DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
1002 WEST 23RD STREET, SUITE 350
PANAMA CITY, FLORIDA 32405

April 22, 2015

REPLY TO ATTENTION OF

Regulatory Division
North Permits Branch
Panama City Permits Section
SAJ-2014-02879(RGP-MMW)

Florida Department of Transportation, District 3
c/o Mr. Colby Cleveland
1074 HWY 90
Chipley, Florida 32428

Dear Mr. Cleveland:

Your application for a Department of the Army permit received on October 1, 2014, has been assigned number SAJ-2014-02879. A review of the information and drawings provided shows the proposed work is to impact 5.26 acres of jurisdictional wetlands for direct road widening, approach fill, and stormwater system impacts adjacent to a proposed bridge. The final roadway project would consist of a four-lane rural roadway with 12-foot travel lanes, 10-foot shoulders, and a 40-foot median. The stormwater management system would utilize conveyance ditches, shoulder gutter and pipe to move water to one of two stormwater ponds. The project would affect waters of the United States associated with the Yellow River, along State Road 87, east of Milton, Santa Rosa County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Regional General Permit (GP) SAJ-92. This authorization is valid until April 8, 2020. Please access the Corps' Jacksonville District Regulatory Division Internet page to view the special and general conditions for SAJ-92, which apply specifically to this authorization. The Internet URL address is:

http://www.saj.usace.army.mil/Missions/Regulatory.aspx

Please be aware this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Once there you will need to click on “Source Book”; and, then click on “General Permits”. Then you will need to click on the specific SAJ permit noted above. You must comply with all of the special and general conditions of the permit; and, any project-specific conditions noted below, or you may be subject to enforcement action. The following project-specific conditions are included with this authorization:

1. Reporting Address: The Permittee shall submit all reports, notifications, documentation and correspondence required by the general and special conditions of this permit to the following address:

a. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Special Projects and Enforcement Branch, 41 North Jefferson St., Suite 301, Pensacola, FL 32502 .

b. For electronic mail CESAJ-ComplyDocs@usace.army.mil (not to exceed 10 MB). The Permittee shall reference this permit number, SAJ-2014-02879(GP - MMW), on all submittals.

2. Commencement Notification: Within 10 days from the date of initiating the work authorized by this permit/Within 10 days from the date of initiating the work authorized by this permit for each phase of the authorized project, the Permittee shall provide a written notification of the date of commencement of authorized work to the Corps.

3. Self-Certification: Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the attached "Self-Certification Statement of Compliance" form (**Attachment #1**) and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.

4. Agency Changes/Approvals: Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Panama City Permits Section. The Corps reserves the right to fully evaluate, amend, and approve or deny the request for modification of this permit.

5. Assurance of Navigation and Maintenance: The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without

expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

6. Turbidity Barriers: Prior to the initiation of any of the work authorized by this permit, the Permittee shall install floating turbidity barriers with weighted skirts that extend to within 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained until the authorized work has been completed and all suspended and erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area.

7. Erosion Control: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

8. Fill Material: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

9. Biological Opinion: This permit does not authorize the Permittee to take an endangered species, in particular the Gulf sturgeon (*acipenser oxyrinchus desotoi*). In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed United States Fish and Wildlife Service Biological Opinion (BO) (**Attachment #2**) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions associated with incidental take of the enclosed BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with this permit. The United States Fish and Wildlife

Service is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

10. Eastern Indigo Snake Protection Measures and Inspection: Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated August 12, 2013, as provided in **Attachment #3** of this permit. All gopher tortoise burrows, active or inactive, shall be evacuated prior to site manipulation in the vicinity of the burrow. If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent permit. The excavation method selected shall minimize the potential for injury of an indigo snake. The Permittee shall follow the excavation guidance provided in the most current FWC Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Holes, cavities, and snake refugia other than gopher tortoise burrows shall be inspected each morning before planned site manipulation of a particular area, and if occupied by an indigo snake, no work shall commence until the snake has vacated the vicinity of the proposed work.

11. In-Lieu Fee Credit Purchase: Within 30 days from the date of initiating the work authorized by this permit, the Permittee shall provide verification to the Corps that 11.03 federal in-lieu fee credits have been purchased from the Northwest Florida Water Management District In-Lieu Fee program, (SAJ-2011-00287), specifically at the Yellow River Ranch mitigation site. The required verification shall reference this project's permit number (SAJ-2014-02879).

12. Cultural Resources/Historic Properties:

a. No structure or work shall adversely affect, impact, or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. The permittee understands and agrees to adhere to all the stipulations identified in the Memorandum of Agreement (MOA, DHR Project file number 2014-2222) dated October 2013. Any deviation from these stipulations will require further consultation with the State Historic Preservation Officer.

c. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics,

stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work in the vicinity and notify the Corps. The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work in the vicinity shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist. The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist, SHPO, and the Corps.

e. In the unlikely event that human remains are encountered on federal or tribal lands, or in situations where Archaeological Resources Protection Act of 1979 or Native American Graves Protection Repatriation Act of 1990 applies, all work in the vicinity shall immediately cease and the Permittee immediately notify the Corps. The Corps shall then notify the appropriate THPO(s) and SHPO. Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. After such notification, project activities on federal lands shall not resume without written authorization from the Corps, and/or appropriate THPO(s), SHPO, and federal manager. After such notification, project activities on tribal lands shall not resume without written authorization from the appropriate THPO(s) and the Corps.

This authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP and RGP, please contact Melinda Witgenstein by telephone at (850) 763-0717, extension 24.

Thank you for your cooperation with our permit program. The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our

environment. We invite you to complete our automated Customer Service Survey at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Please be aware this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Sincerely,

Melinda Witgenstein
Project Manager

Enclosures

Copy/ies Furnished:

Josey Walker, HDR

GENERAL CONDITIONS
33 CFR PART 320-330

1. The time limit for completing the work authorized ends on the **dates identified in the letter**.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: RGP-92
Application Number: SAJ-2014-02879

Permittee's Name & Address (please print or type):_____

_____

_____

Telephone Number:_____

Location of the Work:_____

_____

Date Work Started:_____ Date Work Completed:_____

PROPERTY IS INACCESSIBLE WITHOUT PRIOR NOTIFICATION: YES _____ NO_____

TO SCHEDULE AN INSPECTION PLEASE CONTACT _____
AT _____

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

_____

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

Describe Mitigation completed (if applicable): _____

_____

_____

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

_____

_____

****

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

_____
Signature of Permittee

_____
Date

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2014-02879(RGP-MMW)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

_____ _____

(TRANSFEREE-SIGNATURE) **(SUBDIVISION)**

_____ _____ _____

(DATE) **(LOT)** **(BLOCK)**

_____

(STREET ADDRESS)

_____

(NAME-PRINTED)

_____

_____

(MAILING ADDRESS)

_____

(CITY, STATE, ZIP CODE)

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

SR 87 Widening and Yellow River Bridge
Eglin Air Force Base
Florida Department of Transportation
Santa Rosa County, Florida

Biological Opinion
April 10, 2013

Prepared by:
U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, FL

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ACRONYMNS

Act	Endangered Species Act
AFB	Air Force Base
BA	Biological Assessment
BMPs	Best Management Practices
BO	Biological Opinion
CALTRANS	California Department of Transportation
CEI	Construction and Engineering Inspection
CH	Critical Habitat
CR	County Road
dB_{cSEL}	Cumulative Sound Exposure Level
dB_{peak}	Peak Sound Pressure Level
dB_{RMS}	Root Mean Square Sound Exposure Level
DO	Dissolved Oxygen
DoD	Department of Defense
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FHWG	Fisheries Hydroacoustic Working Group
FPID	Federal Project Identification
HUC	Hydrologic Unit Code
NE	No Effect

NEPA	National Environmental Policy Act
NLAA	May Affect, Not Likely to Adversely Affect
NMFS	National Marine Fisheries Service
NRDA	Natural Resource Damage Assessment
NWFWMD	Northwest Florida Water Management District
PCE	Primary Constituent Element
ROW	Right-of-Way
RPM	Reasonable and Prudent Measure
SEL	Sound Exposure Level
Service	U.S. Fish and Wildlife Service
SR	State Road
Trinity	Trinity Analysis and Development Corporation
TNC	The Nature Conservancy
YOY	Young of Year

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Field Office
1601 Balboa Avenue
Panama City, Florida 32405

Tel: (850) 769-0552
Fax: (850) 763-2177

April 10, 2013

Mr. Thomas L. Chavers
Chief, Eglin Natural Resources
501 DeLeon Street, Suite 101
Eglin Air Force Base, Florida 32542-5133

Attn: Mr. Jeremy Preston

Re: FWS Log No. 2013-F-0033
Date Started: October 18, 2012
Agency: Eglin Air Force Base/Florida Department of Transportation
Project Title: SR 87 Widening/Construct New Yellow and Dead River Bridge From Eglin AFB south boundary to CR 184
FPID: 220442-4 and 220442-7
Location: Yellow River
Ecosystem: NE Gulf of Mexico
County: Santa Rosa County, FL

Dear Mr. Chavers:

This letter transmits the Fish and Wildlife Service's (Service) biological opinion (BO) for actions to be taken during the widening of State Road (SR) 87 from a two-lane undivided roadway to a four-lane divided facility and constructing new Yellow and Dead River Bridges, in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.) Your letter requesting formal consultation was received on October 18, 2012. Our BO is based on information provided in the biological assessment (BA), your responses to our requests for additional information, Service investigations in the project area, discussions with experts in the field, and other sources of information. A complete administrative record of this consultation is on file at the Service's Panama City, Florida field office.

This BO refers only to the potential effects of the Florida Department of Transportation's (FDOT's) proposed widening of SR 87 and construction of new two-lane bridges over the Yellow and Dead Rivers on the threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*) and its designated critical habitat. Table 1 identifies other federally listed species occurring within the Action Area. Provided that all proposed avoidance and minimization measures are followed (refer to Appendix A), the Service concurs with Eglin Air Force Base's (AFB) determination that road and bridge construction activities may affect, but are not likely to adversely affect (NLAA) the eastern indigo snake (*Drymarchon corais couperi*), red-cockaded woodpecker (*Picoides borealis*), and four freshwater mussels species: the Choctaw bean (*Villosa choctawensis*), fuzzy pigtoe (*Pleurobema strodeanum*), narrow pigtoe (*Fusconaia escambia*) and southern sandshell (*Hamiota australis*). Due to the absence of potential habitat in the project area, Eglin AFB has determined that the proposed construction activities will have no effect (NE) on the reticulated flatwoods salamander (*Ambystoma bishop*) and its critical habitat. These species will not be discussed further in this BO.

The construction let date and details on the timing of this project have yet to be determined by FDOT because the project is not currently funded; however, an earnest funding search is underway. It is expected that the project may begin as early as 2016, but the target date is 2025. Because the status of the species and critical habitat may change significantly over time, we have structured this opinion to evaluate the effects of the proposed action assuming construction begins in the next five years. If the let date does not occur within five years of this biological opinion, reinitiation of formal consultation will be required as discussed in Section 9 below.

Table 1. Other federally protected species evaluated for effects.

Species	CH in Action Area	Present in Action Area	Effects Determination
Eastern indigo snake	No	Yes	NLAA
Red-cockaded woodpecker	No	Yes	NLAA
Reticulated flatwoods salamander	No	No	NE
Choctaw bean	Yes	Yes	NLAA
Fuzzy pigtoe	Yes	Yes	NLAA
Narrow pigtoe	Yes	Yes	NLAA
Southern sandshell	Yes	Yes	NLAA
Bald eagle[1]	No	Yes	NLAA

[1]Protected under the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c) and Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712).

