Standard Terms and Conditions and Part IV, Section G of the Recipient Guideline. Following completion of all data collection, a final observational data report will be prepared and distributed.

In years where observational data are collected, data will be reviewed and then used to assess and evaluate overall project performance. Collected data will be assessed to define magnitudes of difference between the values of monitored project performance and the desired values. Annual reports will be developed documenting the progress towards project goals and objectives as characterized by the selected performance measures and success criteria.

**Observational Data Collection and Reporting Budget:**

There will be no RESTORE funding tied to observational data collection.

**Literature Cited:**

North Carolina Stream Restoration Institute and North Carolina Sea Grant. 2017. *Stream Restoration: A Natural Channel Design Handbook*.

McCrory Williams. 2018. *2018 CIP Twelve Mile Creek Bank Stabilization South of Museum Drive and Twelve Mile Creek Repairs at East Drive (Part B)*. Project No. 2018-3005-09.

# RESTORE Project Narrative Project SEP Activity #16: Three Mile Creek Watershed Restoration

## Project Summary

The City of Mobile *Three Mile Creek Watershed Restoration* project will provide bank and stream stabilization along Twelve Mile Creek and dredging and restoration of Langan Park Lake, both of which drain into Three Mile Creek and Mobile Bay. In order to reduce downstream sedimentation, the banks and streambed of Twelve Mile Creek from East Drive to Langan Park Lake will be stabilized. Within Twelve Mile Creek, existing sanitary sewer crossings, which have become vulnerable to damage due to downcutting and widening of the stream, will be protected. Invasive species will be controlled. Instream structures will be constructed to reduce stream velocity/energy and increase habitat. Dredging of Langan Park Lake will increase the capacity of the lake, support flood control and aid in the apple snail abatement.

This project is highly leveraged with different funding sources. The attached milestones table provides a critical overview of tasks, timelines and cost sharing that makes clear the sequence of activities and the funds being requested for RESTORE.

## Approach and Methods

Many studies have been done in our watershed and geographic area that indicate that projects need to be done to improve water quality and stabilize degraded habitats. Healthy freshwater ecosystems have many functions in our community, including “improving water quality and stabilizing sediments, reducing sediment resuspension, erosion and turbidity” (Madsen 72, 76). The compounding problems of increased velocity, loss of vegetation, downcutting, and mass wasting accelerate erosion causing heavy sediment inputs to the Langan Park Lake blanketing benthic flora and fauna with layers of silt. This blanketing may destroy feeding grounds 508 Compliant SEP Template 114 and spawning sites as well as entire populations, causing radical changes in the lake ecosystems (EPA 192). Continued sediment loading leads to advanced eutrophication, swampy or marshy conditions, and finally total infilling of the prior lake environment (Castro 1995). The sediment particles also contain pollutants that impact water quality, including oxygen-demanding substances and nutrients (Three Mile Creek Watershed Management Plan 53, 60, 61).

As identified in the Three Mile Creek Watershed Management Plan (Dewberry, 2014), the unstable banks of Twelve Mile Creek represent a water quality issue. Concrete-lined channels or other hardening mechanisms upstream of the subject area have replaced vegetated stream banks. While this concrete lining provides better conveyance for stormwater and reduces flooding, it also prohibits infiltration thereby increasing stormwater runoff volumes and pollutant loads, and eliminates natural habitat from the bed and banks of the stream, in this case, results in increased velocities within the subject area. These high velocities cause erosion which produces downcutting in the streambed. This downcutting exacerbates the problem by reducing floodplain connectivity thereby further increasing velocity. Erosion continues to aggravate problems by destabilizing stream banks producing mass wasting.

Extensive sanitary sewer structures lie within the stream banks and stream bottoms. Erosion and mass wasting have accelerated to the point that several of these structures have entirely lost their protective trenching and exposing them to the many hazards of the stream. This exposure of the sewer lines dramatically increases the risk of complete failure which results in sewer spills. Mobile Area Water and Sewer actively maintains these lines by importing fill which provides an additional erosion and sedimentation source.

#### *Stream Stabilization of 12 Mile Creek*

The purpose of this task is to reduce further bank de-stabilization, thereby reducing sedimentation to downstream features like Langan Park Lake and Three Mile Creek. Improvements in water quality, stormwater management, and flood control support the work in Langan Park Lake to restore its capacity and usefulness.