An assessment was also made for the bald eagle (*Haliaeetus leucocephalus*), protected under the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c) and Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712). No bald eagles or their nests have been documented in the area. With the incorporation of avoidance and minimization measures, Eglin AFB believes that the action is NLAA the bald eagle.

Consultation History

October 16, 2007 — The FDOT initiated coordination by email with the Service during the SR 87 right-of-way (ROW) re-evaluation for the road segment from the Eglin boundary within the Yellow River to CR 184.

November 5, 2007 — The Service responded by email and discussed addressing the Yellow River at the same time as the Eglin section, and requested additional information for the Eglin section (e.g. conducting a reassessment for RCW, reinitiating consultation for Gulf sturgeon, and evaluating for reticulated flatwoods salamander).

September 23, 2009 — The Service provided information to FDOT consultants (Trinity) on five candidate mussel species potentially occurring near the Yellow River bridge, the final mussel survey protocol, and a list of permitted mussel consultants.

September 24, 2009 — The FDOT and Service discussed by email having windows to stop in-river work for avoiding impacts to the Gulf sturgeon during bridge construction, and potential measures for year-round work.

April 1, 2010 — A conference call was held between FDOT and the Service to discuss timing for candidate mussel surveys in the Yellow River. The Service recommended surveying in the late summer of 2011.

July 6, 2010 — Eglin AFB provided a BA to the Service for improvements to SR 87 with effect determinations. The BA requested concurrence with Eglin AFB's effect determinations and initiation of formal consultation for Gulf sturgeon.

August 25, 2010 — The Service sent a letter to Eglin AFB concurring with their effect determinations, with the exception of Gulf sturgeon critical habitat and candidate freshwater mussels. The Service recommended including sturgeon critical habitat in the formal consultation and conducting mussel surveys in late summer 2011. Additional information on the project was also requested.

October 7, 2010 — A meeting was held at Eglin AFB with staff from the Service, FDOT, Eglin, and Trinity consultants to discuss the BA and timing of formal consultation relative to Eglin's National Environmental Policy Act (NEPA) process. It was decided Eglin would seek approval to delay initiating formal consultation until closer to the potential construction date (2016). Other issues discussed were protecting the sturgeon's fall out-migration, erosion control measures, bridge construction techniques, and the timing of formal consultation relative to the anticipated listing of the candidate mussels.

October 8, 2010	Eglin's NEPA group concurred with delaying formal consultation until 2 years prior to construction, provided that the delay is the preference of the Service and agreed to by FDOT.
October 13, 2010	The Service provided a letter to Eglin AFB indicating our support for delaying formal consultation until 2 years prior to construction.
October 22, 2010	The FDOT provided their agreement to delaying formal consultation by email.
December 3, 2010	In follow-up to the October 7 meeting, the Service provided recommendations for conservation measures for Gulf sturgeon and freshwater mussels.
February 2, 2011	Trinity informed the Service that the proposed construction may be moved forward to 2013.
February 4, 2011	The Service recommended a meeting or call to further discuss timing for formal consultation.
February 24, 2011	A conference call was held with the Service, FDOT, Eglin, and Trinity consultants. FDOT indicated the construction date for the project may move to 2013. FDOT has received an updated BA. Mussel surveys will take place this summer and the results will be added to the BA. If necessary, a formal conference for mussels could be added to the formal consultation.
May 24-26, 2011	Dinkins Biological Consulting conducted mussel surveys on the Yellow River at SR 87.
July 18, 2011	FDOT provided information to the Service by email on the permit application for directional boring across the Yellow River to move the Okaloosa Gas District pipeline in advance of the proposed road widening.
October 4, 2011	The Service published a rule in the Federal Register proposing to list eight freshwater mussels, of which four potentially occur in the Yellow River.
December 12, 2011	Trinity consultants provided the Mussel Survey Report to the Service by email.
December 13, 2011	A meeting was held at Eglin AFB to kick-off the SR 87 Environmental Assessment and discuss mussel survey results. Only one proposed mussel was found (dead narrow pigtoe, 300 feet upstream of the bridge). Eglin

	and the Service agreed that with protective measures, NLAA would be appropriate determination for mussels. Conservation measures to protect Gulf sturgeon and improve available information were also discussed.
April 10-24, 2012	Comments from FDOT on the SR 87 BA were coordinated with Eglin AFB and the Service.
July 10, 2012	FDOT requested a teleconference to discuss concerns over seasonal construction restrictions in the Yellow River.
July 17, 2012	A teleconference was held with FDOT, Eglin, the Service, Trinity, and HDR to discuss seasonal restrictions for work on bents within the river. FDOT agreed on measures including: no timing restrictions for the Dead River; no piling installations in-river during March/April and September/October for the Yellow River; no in-river nighttime piling installations; ramp-up measure for noise mitigation in-river; and examination of other in-river noise mitigation measures.
October 3, 2012	The Service received the final BA from Trinity.
October 10, 2012	The Service published the final rule in the Federal Register listing eight freshwater mussels that occur in the western panhandle of Florida and designating critical habitat.
October 18, 2012	The Service received a letter from the Chief of Natural Resources, Eglin AFB requesting initiation of formal consultation for the Gulf sturgeon.
November 1, 2012	The Service provided a letter indicated that all information needed to initiate formal consultation was provided or is otherwise available.
January 16, 2013	The Service provided a draft BO to Eglin AFB, FDOT, and Florida Fish and Wildlife Conservation Commission (FWC) for review.
January 31, 2013	The Service received comments from the FWC on the draft BO.
February 14, 2013	The Service received comments from the FDOT on the draft BO.
February 20, 2013	The Service received an email from Eglin AFB indicating they had no additional comments to provide on the draft BO.
February 21, 2013	The Service sent an email to Eglin AFB and FDOT itemizing the remaining issues and an approach to resolving these uncertainties.
March 1, 2013	The Service recommends extending the consultation deadline by 45 days as we work toward resolving the remaining concerns.

March 7, 2013 FDOT stated their preference to complete the consultation by April 10, 2013.

March 8, 2013 The Service agreed to complete the consultation by April 10, 2013, provided that we receive additional information 10 days ahead of that date (as requested in our February 21, 2013 email) to resolve remaining issues.

March 28, 2013 FDOT provided additional information.

BIOLOGICAL OPINION

1.0 DESCRIPTION OF PROPOSED ACTION

The Florida Department of Transportation (FDOT) District 3 proposes to widen SR 87 from two to four lanes for approximately 9.7 miles from the southern boundary of Eglin AFB to County Road (CR) 184. In addition, FDOT will construct a new two-lane bridge over the Yellow and Dead rivers. Approximately 7.7 miles of the project are within the boundaries of Eglin AFB. The current ROW will increase from 80-210 feet to 200-300 feet, plus additional ROW for eight new stormwater retention ponds. A map of the proposed project area is given in Figure 1.

The FDOT will use a rural divided typical section with four 12-foot travel lanes, 5-foot outside paved shoulders, and a 40-foot median. In areas with major "cut-and-fill", the roadway section will include gutters and guardrails to allow for 2:1 side slopes to minimize earthwork and ROW requirements.

The new bridge will be for northbound traffic over the Yellow River. It will be approximately 4,751 feet in length, and constructed east of and parallel to the existing bridge. The bridge typical section will consist of two 12-foot lanes with a 6-foot inside paved shoulder and a 10-foot outside paved shoulder. The in-river portion of the bridge will consist of three bents with six piles per bent. For the purposes of this BO, we have defined in-river work to include all work occurring within the banks and bed of the river. All piles will be 24-in pre-stressed plumb concrete. A temporary work bridge located east of the proposed bridge may be used for construction, which could be built and relocated as construction advances to eliminate the need for a full-length work bridge.

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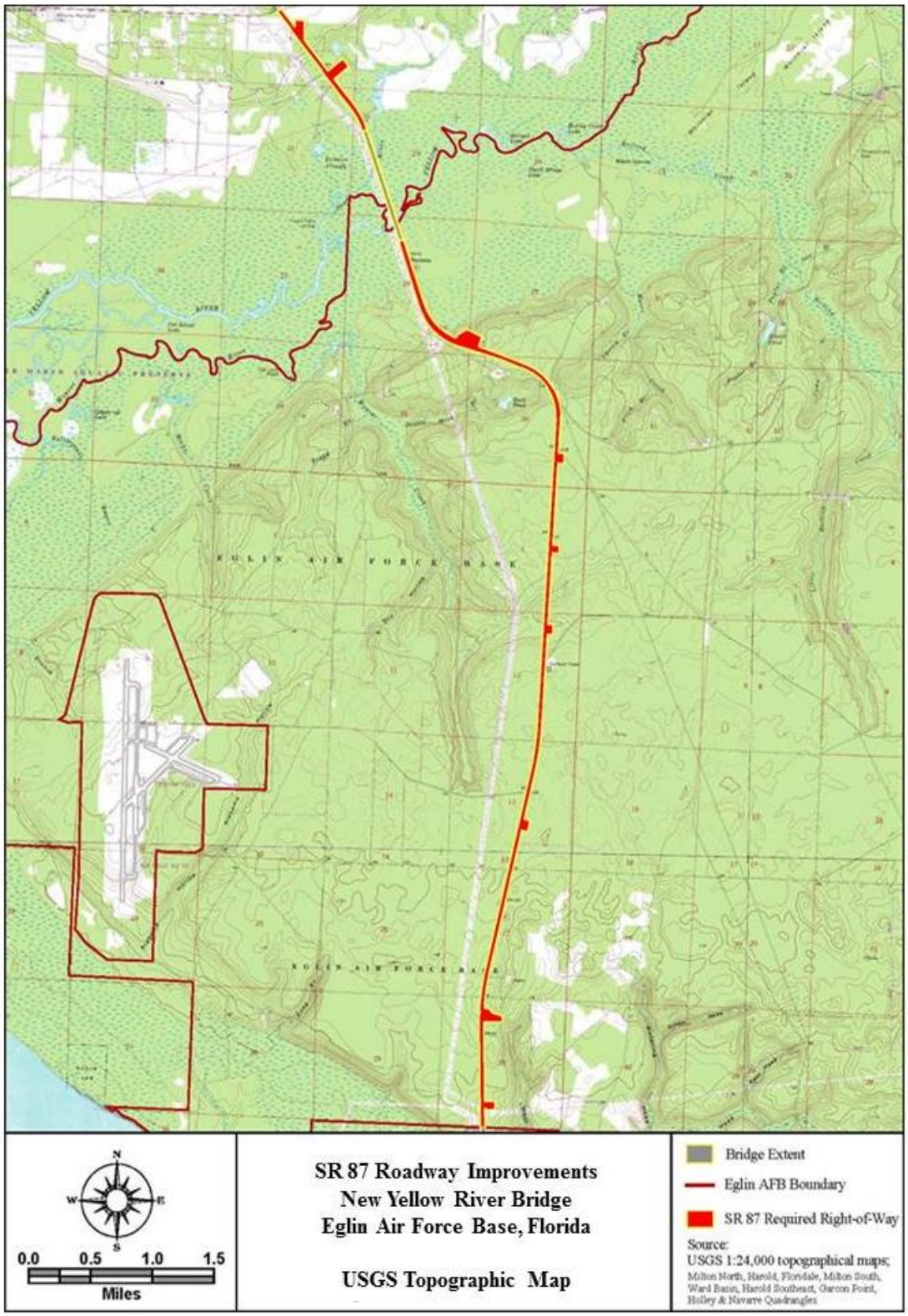


Figure 1. SR 87 and new Yellow and Dead river bridges – project location map.

1.1 Purpose and Need

The project purpose is to enhance travel service and coastal evacuation, improve roadway safety, and better support projected population and economic growth for the region. SR 87 is the main north-south corridor in Santa Rosa County, linking coastal US 98 in Navarre to US 90 in Milton and to Alabama further north.

1.2 Action Area

The action area is defined at 50 CFR 402 to mean "all areas affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." Therefore, the action area may be larger than the construction limits of the project. The impact radius for roads is variable, depending on the ecological factor under consideration and the habitat the road traverses. For example, sediment can affect stream habitat and fish populations for downstream distances of 1,000 meters (3,280 feet) and greater from a road or bridge (Forman et al. 2003). Effects on wildlife (woodland birds, snakes, and deer) due to traffic disturbance, noise, and vibrations from a moderately busy road can extend from 300 to 1,000 meters (984 to 3,280 feet) (Forman et al. 2003). Underwater pressure resulting from pile driving can disturb, harass, and injure fish and other wildlife if threshold criteria are exceeded (Fisheries Hydroacoustic Working Group 2008); it is expected that these effects will diminish to the threshold 2,000 feet of pile driving activities as the river bends. Other broad-scale ecological landscape effects (habitat fragmentation, fish barrier, disrupted wildlife movement corridors, human access impacts) can extend well beyond 1,000 meters (3,280 feet) (Forman et al. 2003). The Action Area for this biological opinion is (1) a 400-foot corridor along the length of the road; (2) 1,000 feet on either side of the corridor; and (3) upstream of the bridge to 2,000 feet and downstream approximately 5.6 miles to the extent of the 12-digit hydrologic unit code (HUC) watershed from where the road corridor crosses the Yellow and Dead rivers. The use of environmentally-sensitive bridge construction techniques, Best Management Practices (BMPs) for water quality protection, and other conservation measures are expected to minimize the zone of influence for the project. The Action Area encompasses approximately 3,064 acres.

1.3 Conservation Measures

Conservation measures are actions to benefit or promote the recovery of a listed species that are included by the Federal agency as an integral part of the proposed action. These actions will be taken by the Federal agency or applicant and serve to minimize or compensate for project effects on the listed species. The BA states that the FDOT will implement the following avoidance and minimization measures to reduce impacts to the Gulf sturgeon and its critical habitat Unit 4: Yellow River.

<u>General Measures</u>

1. Prior to construction, a Construction and Engineering Inspection (CEI) team will be assigned to the project. The CEI supervisor will work with the FDOT District Construction Project Manager and the contractor to provide instructions and educational material to familiarize the contractor and construction personnel with listed species and other sensitive issues associated

with the project during a pre-construction conference. Eglin Natural Resources, the Service, and the Florida Fish and Wildlife Conservation Commission will be invited to provide input during the pre-construction conference. The contractor and the CEI supervisor would be tasked with ensuring construction personnel attend a site orientation briefing and for monitoring compliance with mandates and directives outlined therein.

2. The FDOT will implement appropriate measures resulting from the consultation with the Service for the Gulf sturgeon, such as: timing bridge construction activities to account for the sturgeon spawning season; implementation of innovative bridge construction technologies; implementation of applicable BMPs with substitutions (increased placement of on-land erosion control, where applicable) or modifications to these measures (alternate placement in or removal from the river channel) to allow for normal Gulf sturgeon migration and routine habitat usage by sturgeon of any life stage.

3. The FDOT will contribute towards conservation and monitoring of Gulf sturgeon via a one-time purchase of two Vemco VR2w receivers and ten tags. Funding and facilitation of fish tracking receivers in the river channel will allow Eglin and the Service to continue to monitor population trends and tracking the sturgeon within the river will enable Eglin to better prepare for missions near the river and in the Gulf in regards to sturgeon locations.

Pre-construction

4. FDOT will permit the bridge in accordance with the state's water quality rules from Chapter 62-346 through the Florida Department of Environmental Protection.

5. In order to protect wetlands, the agency will comply with the procedures and practices outlined in EO 11990, 44 CFR 9.6, AFI 32-7064, and 32 CFR 989.

6. The FDOT will provide an information package at the Pre-Construction Conference to educate the Contractor on the subject of the listed species, the laws protecting such species, and the civil and criminal penalties for harming, harassing, or killing such species.

7. Eglin Natural and Cultural Resources will designate appropriate staging and storage areas void of environmentally or archeologically sensitive habitats.

8. Signs will be posted as continuous reminders to warn workers of the potential presence of protected species such as sturgeon in work areas, their endangered status and federal protection, and precautions needed.

Construction

9. The Contractor will consider and implement, where practical, innovative, environmentally sensitive construction techniques to avoid/minimize impacts to listed species and sensitive areas.

10. No dredging of the river bottom will be conducted for barge access.

11. Placement of bridge piles will match the existing bridge locations.

12. Drilled shaft pile construction will be used whenever prudent and feasible as determined by FDOT.

13. Care will be taken in lowering equipment or material below the water surface and into the stream bed to ensure no harm occurs to any sturgeon that may have entered the construction area undetected. Additionally, the use of a spotter would help avoid a direct strike on a sturgeon during in-river bridge pile placement and installation. FDOT could also use side-scan sonar as an alternative method for detecting sturgeon during periods of high turbidity when water visibility is low. A spotter will not be required from December through February when sturgeon are not present in the river.

14. Construction debris will not be discarded into the water.

15. All applicable BMPs (silt fence, sediment traps/basins, staked and floating turbidity barriers, synthetic bales, sandbags, rock bags, etc.) will be utilized to ensure control of fugitive soil movement, excessive sedimentation, and turbidity, with substitutions (increased placement of on-land erosion control, where applicable) or modifications to these measures (alternate placement in, or removal from, the river channel) as needed to allow for normal Gulf sturgeon migration and routine habitat usage by sturgeon of any life stage.

16. Siltation barriers should be properly secured, monitored regularly to avoid entrapment of any species, and made of material in which a sturgeon cannot become entangled. Such barriers will not block entire width of the waterway at any time.

17. Exposed soil surfaces will be sodded or seeded in accordance with contract plans as soon as practicable following soil disturbing activities for stability and erosion control.

18. In-river bridge construction related activities will be timed to take place avoiding periods of known increased Gulf sturgeon activity such as during peak fall and spring migration periods, allowing safe and unobstructed migratory passage to and from the sturgeon's riverine spawning sites. For example, no piling installation will be conducted in March/April or September/October in the Yellow River.

19. No nighttime piling installation will be conducted from March through November, with nighttime defined as 30-minutes after sunset to 30-minutes before sunrise.

20. When piling installation does occur, pile-driving hammers would initially be operated at low levels, then gradually increase to the minimum necessary power required for pile removal or installation. During this ramp-up procedure, any sturgeon in the area would have the opportunity to detect the presence of increased sound and leave the area before full power pile driving commences.

21. All in-river pile driving restrictions will also apply to the proposed temporary work bridge.

22. Boats and barges utilized in support of construction activities will be removed from the main migration route during periods of inactivity.

23. If a sturgeon is seen within 100 yards of active daily construction operations or vessel movement, all appropriate precautions should be implemented to ensure its protection. These precautions should include ceasing operation of any in-river moving equipment (such as a boat or barge) so that it comes no closer than 50 feet of a sturgeon. Furthermore, operation of any mechanical construction equipment should cease immediately if a sturgeon is seen within a 50-foot radius of the equipment. Activities should not resume until the protected species has departed the project area of its own volition.

24. If a sturgeon is in imminent danger, distress, or has been injured or killed, work will cease in the area and FDOT and/or their contractor will immediately coordinate with Eglin Natural Resources. Eglin will then contact the Service's Law Enforcement Office and the Panama City Field Office (see RPM 3.1 for contact information).

25. Any dead sturgeon will be secured on site for carcass analysis by notified agency representative.

Post-construction

26. Following completion of the project, a report summarizing any involvement with sturgeon will be prepared for the Service.

2.0 STATUS OF THE SPECIES

2.1 Species Description

The Gulf sturgeon (*Acipenser oxyrinchus* (=*oxyrhynchus*) *desotoi*), also known as the Gulf of Mexico sturgeon, is an anadromous fish (breeding in freshwater after migrating up rivers from marine and estuarine environments), inhabiting coastal rivers from Louisiana to Florida during the warmer months and over wintering in estuaries, bays, and the Gulf of Mexico. It is a nearly cylindrical primitive fish embedded with bony plates or scutes. The head ends in a hard, extended snout; the mouth is inferior and protrusible and is preceded by four conspicuous barbels. The caudal fin (tail) is heterocercal (upper lobe is longer than the lower lobe). Adults range from 1.2 to 2.4 m (4 to 8 ft) in length, with adult females larger than males. The Gulf sturgeon is distinguished from the geographically disjunct Atlantic coast subspecies (*A. o. oxyrinchus*) by its longer head, pectoral fins, and spleen (Vladykov 1955; Wooley 1985). King et al. (2001) have documented substantial divergence between *A. o. oxyrinchus* and *A. o. desotoi* using microsatellite DNA testing.

2.2 Critical Habitat Description

The Service and NOAA Fisheries jointly designated Gulf sturgeon critical habitat on April 18, 2003 (68 FR 13370, March 19, 2003). Gulf sturgeon critical habitat includes areas within the major river systems that support the seven currently reproducing subpopulations and associated estuarine and marine habitats. Gulf sturgeon use rivers for spawning, larval and juvenile feeding, adult resting and staging, and moving between the areas that support these life history components. Gulf sturgeon use the lower riverine, estuarine, and marine environment during winter months primarily for feeding and for inter-river movements.

Fourteen areas (units) are designated as Gulf sturgeon critical habitat (Figure 2). Critical habitat units encompass approximately 2,783 km (1,729 mi) of riverine habitats and 6,042 km^2 (2,333 mi^2) of estuarine and marine habitats, and include portions of the following Gulf of Mexico rivers, tributaries, estuarine and marine areas:

Unit 1	Pearl and Bogue Chitto Rivers in Louisiana and Mississippi;
Unit 2	Pascagoula, Leaf, Bowie, Big Black Creek and Chickasawhay Rivers in Mississippi;
Unit 3	Escambia, Conecuh, and Sepulga Rivers in Alabama and Florida;
Unit 4	Yellow, Blackwater, and Shoal Rivers in Alabama and Florida;
Unit 5	Choctawhatchee and Pea Rivers in Florida and Alabama;
Unit 6	Apalachicola and Brothers Rivers in Florida;
Unit 7	Suwannee and Withlacoochee River in Florida;
Unit 8	Lake Pontchartrain (east of causeway), Lake Catherine, Little Lake, the Rigolets, Lake Borgne, Pascagoula Bay and Mississippi Sound systems in Louisiana and Mississippi, and sections of the state waters within the Gulf of Mexico;
Unit 9	Pensacola Bay system in Florida;
Unit 10	Santa Rosa Sound in Florida;
Unit 11	Nearshore Gulf of Mexico in Florida;
Unit 12	Choctawhatchee Bay system in Florida;
Unit 13	Apalachicola Bay system in Florida; and
Unit 14	Suwannee Sound in Florida.