Approximately 8200 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrory and Williams, 2019). The installed riprap will help decrease velocities and therefore decrease erosional streambanks. Seven existing sewer crossings will be restored and protected through placement of loose Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream.

#### *Langan Lake Park Dredging*

Langan Park Lake is a focal point of the surrounding Langan (Municipal) Park, where citizens in decades past enjoyed water activities such as a beach and paddle boats. Langan Park provides many recreational, educational, and cultural activities throughout the year for people throughout the region. However, the Lake has been severely impacted by sedimentation and the waters have become more swamp-like, making the lake more of an eyesore rather than an amenity. The continued sedimentation of Langan Park Lake devalues the Park and surrounding cultural and sports institutions, making redevelopment in the area more difficult.

Sediment removal will occur through hydraulic and mechanical means. The volume of sediment to be removed is approximately 185,640 cubic yards. The method by which sediment will be disposed of will be determined in final design and permitting discussions with regulated. Pre-dredging and post-dredging field bathymetric surveys will be conducted to confirm the sediment removal volume.

#### *Invasive Species*

Biological pollutants in the form of invasive species are degrading habitat and displacing native species in this project area. In fact, at least four of Alabama's 10 worst invasive weeds exist at the site (Alabama Invasive Plant Council, 2018). Plant communities are also damaged. Studies have found that aquatic macrophytes "community biomass decreases with increasing velocity" (Madsen, 2001). Loss of these communities limit important ecosystem services, including "(1) improving water quality; and (2) stabilizing sediments, reducing sediment resuspension, erosion and turbidity" (Madsen, 2001). The compounding problems of increased velocity, loss of vegetation, downcutting, and mass wasting accelerate erosion causing heavy sediment inputs to the Langan Park Lake blanketing benthic flora and

fauna with layers of silt. This blanketing may destroy feeding grounds and spawning sites as well as entire populations, causing radical changes in the lake ecosystems (EPA, 1973). Continued filling with sediments leads to advanced eutrophication, swampy or marshy conditions, and finally total infilling of the prior lake environment (Castro, 1995). The sediment particles also contain pollutants that impact water quality, including oxygen-demanding substances and nutrients (Dewberry, 2014).

The method to reduce and/or control presence of invasive species from approximately 14 acres of shoreline will be derived from the *Three Mile Creek Watershed: Invasive Species Control Plan* and will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

## Roles and Responsibilities Table

<b>Organization/ Agency/Company</b>	<b>Role</b>	<b>Duties</b>
<i>Department of Conservation &amp; Natural Resources</i>	<i>Grant recipient – project implementation</i>	<i>Grant application preparation, grant management, performance and financial monitoring and reporting, subrecipient agreement development, procurement reviews, fiscal services</i>
<i>City of Mobile</i>	<i>Subrecipient</i>	<i>Coordinate request for qualifications for design and engineering services, Coordinate receipt of the environmental permit, act as Project Manager, coordinate procurement of construction services, coordinate financial requirements of the grant, metric monitoring</i>
<i>University of South Alabama</i>	<i>Partner (in-kind service)</i>	<i>Execute baseline and post construction monitoring</i>
<i>Mobile Bay National Estuary Program/Gulf Corps</i>	<i>Partner</i>	<i>MNEP has an invasive species plan throughout the Three Mile Creek Watershed that may support efforts of this project. MNEP has a project in the headwaters of Twelve Mile Creek which will precede this project and benefit the stabilization of the creek upstream. Coordinate with the City of Mobile in construction activities</i>
<i>McCrary &amp; Williams, Inc.*</i>	<i>Design Engineer on Improvements for Task 1 &amp; 2</i>	<i>Create Construction Plans and complete permitting for Task 1 &amp; 2</i>