Figure 2. Designated critical habitat and historic range of Gulf sturgeon.

Critical habitat determinations focus on those physical and biological features (primary constituent elements [PCEs]) that are essential to the conservation of the species (50 CFR 424.12). Federal agencies must insure that their activities are not likely to result in the destruction or adverse modification of designated critical habitats. Therefore, proposed actions that may affect designated critical habitat require an analysis of potential impacts to the PCEs. The PCEs of Gulf sturgeon critical habitat are:

- Abundant food items, such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items, such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks and/or crustaceans, within estuarine and marine habitats and substrates for subadult and adult life stages;
- Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay;
- Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal

riverbed depths, believed necessary for minimizing energy expenditures during freshwater residency and possibly for osmoregulatory functions;

- A flow regime (*i.e.*, the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging;
- Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages;
- Sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and
- Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (*e.g.*, an unobstructed river or a dammed river that still allows for passage).

2.3 Life History

Like most sturgeons, the Gulf sturgeon is characterized by large size, longevity, delayed maturation, high fecundity, and far-ranging movements. Gulf sturgeon typically live for 20-25 years, but can reach ages of at least 42 years old (Huff 1975). Age at sexual maturity ranges from 8-12 years for females and 7-9 years for males (Huff 1975). High fecundity has been demonstrated by Chapman et al. (1993), who estimated that mature female Gulf sturgeon weighing between 29 and 51 kg (64 and 112 lb) produce an average of 400,000 eggs. Long-range migrations from the open Gulf of Mexico to bays and estuaries to coastal rivers are also common. Migratory behavior of the Gulf sturgeon is likely influenced by sex and reproductive status (Fox et al. 2000), change in water temperature (Wooley and Crateau 1985; Chapman and Carr 1995; Foster and Clugston 1997), and increased river flow (Chapman and Carr 1995; Heise et al. 1999a, b; Sulak and Clugston 1999; Ross et al. 2000 and 2001b; Parauka et al. 2001; B. Tate, pers. comm. 2012).

In general, all life stages of Gulf sturgeon migrate into rivers in the spring (from late February to May), where sexually mature sturgeon spawn when the river temperatures rises to between 17-25°C. Similar to Atlantic sturgeon, Gulf sturgeon are believed to exhibit a long inter-spawning period, with male Gulf sturgeon capable of annual spawning, but females requiring more than one year between spawning events (Huff 1975; Fox et al. 2000) and only small percentage of females spawn in a given year (Sulak and Clugston 1999; Pine et al. 2001). Therefore, Gulf sturgeon population viability is highly sensitive to changes in adult female mortality and abundance (Pine et al. 2001; Flowers 2008).

Spawning occurs in the upper reaches of rivers, at least 100 km (62 miles) upstream of the river mouth (Sulak et al. 2004), in habitats consisting of one or more of the following: limestone bluffs and outcroppings, cobble, limestone bedrock covered with gravel and small cobble, gravel, and sand (Marchant and Shutters 1996; Sulak and Clugston 1999; Heise et al. 1999a; Fox et al. 2000; Craft et al. 2001; USFWS unpub. data 2005; Pine et al. 2006). These hard bottom substrates are required for egg adherence and shelter for developing larvae (Sulak and Clugston

1998). Documented spawning depths range from 1.4 to 7.9 m (4.6 to 26 ft) (Fox et al. 2000; Ross et al. 2000; Craft et al. 2001; USFWS unpub. data 2005; Pine et al. 2006).

Gulf sturgeon eggs are demersal and adhesive and require at least 2 to 4 days to hatch (Parauka et al. 1991; Chapman et al. 1993). After hatching, larval Gulf sturgeon are particularly sensitive to water temperatures above 25°C (Chapman and Carr 1995). Young-of-year (YOY) fish disperse widely throughout the river and remain in freshwater for 10 to 12 months after spawning occurs (Sulak and Clugston 1999). They are typically found in open sand-bottom habitat away from the shoreline and vegetated habitat.

Throughout early spring to late autumn, Gulf sturgeon of all ages remain in freshwater until fall (6 to 9 months) (Odenkirk 1989; Foster 1993; Clugston et al. 1995; Fox et al. 2000; Sulak et al. 2009). They typically occupy discrete areas either near the spawning grounds (Wooley and Crateau 1985; Ross et al. 2001b) or downstream areas referred to as summer resting or holding areas. These resting areas are often located in deep holes, and sometimes shallow areas, along straight-aways ranging from 2 to 19 m (6.6 to 62.3 ft) deep (Wooley and Crateau 1985; Morrow et al. 1998; Ross et al. 2001a, b; Craft et al. 2001; Hightower et al. 2002), and frequently near (not in) natural springs (Clugston et al. 1995; Foster and Clugston 1997; Hightower et al. 2002). The substrates consisted of mixtures of limestone and sand (Clugston et al. 1995), sand and gravel (Wooley and Crateau 1985; Morrow et al. 1998), or just sandy substrate (Hightower et al. 2002). With the exception of YOY fish, Gulf sturgeon do not typically feed during freshwater residency (Mason and Clugston 1993; Gu et al. 2001). Sulak et al. (2012) reported that the vast majority (~94%) of juvenile, subadult, and adult Gulf sturgeon sampled from the Suwannee River exhibited complete feeding cessation for the 8-9 month summer residency; however, a small percentage (~6%) of juveniles and subadults did feed in freshwater.

All non-YOY begin to migrate downstream from fresh to saltwater around September (at about 23°C [73°F]) through November (Huff 1975; Wooley and Crateau 1985; Foster and Clugston 1997), and they spend the cool months in estuarine areas, bays, or in the Gulf of Mexico (Odenkirk 1989; Foster 1993; Clugston et al. 1995; Fox et al. 2002). During the fall migration, Gulf sturgeon may require a period of physiological acclimation to changing salinity levels, referred to as osmoregulation or staging (Wooley and Crateau 1985). This period may be short (Fox et al. 2002) as sturgeon develop an active mechanism for osmoregulation and ionic balance by age 1 (Altinok et al. 1998). Some adult Gulf sturgeon may also spawn in the fall (Randall and Sulak 2012).

Throughout fall and winter, juveniles feed in the lower salinity areas in the river mouth and estuary (Sulak and Clugston 1999; Sulak et al. 2009), while subadults and adults migrate and feed in the estuaries and nearshore Gulf of Mexico habitat (Foster 1993; Foster and Clugston 1997; Edwards et al. 2003, 2007; Parkyn et al. 2007). Some Gulf sturgeon may also forage in the open Gulf of Mexico (Edwards et al. 2003).

The Gulf sturgeon is a benthic (bottom dwelling) suction feeder: it feeds mostly upon small invertebrates in the substrate using its highly protrusible tubular mouth. The type of invertebrates ingested varies by habitat but are mostly soft-bodied animals that occur in sandy substrates. Young-of-the-year Gulf sturgeon feed on freshwater aquatic invertebrates, mostly

insect larvae and detritus (Mason and Clugston 1993; Sulak and Clugston 1999; Sulak et al. 2009). Juveniles (less than 5 kg (11 lbs), ages 1 to 6 years) forage in lower salinity habitats near the river mouth and in the estuaries, and subadults and adults feed in the estuary and nearshore feeding grounds in the Gulf of Mexico (Foster 1993; Foster and Clugston 1997; Edwards et al. 2003, 2007; Parkyn et al. 2007). Prey in estuarine and marine habitats include amphipods, brachiopods, lancelets, polychaetes, gastropod mollusks, shrimp, isopods, bivalve mollusks, and crustaceans (Huff 1975; Mason and Clugston 1993; Carr et al. 1996; Fox et al. 2000; Fox et al. 2002). Ghost shrimp (Lepidophthalmus louisianensis) and haustoriid amphipods (e.g., Lepidactylus spp.) are strongly suspected to be important prey for adult Gulf sturgeon over 1 m (3.3 ft) (Heard et al. 2000; Fox et al. 2002).

Marine movement, habitat, and feeding data indicate that Gulf sturgeon prefer open, sandy habitat containing high abundances of known benthic prey (Fox et al. 2002; Parauka et al. 2001; Harris et al. 2005). In bays and estuaries, Gulf sturgeon generally prefer shallow (depths less than 3.5 m, 11.5 ft) areas (Parauka et al. 2001; Craft et al. 2001) or deep holes near passes (Craft et al. 2001). Gulf sturgeon using nearshore Gulf of Mexico areas are generally found at depths less than 6-10 m (33 ft) (Ross et al. 2001a; Fox et al. 2002; Rogillio et al. 2002; Parauka 2012 pers. comm.). Generally, fish are found in near shore areas off Perdido Bay and between Pensacola and Apalachicola Bays (Fox et al. 2002; Parauka 2012 pers. comm.) and in the Mississippi Sound along the barrier islands, where they are relocated most often at the passes between islands (Ross et al. 2001a; Rogillio et al. 2002). Telemetry-tagged Gulf sturgeon from different natal river systems are regularly detected in the same marine foraging areas.

Previous tagging studies indicated that Gulf sturgeon exhibit river fidelity (USFWS and GSMFC 1995). Stabile et al. (1996) identified five regional or river-specific stocks (from west to east): (1) Lake Pontchartrain and Pearl River, (2) Pascagoula River, (3) Escambia and Yellow Rivers, (4) Choctawhatchee River, and (5) Apalachicola, Ochlockonee, and Suwannee Rivers. Dugo et al (2004) reported that genetic structure occurs at the drainage level for the Pearl, Pascagoula, Escambia, Yellow, Choctawhatchee, and Apalachicola rivers (no samples were taken from the Suwannee population). Additional genetic studies by Brian Kreiser at University of Southern Mississippi indicate that there is strong population structure in all rivers across its range, and a clear difference between populations east and west of Mobile Bay (B. Kreiser 2012 pers. comm.). Gulf sturgeon do make inter-river movements (USFWS unpubl. data 2012; Krieser 2012 pers. comm.), and more genetic research is needed to determine if inter-stock movement is resulting in inter-stock reproduction.

2.4 Population Status

Historically, the Gulf sturgeon occurred from the Mississippi River east to Tampa Bay (Figure 2). Its present range extends from Lake Pontchartrain and the Pearl River system in Louisiana and Mississippi east to the Suwannee River in Florida. Sporadic occurrences have been recorded as far west as the Rio Grande River between Texas and Mexico, and as far east and south as Florida Bay (Wooley and Crateau 1985; Reynolds 1993).

In the late 19th century and early 20th century, the Gulf sturgeon supported an important commercial fishery, providing eggs for caviar, flesh for smoked fish, and swim bladders for

isinglass, which is a gelatin used in food products and glues (Huff 1975; Carr 1983). Gulf sturgeon numbers declined due to overfishing throughout most of the 20th century. The decline was exacerbated by habitat loss associated with the construction of dams and sills (low dams), mostly after 1950. In several rivers throughout the species' range, dams and sills have severely restricted sturgeon access to historic migration routes and spawning areas (Wooley and Crateau 1985; McDowall 1988).

On September 30, 1991, the Service and the National Marine Fisheries Service (NMFS) listed the Gulf sturgeon as a threatened species under the Act (56 FR 49653). Threats and potential threats identified in the listing rule included: construction of dams, modifications to habitat associated with dredging, dredged material disposal, de-snagging (removal of trees and their roots) and other navigation maintenance activities; incidental take by commercial fishermen; poor water quality associated with contamination by pesticides, heavy metals, and industrial contaminants; aquaculture and incidental or accidental introductions; and the Gulf sturgeon's long maturation and limited ability to recolonize areas from which it is extirpated.

The Service and NMFS conducted a 5 year status review in 2009 where we concluded that the following threats continue to affect Gulf sturgeon and its habitat: impacts to habitats by dams, dredging, point and nonpoint discharges, climate change, bycatch, red tide, and collisions with boats (USFWS and NMFS 2009). Additional threats may include ship strikes and potential hybridization due accidental release of non-native sturgeon. These threats persist to varying degrees in different portions of the species range. The juvenile stage of Gulf sturgeon life history is the least understood, and perhaps the most vulnerable as this cohort remains in the river for the first years of its life and is therefore exposed to most of the threats faced by the species and its habitat. Further, the species long-lived, late-maturing, intermittent spawning characteristics make recovery a slow process.

Currently, seven rivers are known to support reproducing subpopulations of Gulf sturgeon. Table 2 lists these rivers and most-recent estimates of subpopulation size. Abundance numbers indicate a roughly stable or slightly increasing population trend over the last decade in the eastern river systems (Florida), with a much stronger increasing trend in the Suwannee River and a possible decline in the Escambia. Populations in the western portion of the range (Mississippi and Louisiana) have never been nearly as abundant, and their current status is unknown as comprehensive surveys have not occurred in the past ten years.

At this time, the Service characterizes the status of the species as stable; however, the status of the subpopulations in the Pearl and Pascagoula rivers is uncertain. These rivers do not have current population estimates and have recently been threatened by hurricanes, the Deepwater Horizon oil spill, and a pot-liquor spill in the Pearl River. The Gulf sturgeon continues to meet the definition of a threatened species. While some riverine populations number in the thousands, abundance of most populations is in the hundreds. Loss of a single year class could be catastrophic to some riverine populations with low abundance. Further, while directed fisheries no longer occur, many threats continue and new ones are arising. Data are not yet available to determine if Gulf sturgeon recovery is limited by factors affecting recruitment (e.g., spawning habitat quantity or quality), adult survival (e.g., incidental catch in fisheries directed at other species), or the late-maturing, intermittent reproductive characteristics of the species.

2.5 Analysis of the Species/Critical Habitat Likely to be Affected

This BO addresses the effects of improving SR 87 and constructing a new bridge over the Yellow River on the Gulf sturgeon and its designated critical habitat. The Gulf sturgeon is found seasonally in the Yellow River and its distributaries from early spring until late fall.

The Yellow River is one of seven rivers currently known to support a reproducing subpopulation of Gulf sturgeon. The critical habitat in the Yellow River system is included in Unit 4 (the Yellow River mainstem, downstream to its discharge at Blackwater Bay, and all Yellow River distributaries). Unit 4 provides spawning sites and potential summer resting areas for the Yellow River Gulf sturgeon subpopulation. Road and bridge construction may affect water and sediment quality in the Yellow River, and alter migratory behavior as a result of physical and acoustic effects from pile driving and other work activities within the river. Therefore, in this BO we limit our analysis of effects to Gulf sturgeon to the Yellow River subpopulation of the species in critical habitat Unit 4.

Table 2. Estimated size of known reproducing subpopulations of Gulf sturgeon. In some cases, multiple estimates are presented based on differences in population estimation models used. All estimates apply to a proportion of the population exceeding a minimum size, which varies by researchers according to the sampling method used. CI = confidence interval. NR = not reported.

River	Year of data collection	Abundance Estimate	Lower Bound 95% CI	Upper Bound 95% CI	Source
Pearl	2001	430	323	605	Rogillio et al. 2001
Pascagoula	2000	181	38	323	Ross et al. 2001
Pascagoula	2000	206	120	403	Ross et al. 2001
Pascagoula	2000	216	124	429	Ross et al. 2001
Escambia	2006	451	338	656	USFWS 2007
Yellow	2011	1,036	724	1,348	USFWS 2012 unpub. data
Choctawhatchee	2008	3,314	NR	NR	USFWS 2009
Apalachicola	2005	2,000	NR	NR	Pine and Martell 2009a
Apalachicola	2010	1,292	616	1,968	USFWS 2010 unpub. data
Suwannee	2004	10,000	NR	NR	Pine and Martell 2009a
Suwannee	2006	9,728	6,487	14,664	Randall 2008
Suwannee	2007	14,000	NR	NR	Sulak 2008

3.0 ENVIRONMENTAL BASELINE

3.1 Status of the Species within the Action Area

The Action Area extends from 2,000 ft upstream of the SR 87 crossing in the Yellow and Dead Rivers to the downstream extent of the 12-digit HUC and also includes the 400-ft road corridor and a 1,000-ft buffer on either side of the road corridor. Although the action area does not include the full extent of Gulf sturgeon habitat in the Yellow River, this project has the potential to affect the entire Yellow River subpopulation because the road crossing is near a major summer holding area and all life stages must pass up- and downstream of the project. Therefore, the status of the subpopulation in the Yellow River is the same as its status in the action area.

The Yellow River subpopulation of Gulf sturgeon was estimated to be roughly 1,300 net vulnerable (roughly age 4+) individuals in 2011 (USFWS unpub data 2012). A similar census in the fall of 2003 estimated the population size was 911 individuals (Berg et al. 2007), which indicates that the population may have been growing at a rate of about 5% per year for the past ten years (depending on the accuracy of the estimates). Pine et al. (2001) found positive population growth of about 5% annually for adults within the Suwannee River subpopulation, and this is believed to be the maximum average annual rate of increasing Gulf sturgeon populations over time. Evidence of recruitment has also been observed in recent years, suggesting that the Yellow River subpopulation is viable (i.e., regularly reproducing) (Berg et al. 2007; Kreiser et al 2008; USFWS 2011-2012 unpub data).

Gulf sturgeon are known to spawn at sites within about a 5-km (~ 3-mi) reach of the Yellow River downstream of SR 55 (approximately rkm 130) near the Alabama/Florida border (Kreiser et al 2008; USFWS 2010-2012 unpub. data). The Service also confirmed spawning at a site in Florida downstream of CR 2 (USFWS 2011 unpub. data). Several holding areas have been identified by Craft et al. (2001) in the lower river downstream of rkm 60. The most populated holding area was found between SR 87 and Boiling Creek (rkm 11-16), and additional sites have been documented near Miller's Bluff (rkm 23), south of River's Edge Campground (rkm 42), and Gin Hole Landing (rkm 58) (Craft et al. 2001). The Service has also recently confirmed the continued use of these areas.

Three recent telemetry studies have advanced knowledge of Gulf sturgeon movement and habitat use in the Yellow River: 1) Eglin and the Department of Defense funded telemetry in marine environments near Eglin AFB from 2008-2010, 2) NOAA funded a telemetry study assessing adult mortality rates since 2010, and 3) additional telemetry work was funded under the Natural Resources Damage Assessment (NRDA) of the Deepwater Horizon oil spill beginning in 2010. These studies have resulted in a total of approximately 200 telemetry-tagged adult Gulf sturgeon in the Yellow and Blackwater rivers in 2012. The Service monitored riverine movement and habitat use of these tagged fish in the Yellow River in 2011 and 2012. Telemetry receivers were placed at 5-kilometer (km) intervals in the lower river, additional receivers were placed near known and suspected spawning sites, and data was downloaded every 4-8 weeks. A receiver was placed approximately 100 m east of the SR 87 bridge, which picked up transmissions approximately ~ 500 m upstream and downstream of the bridge.

Results indicate that the area around the SR 87 bridge was actively used from late February until November. Figures 3 and 4 describe the pattern of movement and habitat use in the vicinity of the bridge in 2011, and a similar pattern was observed in 2012. Figure 3 describes the number of individuals observed by month, and Figure 4 describes residency (*e.g.*, how frequently individuals are detected at the same receiver near the SR 87 bridge). Generally, Gulf sturgeon enter the river in late February or early March. They move through the action area relatively quickly passing upstream to spawning or resting areas; however, sturgeon are detected in the vicinity of the bridge consistently through November. From mid-summer until the fall migration, Gulf sturgeon are increasingly found in the vicinity of the SR 87 bridge until they migrate into Pensacola Bay or the Gulf of Mexico (September through November).

3.2 Status of the Critical Habitat within the Action Area

This portion of the environmental baseline section focuses on the designated critical habitat for the Gulf sturgeon, describing what we know about the physical and biological features (PCEs) that are essential to the species' conservation within the action area. The action area does not include the estuarine critical habitat in Unit 9, as we do not expect impacts of bridge construction to extend beyond the downstream extent of the 12-digit HUC; therefore, PCEs for estuarine or marine habitat are not discussed.

3.2.1 Food items

Riverine benthic invertebrate communities serve as prey primarily for YOY and juvenile Gulf sturgeon (see Section 2.3). Lewis (2010) summarized recent invertebrate collections in the action area and found that communities were dominated by midge (Tendipedidae) and mayfly (Ephemeroptera) larvae, oligochaetes and bivalves (particularly the Asian clam, *Corbicula fluminea*). Overall, Yellow River habitats were considered relatively productive compared to other Pensacola Bay river systems (*i.e.*, Blackwater and Escambia rivers). There is no evidence to indicate the food resources in the Yellow River are not adequate to support YOY and juvenile Gulf sturgeon at this time.

3.2.2 Riverine spawning sites

As described in Section 3.1, Gulf sturgeon spawn at sites above rkm 125 near the Alabama/Florida border and at one site below CR 2 in Florida. All of the sites consist of hard bottom substrate including claystone, limestone, and boulder. The availability, and likely the suitability, of hard-bottom areas for spawning varies with flow, *i.e.*, more of the hard-bottom habitat is inundated at higher flow and less at lower flow.

The Yellow River Basin is increasingly impacted by excessive sedimentation from bank instability and unpaved road crossings (Herrington et al. 2010), and sedimentation has been identified as a problem at several of these spawning sites (Craft et al. 2001; Lewis 2010; Herrington et al. 2010). In particular, the Dripping Rock area (*e.g.*, the furthest upstream spawning site at rkm 134) was characterized by a bare and breached riverbank and an unpaved road resulting in an estimated 60 tons of excess sediment per year to the river. This area was

recently restored by DoD, the Service, the Nature Conservancy, and the Florida Fish and Wildlife Conservation Commission by grading, stabilizing and revegetating the breached bank, and by closing, grading, filling, and seeding the unpaved road for long-term sediment stabilization.

Although there are impacts to spawning sites from sedimentation, the status of this constituent element is stable. Spawning has been documented at Dripping Rock despite sedimentation in the reach, and the population structure shows evidence of regular recruitment (Berg et al. 2007; USFWS 2011 unpub data). We are unaware of specific spawning habitat alterations that may limit the ability of the designated critical habitat to function for the conservation of the species.

3.2.3 Riverine aggregation areas

As described in Section 3.1, at least four Gulf sturgeon holding areas occur in the Yellow River downstream of rkm 60. The area in the vicinity of SR 87 appears to be particularly important to Gulf sturgeon. At this time, we are unaware of specific alterations to riverine aggregation areas that may limit the ability of the designated critical habitat to function for the conservation of the species.