<i>Dorsey &amp; Dorsey, Inc.*</i>	<i>Preliminary Design Engineer on Task 3</i>	<i>Provided an executive summary that identified required permitting, abatement procedures for the island apple snail, preliminary engineering for dredging and disposal of material from Langan Park Lake</i>
<i>TBD**</i>	<i>Future Consultant to complete the Construction Engineering &amp; Inspection Services</i>	<i>Observe construction activities within Twelve Mile Creek. Complete the design of the dredging of Langan Park Lake.</i>
<i>TBD***</i>	<i>Contractor</i>	<i>Complete the construction and invasive species removal of Twelve Mile Creek from East Drive to University Boulevard</i>
<i>TBD***</i>	<i>Contractor</i>	<i>Complete the construction and invasive species removal of Twelve Mile Creek from University Boulevard to Museum Drive</i>
<i>TBD***</i>	<i>Contractor</i>	<i>Complete the construction of the dredging of Langan Park Lake including disposal and restoration of the site, and invasive species removal</i>

\* Funding for these roles paid through the City of Mobile’s Capital Improvement Funds. No RESTORE funds used for these roles.

\*\* Contract for professional services will awarded based on the City of Mobile’s Federal Procurement Policy, which follows the Universal Guidelines set forth in 2 CFR Part 200.

\*\*\* Contract for construction will awarded based on the City of Mobile’s Federal Procurement Policy, which follows the Universal Guidelines set forth in 2 CFR Part 200.

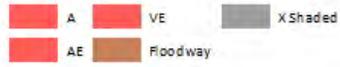
## Project Location

The project begins along Twelve Mile Creek at East Drive and ends at the outlet control structure of Langan Park Lake in Langan (Municipal) Park near Zeigler Boulevard in Mobile, Alabama.