3.2.4 Flow regime

The Yellow River exhibits moderate seasonality in flows (Lewis 2010), with highest flows in the winter and early spring and lowest flows in the fall. A precursory look at the record of flow at the USGS gage in Milligan, FL, indicates that there are no major differences in the flow regime from August 1938 to current. Figure 5 compares the distribution of annual flow from 1938-1958 and 1992-2012. The assumption is that flows in the time period prior to 1960 would be less affected by consumptive uses from development and agricultural irrigation that have occurred more recently in the Yellow River basin. Overall, annual flows are slightly lower in recent times than the assumed more natural flows recorded before 1960; however, the pattern is similar and differences are small. Surface water from the Yellow River basin has not played a major role in water supply (NWFWMD 2012), and most of the water supply for municipal and agricultural uses comes from the sand and gravel aquifer. At this time, we are unaware of specific flow regime alterations that may limit the ability of the designated critical habitat to function for the conservation of the species.

3.2.5 Water quality

The Yellow River system is subject to a variety of nonpoint pollution sources (especially urban runoff from Crestview) and input from wastewater reuse facilities (Thorpe et al. 1997). Despite these impacts, water quality throughout the system has been described as “excellent”, “some of the most pristine water quality in the state”, and “high quality” (FDEP 1996; FDEP 1998; Lewis 2010, respectively). Currently only three segments of the Yellow River and two segments of the Shoal River were included on the verified list of impaired waters, and impairments are for fecal coliform and mercury in fish tissue (FDEP 2006).

Sturgeons are more sensitive to hypoxia (insufficient oxygen levels) than other well known, oxyphillic species, such as rainbow trout (Secor and Niklitschek 2001). Sturgeons have a limited behavioral and physiological capacity to respond to hypoxia, and basal metabolism, growth, consumption, and survival are sensitive to changes in oxygen levels (Secor and Niklitschek 2001). The sensitivity of sturgeons to low dissolved oxygen (DO) conditions appears to decrease as the fish matures, with YOY fish being the most sensitive. In laboratory experiments, young (< 77 days old) shortnose sturgeon (*A. brevirostrum*) died at oxygen levels of 3.0 mg/l and all sturgeon died at oxygen levels of 2.0 mg/l (Jenkins et al. 1993). Niklitschek and Secor (2009) tested YOY Atlantic sturgeon at 20°C and found a no effect at 6.70 mg/L, high mortality at 3.47 mg/L, and chronic deleterious effects of 4.82 mg/L. Lewis (2010) summarized DO collection data from 22 sites in the Yellow River from the 2009 Florida STORET database. Dissolved oxygen throughout the river was fairly high (> 6 mg/L). Several sites had values between 4-5 mg/L; however, the low values usually occurred during single sampling events, and observed concentrations were only below 4 mg/L on one occasion.

At this time, it appears that water quality in the Yellow River critical habitat unit is adequate for the conservation of Gulf sturgeon.

3.2.6 Sediment quality

Herrington et al. (2010) recently completed an inventory of impaired sites in the Yellow River basin and concluded that the Yellow River Basin is increasingly impacted by excessive sedimentation primarily from unpaved road crossings and also from bank instability. Assessments of sediment contamination in the Yellow River have not been conducted, but it is reasonable to suspect some level of contamination since the basin has experienced extensive logging and receives nonpoint source pollution and sedimentation from agricultural areas, unpaved roads, and urban runoff (Thorpe et al. 1997).

At this time, the status of the sediment quality PCE of Gulf sturgeon critical habitat in the Yellow River is not pristine, but we do not have evidence that it is limiting the ability of the designated critical habitat to function for the conservation of the species. We are not aware of sediment quality impairments that have resulted in death, injury, or reduced growth and reproductive success to Gulf sturgeon in this system, and the subpopulation appears to be slowly increasing (see section 3.1).

3.2.7 Safe and unobstructed migratory pathways

The Yellow River is free-flowing. At this time, we are unaware of any other ongoing hazards or obstructions that may limit migratory movements within Yellow River critical habitat unit.

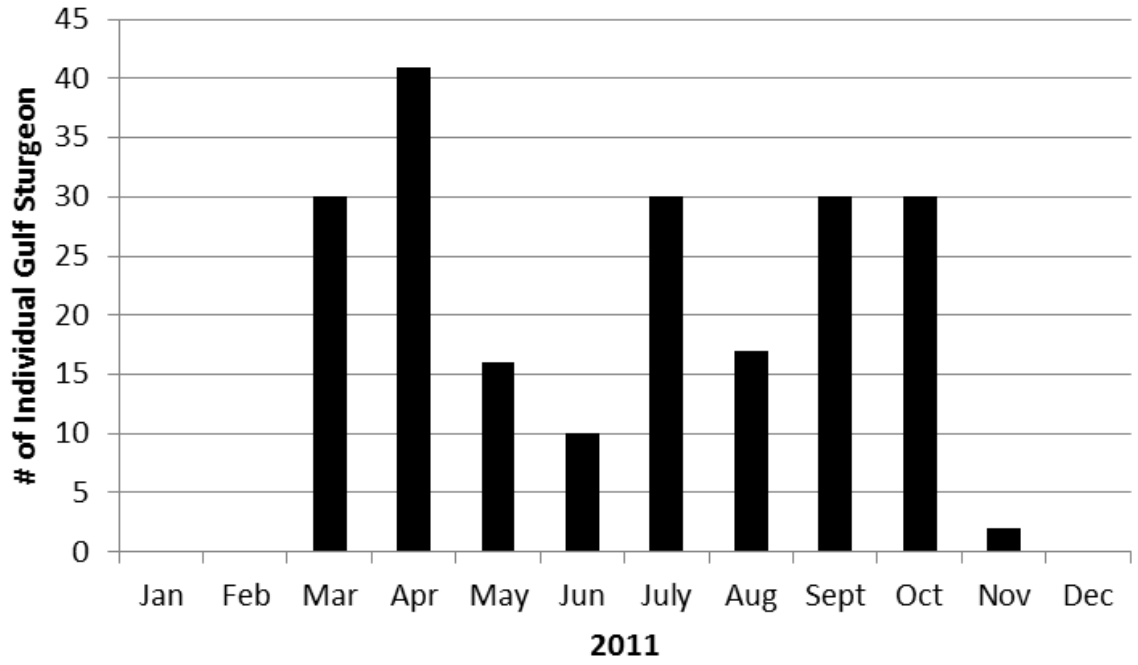


Figure 3. The total number of individual Gulf sturgeon detected in the vicinity of SR 87 during the months of 2011.

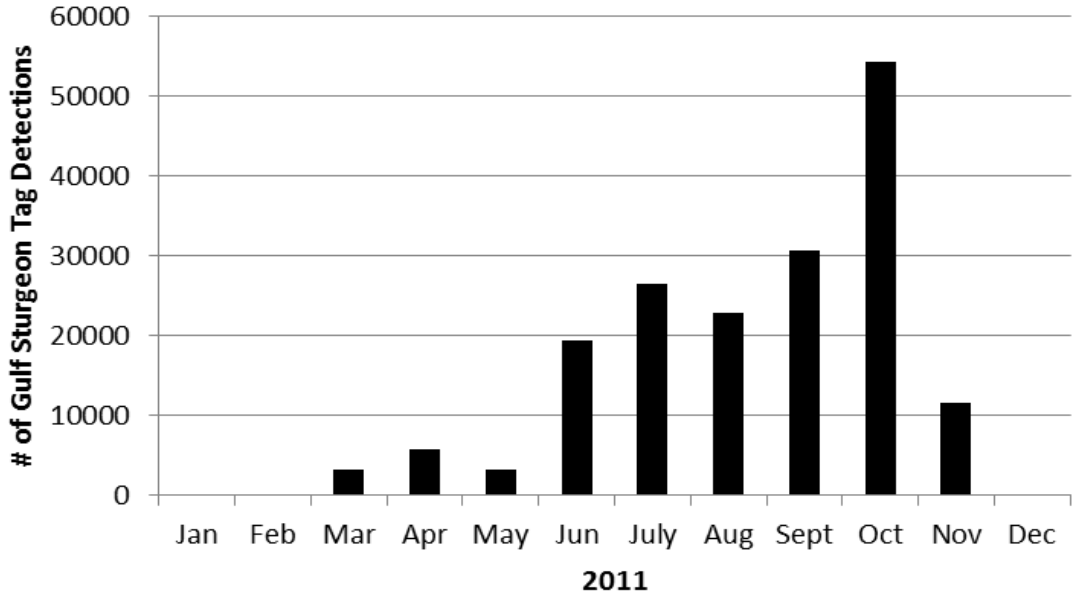


Figure 4. The total number of detections of individual Gulf sturgeon in the vicinity of SR 87 during the months of 2011.

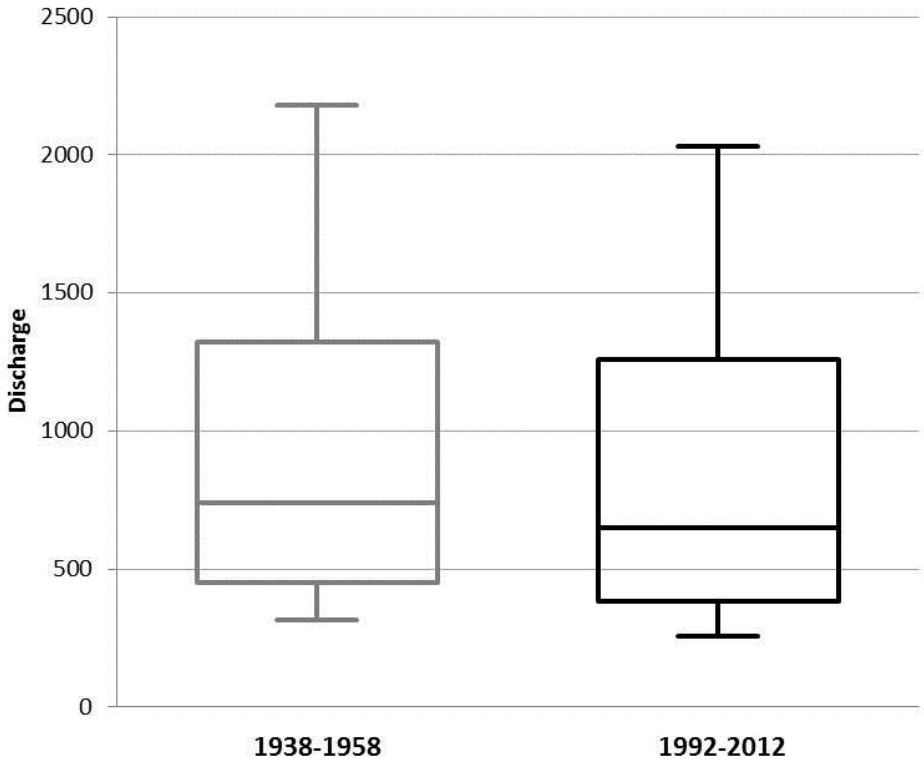


Figure 5. Comparison of annual flows at the USGS gage on the Yellow river near Milligan, FL from 1938-1958 and 1992-2012.

4.0 EFFECTS OF THE ACTION

4.1 Factors to be Considered

This section includes an analysis of the direct and indirect effects of the proposed action on the species and critical habitat and its interrelated and interdependent activities. Our analysis of the effect of road and bridge construction considers the following factors:

Proximity of the action: The proposed action will affect designated critical habitat and all life stages of Gulf sturgeon in the Yellow River because the road crossing is near a major summer holding area and all life stages must pass up- and downstream of the project.