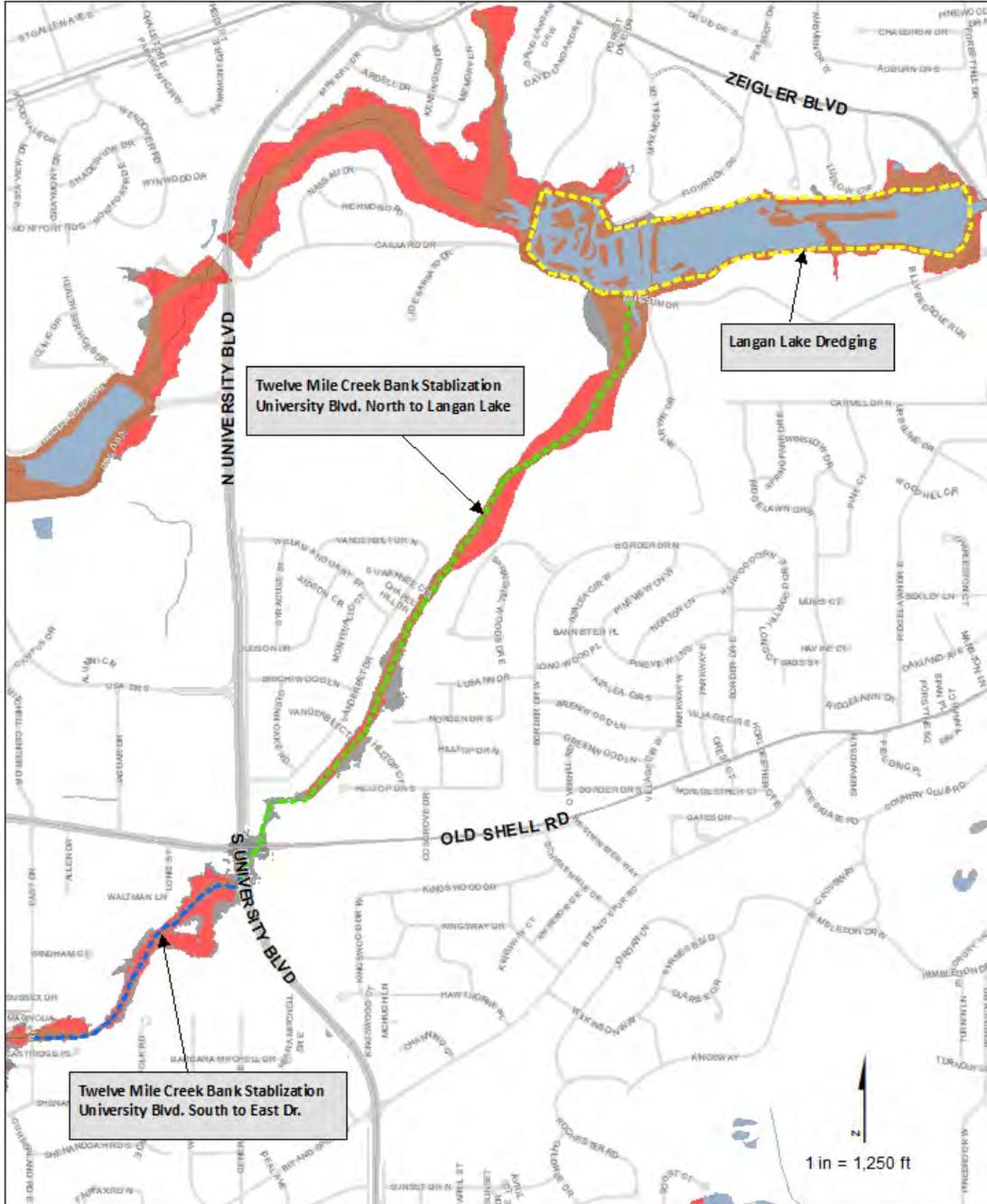
# Three Mile Creek Restoration Grant

City of Mobile

## Flood Zones



Date: 11/26/2019



Project Period of Performance

This project is anticipated to begin upon award with a 30 month duration.

## Supporting Information (Best Available Science)

This project is supported by science and routine infrastructure project work done by the City of Mobile, therefore the tasks and methods are discussed in detail and supported by the literature, which is referenced throughout this project narrative. Thus, there is no separate sections for Best Available Science in this project narrative, as the tasks, approach and methods sections all contain information related to the Best Available Science Requirements. References are included at the end of the document.

## Project Deliverable(s)

1. Engineering and Design Plan Set: Langan Park Dredging (Task 1)
2. Construction: Langan Park Dredging (Task 1)
3. Construction of Streambank Stabilization of 12 Mile Creek University Blvd. to Museum Drive (Task 2)
4. Construction of Streambank Stabilization of 12 Mile Creek East Drive to University Blvd.(Task 3)

## Detailed Scope of Work

Note: The scope descriptions below include some work that is underway via other, leveraged funding sources. This work will be completed prior to the request of RESTORE funds, but is important to note in the detailed description below in order to provide a complete picture of the project.

### **Preaward – Grant Development**

The Executive Director for the Alabama Gulf Coast Recovery Council is responsible for coordinating and implementing all activities undertaken for project submission, selection, and funding awards for Spill Impact Component RESTORE Act funding. The Executive Director began working with the RESTORE Project Manager on September 9, 2019, after approval of the SEP, to develop the grant application for submission into RAAMS.

### **Task 0 – Grant Administration**

ADCNR, as Administrative Agent for the Alabama Gulf Coast Recovery Council, will serve as Grant Administrator for the project, monitoring subrecipient procurement, grant compliance, and programmatic activities. ADCNR will conduct periodic onsite visits and will submit all semi-annual and final reports. Volkert, Inc., as ADCNR's Program Manager, may assist with some of the activities listed above on an as-needed, task order basis. Once substantial completion has been reached by the Subrecipient, and upon favorable review by ADCNR, ADCNR will initiate and submit all required documentation to begin and conclude the grant closeout process in compliance with 2 CFR Part 200 and

applicable regulations. Final drawdown and federal financial report will be completed upon instruction by the RESTORE Council.

## **Task 1- Langan Park Lake Dredging**

### *1. Final Engineering & Design*

### *2. Construction*

Management & Oversight Tasks - The City of Mobile's Project Manager will provide technical oversight and general project coordination, as well as budgetary and administration oversight, with the assistance of additional experienced and professional City of Mobile staff. They will review all project specifications, literature and data to ensure quality of each task, provide all data to the Alabama Gulf Coast RESTORE Council (AGCRC) or designated repository per a Data Management Plan, if applicable. Progress reporting will be conducted on a quarterly basis or as instructed by the AGCRC.

Design Completion - The scope of the consultant contract for design completion of Task 1 for the Project consists of plan completion and agency interaction for dredging of Langan Park and removal and abatement of invasive species in the lake. Items addressed by the consultant in its contract will include design completion (including disposal area identification), specification writing associated with the contract documents, contract documents assembling, permit investigation, project coordination, construction contract letting, contractor review & approval and construction observation and recommendations. Initial design has been funded by the City of Mobile and is captured in leveraged funding sources section below.