Distribution: The Gulf sturgeon is known to reproduce in seven rivers across its range, and all seven rivers are designated critical habitat. The Yellow River critical habitat unit is in the center of the species' range and comprises 7% of designated riverine critical habitat; however, critical habitat will only be affected in the Yellow River from 610 m (2,000 ft) upstream of the bridge to 10.4 rkm (6.4 rm) downstream. The latter is the downstream extent of critical habitat within the 12-digit HUC). Therefore, less than 1% of designated Gulf sturgeon riverine critical habitat may

be affected by the proposed action. The Yellow River subpopulation was estimated to be 1,036 net-vulnerable individuals in 2011, which is about 5-6% of the range-wide Gulf sturgeon estimation.

Timing: The construction let date and details on the timing of this project have yet to be determined by FDOT. It is expected that the project may be completed in two phases, with bridge work occurring in one phase. Work within the Yellow River channel is expected to take approximately 120 days, with 2 to 3 months to complete pile driving activities.

Nature of the effect: Direct impacts may consist of: physical injury, temporary hearing loss, or mortality from underwater sound pressure waves associated with pile driving; crushing or burying individual Gulf sturgeon and their prey species by machinery or sediment deposition; displacement of individuals; and habitat loss due to the addition of in-river structures, increased scour, riparian vegetation removal, decreased woody debris, potential increases in stream temperature, and the addition of fine sediments. Indirect impacts from construction may consist of altered water quality, habitat quality, and behavior of Gulf sturgeon within the stream segment. Altered behavior could include increased stress responses and disruption of migration due to construction activities (*e.g.*, elevated noise, sediment controls or equipment blocking passage, etc.), resulting in lost or reduced recruitment and/or reduced feeding due to construction activities. Elevated levels of fine sediments may affect breathing, feeding, and reproduction. Invertebrate populations, a food source for YOY and juvenile sturgeon, may also be depressed.

Direct and indirect effects are likely to occur primarily within the Yellow River from 610 m (2,000 ft) upstream of the bridge and downstream as far as 366 m (1200 ft), the distance in-river noise levels would travel (see below). Additional indirect effects may occur beyond the area of elevated noise. Activities that could cause erosion and sedimentation into the stream could extend over 1,000 m (3,280 ft) downstream and even to the downstream extent of the 12-digit HUC; however, erosion control measures should reduce these effects to a minimal level. In addition, road capacity improvement projects can lead to additional development within the watershed. The following agreed-upon conservation measures will greatly reduce the direct and indirect impacts from the project: the use of environmentally-sensitive bridge construction; timing of in-river bridge construction related activities to avoid peak fall and spring migration periods; prohibiting nighttime piling installation from March through November; using ramp-up measures during piling installation to allow for a gradual increase in noise levels; using BMPs to control erosion, sedimentation, and turbidity; and conveying stormwater to treatment ponds to eliminate run off into streams.

Duration: The duration of impacts will be both short- and long-term, although the duration of all work activities has not been determined by FDOT. Work within the Yellow River channel is expected to be completed in 120 days with 2 to 3 months to complete pile driving. Some indirect impacts due to the presence of the road will be permanent, resulting from the continuing presence of the road itself. These effects may be both short-term (such as periodic maintenance activities) and long-term (altered stream hydrology and geomorphology; increased magnitude and frequency of floods and debris flows, etc.). Roads can be a major sediment source throughout their existence. Vehicular traffic is a source of chemical contamination from metals, petroleum products, and occasional toxic spills. Roads may also provide a new access point for

human activity, thereby causing the spread of non-native plants, fish and mollusks, and pathogens.

Disturbance frequency: Construction activities will result in a prolonged, one-time disturbance to critical habitat within the Action Area and the Yellow River subpopulation of Gulf sturgeon. Underwater noise from pile driving will occur as short-term pulses (*i.e.*, minutes to hours), separated by virtually instantaneous and complete recovery periods. These disturbances are likely to occur several times a day for up to 3 months. Water quality impairment will also occur as short-term pulses (*i.e.*, minutes to hours) during construction, most likely due to erosion during precipitation events, and will continue due to stormwater runoff for the design life of the bridge. Physical habitat alteration due to modification and replacement of existing in-river and over-water structure also occur intermittently during construction, and will remain as the final, as-built project footprint for the design life of the bridge.

Disturbance intensity and severity: Temporary impacts are expected to occur during the construction phase of the project. Since work for each segment will be two years, the temporary impacts of the proposed action are expected to affect multiple generations. We also expect individual Gulf sturgeon to use the areas in the project footprint routinely from late February through November and to recolonize daily if they are temporarily displaced during construction. The intensity and severity of the impacts will be reduced by implementing many of the conservation measures in the proposal. These measures include but are not limited to, the use of environmentally-sensitive bridge construction; timing of in-river bridge construction related activities to avoid peak fall and spring migration periods; prohibiting nighttime piling installation from March through November; using ramp-up measures during piling installation to allow for a gradual increase in noise levels; using BMPs to control erosion, sedimentation, and turbidity; and conveying stormwater to treatment ponds to eliminate run off into streams.

4.2 Analysis for Effects of the Action

The effects of roads and bridges on aquatic systems have been well-studied and can extend well beyond the project's construction footprint. Effects can occur from construction activities, the presence of the structure itself, and from associated urban growth. Construction activity results in equipment in the river including boats, barges, pilings, and erosion control materials. Gulf sturgeon are known to jump out of the water near the bridge and may be struck by boats. Erosion control material may impede movements and migration through and around the area. The impacts discussed above are all possible; however, there are two primary effects of the project that have the greatest potential for impacts: elevated levels of underwater noise and reduced water quality.

Underwater Noise:

Underwater pile driving produces high sound pressure underwater, which can injure or kill fish (Caltrans 2001; Hastings and Popper 2005; Popper and Hastings 2009). Fish with swim bladders, such as Gulf sturgeon, are particularly sensitive to underwater impulsive sounds with a sharp sound pressure peak occurring in a short interval of time (Caltrans 2001). As the pressure wave passes through a fish, the swim bladder is rapidly squeezed due to the high pressure, and

then rapidly expanded as the under pressure component of the wave passes through the fish. The pneumatic pounding may rupture capillaries in the internal organs as indicated by observed blood in the abdominal cavity, and maceration of the kidney tissues (Caltrans 2001). Direct take can occur as instantaneous death, latent death within minutes after exposure, or can occur several days later. Indirect take can occur because of reduced fitness of fish making it susceptible to predation, disease, starvation, or ability to complete its life cycle.

Generally, sound pressures from underwater pile driving depend upon the size of the pile and the size of the hammer. Several other factors can cause large variations in measured sound pressures including water depth, tidal conditions or currents if sound attenuation systems are used, and the geotechnical conditions that determine how difficult it is to drive the pile (Illinworth and Rodkin 2007). Underwater pile strike noise is measured in the following ways:

1. Peak sound pressure level (dB_{peak}): the maximum sound pressure level or highest level of sound in a single strike measured in decibels relative to 1 micro-Pascal (dB re 1 μPa) and referred to as dB_{peak}.
2. Sound exposure level (SEL): the integral of the squared sound pressure over the duration of the pulse (e.g., a full pile driving strike.) SEL is the integration over time of the square of the acoustic pressure in the signal and is thus an indication of the total acoustic energy received by an organism from a particular source (such as pile strikes). It is measured in decibels relative to 1 micro-Pascal-squared second (dB re 1 μPa^2-s).
3. Single Strike SEL: the amount of energy in one strike of a pile.
4. Cumulative SEL (dB_{cSEL}): the energy accumulated over multiple strikes. Cumulative SEL indicates the full energy to which an animal is exposed during any kind of signal. The rapidity with which the cumulative SEL accumulates depends on the level of the single strike SEL. The actual level of accumulated energy is the logarithmic sum of the total number of single strike SELs. Thus, dB_{cSEL} = Single-strike SEL + $10\log_{10}(N)$; where N is the number of strikes. This is referred to as $dB_{cSEL.}$
5. Root Mean Square (dB_{RMS}): the average level of a sound signal over a specific period of time. This is referred to as dB_{RMS}.

A multi-agency work group consisting of key technical and policy staff, supported by national experts on sound propagation activities that affect fish and wildlife species of concern, developed criteria for the acoustic levels at which various physiological effects to fish could be expected (FHWG 2008). These criteria apply to all listed fish species on the west coast, including green sturgeon, which are biologically similar to Gulf sturgeon. They determined that to protect listed fish species, sound pressure waves should be within a single strike threshold of 206 dB_{peak}, and cumulative strike sound exposure levels should be less than 187 dB_{cSEL} for fish that are larger than 2 grams and less than 183 dB_{cSEL} for fish that are smaller than 2 grams (FHWG 2008).

NMFS has relied on these criteria in determining the potential for physiological effects in Section 7 consultations conducted on the East and West Coast. At this time, they represent the best available information on the thresholds at which physiological effects to sturgeon are likely to occur. It is important to note that physiological effects may range from minor injuries from which individuals are anticipated to completely recover with no impact to fitness to significant

injuries that will lead to death. The severity of injury is related to the distance from the pile being installed and the duration of exposure. The closer to the source and the greater the duration of the exposure, the higher likelihood of significant injury. NMFS has employed a dB_{RMS} pressure level radius in several East and West Coast consultations. At this level, fish may experience a temporary threshold shift in hearing due to a temporary fatiguing of the auditory system that can reduce the survival, growth, and reproduction of the affected fish by increasing the risk of predation and reducing foraging or spawning success (Stadler and Woodbury 2009). For the purposes of this consultation we also will use the dB_{RMS} threshold of 150 as a conservative indicator of the noise level at which there is the potential for behavioral effects.

The BA for the proposed action states that the sound level for impact pile driving a 0.6 m (24 in) concrete pile is estimated to be 166 dB_{RMS} at 10 m from the pile. Illinworth and Rodkin (2007) compiled all available information on sound pressures resulting from pile driving in Northern California since 2000. They reported driving a 0.6 m (24 in) concrete pile at a water depth of approximately 5 m (16.4 ft) resulted in near-source (10 m) sound pressures of 190 dB_{pSPL}, 170 dB_{RMS}, and 160 dB_{cSEL}. The BA also used the Practical Spreading Loss and Nedwell models to estimate in-river noise attenuation levels. The Service and NMFS currently recognize the Practical Spreading Loss equation as the best method to determine underwater noise attenuation rates, and results can be further refined based on site-specific factors. The Practical Spreading Loss model resulted in noise attenuation to ambient levels at 5.41 km (3.36 miles). Because this model is for open water, we expect threshold levels to be reached over a shorter distance because noise propagation is limited by the sinuosity of the river. Using a line-of-sight rule (where the sound level is assumed to greatly diminish at the first visual river bend), noise should be abated by within approximately 610 m (2,000 ft) upstream and 366 m (1200 ft) downstream.

The BA concludes that it is unlikely that noise or disturbance will affect the holding area upstream of the SR 87 bridge; however, the assumption was that the nearest holding area was located near Boiling Creek, which is about 4.8 rkm (2.9 river mi) upstream of the bridge. As discussed in Section 3.1, our most recent data indicates that Gulf sturgeon use the area immediately around the bridge from February to November, especially in the summer and fall months. Given that the dB_{peak} and dB_{cSEL} values associated with this project are expected to be less than the thresholds for causing injury, we do not expect Gulf sturgeon to be killed or injured during pile driving. However, we do expect indirect effects to Gulf sturgeon to result from levels in excess of 150 dB_{RMS} (Caltrans 2009). As a conservative estimate in the BA, noise levels above 125 dB_{RMS} were considered to cause disturbance to sturgeon.