Construction Inspection and Project Documentation - Construction engineering & Inspection services for the dredging of Langan Lake and invasive species removal within all project task areas. Responsibilities of the consultant in its contract will include compliance with plans and specifications adherence, quality assurance, project observation, project reporting, contractor pay estimates, construction recommendations and close out documents.

Dredging and Invasive Species Removal – This consists of dredging Langan Lake of sediment. Sediment removal will occur through hydraulic and mechanical means. Pre-dredging and post-dredging field bathymetric surveys will be conducted to confirm the sediment removal volume.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

Timeline for Completion of Task 1: Award + 22 months

Total RESTORE Funds Requested for Task 1: \$6,020,940

## **Task 2 – Construction – Streambank Stabilization: 12 Mile Creek Restoration University Blvd. to Museum Drive**

Management & Oversight Tasks - The City of Mobile's Project Manager will provide technical oversight and general project coordination, as well as budgetary and administration oversight, with the assistance of additional experienced and professional City of Mobile staff. They will review all project specifications, literature and data to ensure quality of each task, provide all data to the Alabama Gulf Coast RESTORE Council (AGCRC) or designated repository per a Data Management Plan, if applicable. Progress reporting will be conducted on a quarterly basis or as instructed by the AGCRC.

Construction Inspection and Project Documentation - Construction engineering & Inspection services for the construction of 12 Mile Creek stabilization – University Blvd. to Museum Drive and invasive species removal within all project task areas. Responsibilities of the consultant in its contract will include compliance with plans and specifications adherence, quality assurance, project observation, project reporting, contractor pay estimates, construction recommendations and close out documents.

Construction and Invasive Species Control - The scope consists of stabilizing the banks and streambed of Twelve Mile Creek from *University Blvd. to Museum Drive*. Approximately 5500 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrory and Williams, 2018). The installed riprap will help decrease velocities and therefore decrease erosional streambanks. Seven existing sewer crossings will be restored and protected through placement of loose Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream. Engineering and design has been funded by the City of Mobile and is captured in leveraged funding sources section below.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

Timeline for Completion Task 2: Award + 12 months  
Total RESTORE Funds Requested for Task 2: \$3,465,000.00

### **Task 3 Construction- Streambank Stabilization- 12 Mile Creek Restoration East Drive to University Blvd.**

Management & Oversight Tasks - The City of Mobile's Project Manager will provide technical oversight and general project coordination, as well as budgetary and administration oversight, with the assistance of additional experienced and professional City of Mobile staff. They will review all project specifications, literature and data to ensure quality of each task, provide all data to the Alabama Gulf Coast RESTORE Council (AGCRC) or designated repository per a Data Management Plan, if applicable. Progress reporting will be conducted on a quarterly basis or as instructed by the AGCRC.

Construction Inspection and Project Documentation - Construction engineering & Inspection services for the construction of 12 Mile Creek stabilization – *East Drive to University Blvd* and invasive species

removal within all project task areas. Responsibilities of the consultant in its contract will include compliance with plans and specifications adherence, quality assurance, project observation, project reporting, contractor pay estimates, construction recommendations and close out documents. Engineering and design has been funded by the City of Mobile and is captured in leveraged funding sources section below.

Construction and Invasive Species Control - The scope consists of stabilizing the banks and streambed of Twelve Mile Creek from *East Drive to University Blvd.* Approximately 5500 linear feet of the stream of stream bank and channel will be stabilized in place using Priority 4 Options (NC 2017, 54) through implementation of loose Class 2 and Class 3 riprap (McCrorry and Williams, 2018). The installed riprap will help decrease velocities and therefore decrease erosional streambanks. Seven existing sewer crossings will be restored and protected through placement of loose Class 3 riprap above the sewer pipe. The riprap will mitigate velocities and prevent further undercutting of the pipe. Additionally, the pipe will no longer be exposed to the many hazards of the stream.

The method to reduce and/or control presence of invasive species along the banks will utilize Strategy 1 and Strategy 2 treatments. Foliar Spot Treatment will be utilized within the areas identified for Strategy 1 treatment and Herbaceous Broadcast Treatment will be utilized within the areas identified for Strategy 2 treatment. Foliar spraying of low-growing species is most effective below 4 feet in height. Spraying above 4 feet in height may be ineffective and potentially exposes the applicator to the chemical (Enviroscience, 2019).

Timeline for Completion of Task 3: Award+12 months.

Total RESTORE Funds Requested for Task 3: \$2,475,000

## Project Timeline

Award Date

Milestone #1 – Grant Management (Award + 30 months)

Milestone #2- Finalize Engineering and Design Task 2 (Award + 12 months)

Milestone #3 – Construction (Tasks 2, 3, 4) (Award + 28 month)

Project Completion – Award + 30 Months to Completion

## **Budget Summary**

Cost Classification	Other Funding	RESTORE	Total Costs
1. Administrative and Legal Expenses	\$		
2. Land, Structure, Rights-of-Way, Appraisals, Etc.			
3. Relocation Expenses and Payments			

4.	Architectural and Engineering Fees ( <i>Basic architectural/engineering contract related to the project.</i> )	\$410,000	\$186,040	\$596,040
5.	Other Architectural and Engineering Fees ( <i>Survey, permitting, testing, soil borings, etc.</i> )			
6.	Construction Inspection Fees		\$420,000	\$420,000
7.	Site Work ( <i>Only include site preparation and restoration costs not included in the construction contract.</i> )			
8.	Demolition and Removal ( <i>Only include demo/removal costs not included in the construction contract.</i> )			
9.	Construction		\$11,354,900	\$11,354,900
10.	Equipment			
11.	Miscellaneous			
12.	<b>SUBTOTAL (Sum of Lines 1-11)</b>	\$410,000	\$11,960,940	\$12,370,940
13.	Contingencies			0
14.	<b>SUBTOTAL (Sum of Lines 13-14)</b>	\$410,000	\$11,960,940	\$12,370,940
15.	Project (Program) Income			0
16.	<b>TOTAL PROJECT COSTS (Line 14 less Line 15)</b>	\$410,000	\$11,960,940	\$12,370,940

### Possible Material Risks to Implement and Maintain the Proposed Activity

Project Component	Risk	Mitigating Strategy
Operational	Failure to meet project timelines or provide deliverables.	Project milestones with specific goals have been developed including start and completion dates required for each milestone. The project manager and qualified City of Mobile personnel shall confirm each milestone is met in a timely manner.
	Inadequate performance or incomplete tasks by subcontractors	Additional time has been allocated for unforeseen delays caused by weather or equipment failure. In the event additional delays occur the subcontractor must request extensions at no extra cost to the project.
	Equipment failures or weather delays	Additional time has been allocated for unforeseen delays

		caused by weather or equipment failure. In the event additional delays occur the subcontractor must request extensions at no extra cost to the project.
Budgetary	Cost Overrun	Scope of work is well defined and routine. The cost associated with supplies, equipment, and operations required for each project milestone are known. The project manager and qualified City of Mobile personnel performed cost analysis for each milestone for the entire project.
	Subcontractor extension requests	Scope of work is well defined and routine. The contract specifies all requested project extensions shall be performed at no additional cost to the project.
Regulatory	Non-Permitted Operations	All required Federal, State, and Municipal permits shall be fully executed prior to the start of any regulated operations.
	Permit Non-Compliance	The contract will require each subcontractor to be designated as the responsible official for all Federal, State, and Municipal permits applicable to their operations.
	Regulatory violations	The project manager will ensure all applicable permits are fully executed prior to the start of regulated operations and that the subcontractor is the legally responsible official.

## Leveraged Funds

- The proposed project leverages RESTORE Bucket 2 funds allocated (\$1.15M) to the MBNEP for restoration activities in Twelve Mile Creek, upstream of Langan Lake Park. Also, the grant for the MBNEP funds hydrologic modeling and invasive species management for the entire Twelve Mile Creek to ensure design compatibility.
- The City of Mobile is providing funds for grant management, project management, technical oversight, and \$320,000 (FY18) in engineering services.

## Metrics

- HR010 – Riparian stabilization (i.e. buffers) – Length stabilized
- RES002 - # upgrades to stormwater and/or waterwater systems

## Environmental Compliance

See attached RESTORE Act Environmental Compliance Checklist. The City of Mobile has initiated consultations with the US Army Corps of Engineers for the necessary permits for the project.

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