Sound pressure levels in excess of the disturbance threshold (but below the threshold for injury) are expected to cause temporary behavioral changes that will increase the risk that those individuals will be subject to predation and reduce their likelihood of foraging or spawning success. We expect the behavioral response of Gulf sturgeon would be to move to areas outside of the noise threshold. It is possible that the noise would cause Gulf sturgeon to avoid the project area, which may impede migration; however, no piling construction will occur during peak migratory periods from March to April and September to October. In addition, no night-time piling installation will be conducted from March to November, so there will be daily periods of time without potential impacts, and sturgeon are expected to quickly recolonize the area when the noise stops. The additional conservation measure of ramping-up noise levels may

also reduce impacts to Gulf sturgeon. During the construction of the Woodrow Wilson Bridge over the Potomac River, there is evidence that tapping the pile with lower energy for the first few strikes may cause fish to move away from the piles before full operations begin (FHWA 2003); however, these findings were anecdotal and were not part of scientifically controlled studies.

Reduced Water Quality:

Road and bridge construction commonly result in increased sedimentation in riverine environments. Sediment and contaminants are likely to be released into the water by construction activities that are part of the proposed action, including geotechnical surveys, excavation, grading, filling, pile driving, and in-river work that is necessary rehabilitate or construct the road and bridges, and to construct and maintain the stormwater facilities. Soil disturbance will increase the rate at which wind and water erosion will carry sediment into the Yellow River. Pile installation will also disturb the sediments in the footprint and result in some re-suspension of material into the water column. However, because pile occupies a small area of primarily sandy substrates that are often rearranged by river currents, any increase in turbidity will likely be small.

Contamination of sediment from the project area is probable from runoff and automobile releases. Discharge of stormwater runoff from contributing impervious area associated with the proposed action will also contribute a variety of pollutants to Yellow River that originate directly from automobiles and indirectly via aerial deposition from industrial and agricultural production. These pollutants will include, but are not limited to, nutrients, metals (arsenic, copper, chromium, lead, mercury, and nickel), PAHs, sediment, and pesticides (Buckler and Granato 1999; Colman et al. 2001; Kayhanian et al. 2003). Nutrients and other oxygen demanding substances in stormwater lower oxygen levels in receiving waters and may lead to oxygen depletions. Additionally, the use of heavy construction equipment results in small, unpredictable releases of fuel, lubricant, and hydraulic fluids. The release of construction material, though minor is likely to occur as well (grinding slurry, concrete, and rubble).

The FDOT proposes to capture, manage, and treat stormwater in six dry and two wet stormwater retention ponds. However, the proposed treatment will not eliminate all stormwater pollutants. Thus, some adverse effects of stormwater runoff will exist for the design life of the road and bridge crossing.

The Gulf sturgeon and its critical habitat are likely to be affected by reduced water quality through increased sedimentation and contamination associated with road and bridge construction and stormwater discharge. Sedimentation from soil disturbance in and near the stream may interfere with proper respiratory functioning, smother in-stream habitat and reduce the prey base for YOY and juvenile Gulf sturgeon, and reduce channel capacity. Loss of channel capacity leads to greater bank erosion, channel widening, increased temperatures and other alterations adverse to the Gulf sturgeon. However, the erosion control plan should reduce the potential for impacts to Gulf sturgeon and its critical habitat. Although little is known about contaminant effects directly on Gulf sturgeon, specific impacts of pollution and contamination on other sturgeons have been identified to include muscle atrophy, abnormality of gonad, sperm and egg development, morphogenesis of organs, tumors, and disruption of hormone production (Graham

1981; Altuf'yev et al. 1992; Dovel et al. 1992; Georgi 1993; Romanov and Sheveleva 1993, Heath 1995; Khodorevskaya et al. 1997; Kruse and Scarnecchia 2002). However, due to stormwater treatment, and the relatively small amount of time that any heavy equipment will be in the water and the use of proposed conservation measures, any increase in contaminants is likely to be small and infrequent.

4.3 Species Response to the Proposed Action

Effects to Gulf Sturgeon

While the use of the conservation measures described above should greatly reduce direct impacts to individual Gulf sturgeon and critical habitat, some mortality is expected along with displacement of fish for the approximate 120 days that in-river work will take place. Mortality may result from boat strikes, construction debris, equipment movement, muck removal, placement of fill, sedimentation, and/or as the result of pile-driving of bridge piers. Displacement will result from disturbance and noise. Direct impacts of mortality or displacement and indirect effects from elevated noise associated with pile driving would be most likely to occur within the radius of underwater noise that will be created by impact pile driving a 24-in concrete pile, which is approximately 610 m (2,000 ft) upstream and 366 m (1,200 ft) downstream of the bridge. Indirect effects from reduced water quality are reasonably certain to occur from the bridge crossing to the downstream extent of the 12-digit HUC.

The proposed action would result in a prolonged (over 3 years total), temporary disturbance to Gulf sturgeon within the Action Area. Direct and indirect impacts are expected to be greatest during the bridge construction phase of the project, which is expected to take 2 years to complete. Because the entire Yellow River subpopulation of Gulf sturgeon must pass through the action area, all of the individuals have the potential to be affected by the proposed project; however, we do not expect impacts to be substantial. In general, the proposed project will result in additional boat traffic and potential for interaction between boats and equipment and Gulf sturgeon in the river. Given the small increase in boat traffic, the slow speeds that these boats are expected to operate at, the risk of boat and equipment strikes is not high, and we expect few interactions. We cannot quantify the number of individuals that may be directly taken through interactions with boats or equipment or the number of individuals indirectly affected by elevated noise from pile driving, because it depends on the number of individuals in the area of impact, which varies widely based on time of year and habitat condition. Potential impacts to feeding are expected to be minimal because YOY sturgeon are wide-ranging, and invertebrate food sources are abundant in the Yellow River. Potential impacts to migration and spawning are also expected to be minimal as a result of avoiding pile driving during the peak migration periods. Effects of sedimentation and contamination will be greatly reduced through the use of stormwater treatment ponds and an effective erosion control plan.

Effects to Critical Habitat

The proposed action has the potential to affect the following PCEs of critical habitat in the lower Yellow River: 1) food items, 2) riverine aggregation areas, 3) water quality, 4) sediment quality, and 5) safe and unobstructed migratory pathways. These impacts will be temporary and have the

greatest potential to occur during bridge construction. Impacts to water quality, sediment quality, and food resources could occur from sedimentation and contamination; however, any impacts will be greatly reduced through the use of stormwater treatment ponds and an effective erosion control plan. Riverine aggregation areas and safe and unobstructed migratory pathways both have the potential to be affected by elevated noise from pile driving and displacement from other construction activities. These impacts are also greatly reduced through the use of conservation measures described above. None of the impacts are expected to permanently modify PCEs of the designated critical habitat.

4.4 Interrelated and Interdependent Actions

Along with the effects of the action, we must consider the effects of other federal activities that are interrelated to, or interdependent with, the proposed action (50 CFR sect. 402.02). Interrelated actions are part of a larger action and depend on the larger action for their justification. Interdependent actions have no independent utility apart from the proposed action. At this time, the Service is unaware of actions that satisfy the definitions of interrelated and interdependent actions that will not themselves undergo section 7 in the future, or that are not already included in the Baseline.

5.0 CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. The Service is not aware of any specific plans within the Action Area that would not be covered under section 7.

6.0 CONCLUSION

Our analysis indicates that the proposed project would have a negative, but not appreciable effect on the survival and recovery of Gulf sturgeon. Most direct and indirect effects will occur within the radius of underwater noise that will be created by pile driving; however, the effects are considered small, temporary and reversible. Given that the subpopulation of Gulf sturgeon in the Yellow River is stable or increasing, the probability of species extinction is low. In addition, the proposed project is not likely to appreciably diminish the critical habitat's capability to provide the intended conservation role for the Gulf sturgeon. The nature of effects to critical habitat is relatively small, dynamic, and would not produce permanent alterations to any PCE.

After reviewing the current status of the Gulf sturgeon, the environmental baseline for the action area, the effects of the action, and the cumulative effects, it is the Service's biological opinion that the proposed widening of SR 87 and construction of a new north-bound bridge is not likely to jeopardize the continued existence of the Gulf sturgeon or destroy or adversely modify its designated critical habitat. This opinion will apply as long as the construction let date occurs within five years of this biological opinion, otherwise reinitiation of formal consultation will be required as discussed in Section 9 below.

7.0 INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering [50 CFS §17.3]. Incidental take is defined as take that is incidental to, and not the purpose of, an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by FDOT so that they become binding conditions of any contract, grant or permit issued by Eglin AFB, as appropriate, for the exemption in section 7(o)(2) to apply. Eglin AFB has a continuing duty to regulate the activity covered by this incidental take statement. If Eglin AFB: (1) fails to assume and implement the terms and conditions or, (2) fails to require any contracted group to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Eglin AFB must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR §402.14(I)(3)]

7.1 Amount Or Extent Of Take Anticipated

Incidental take is expected to be in the form of temporary direct and indirect impacts resulting from construction activities, elevated noise levels, impaired water quality, and habitat degradation. While injury or mortality of individuals is possible, the risk will be reduced by the use of environmentally-sensitive bridge construction techniques, and conservation measures that minimize impacts of pile driving noise, erosion, and ground disturbance. As described above (Effects of the Action), we cannot quantify the number of individuals that may be directly or indirectly affected by the proposed action because it depends on the number of individuals in the area of impact, which varies widely based on time of year and habitat condition. Therefore, take cannot be accurately quantified as the number of individual Gulf sturgeon that are reasonably certain to be injured or killed, or indirectly impacted through habitat degradation. We instead consider take in terms of habitat as follows:

1. *Pile Driving*: Take will occur in the area affected by the radius of underwater noise that will be created by impact pile driving a 24-in concrete pile, which is approximately 610 m (2,000 ft) upstream and 366 m (1,200 ft) downstream of the bridge. This includes

behavioral disturbance, or auditory injury due to impulse sound from impact driving where the dB_{RMS} sound pressure level will exceed 150 re 1 μPa^2. Take may also occur within this area as a result of boat or equipment strikes associated with in-river construction.

2. *Reduced Water Quality*: Take caused by reduced water quality due to construction activities and stormwater is reasonably certain to occur from the bridge crossing to the downstream extent of the 12-digit HUC. The best available indicators for the extent of take due to reduced water quality are evidence of turbidity released during construction. This variable is proportional to the amount of construction-related disturbance of upland and stream channel habitats that results in an erosion and suspended sediment in runoff and the water column. We anticipate that these effects should not result in visible turbidity plume more than 300 feet from the project footprint. The best available indicator for the extent of take due to reduced water quality is no more than a 10% cumulative increase in natural stream turbidity 300 feet from an upland or in-river construction activity, as measured relative to a control point immediately upstream of the turbidity-causing activity.

Table 3. The habitat area and associated individuals affected by the proposed project, based on the best available commercial and scientific information.

Species	***Habitat***	***Individuals***	***Take Type***
Gulf sturgeon	3,200 linear feet	*All adult and juvenile sturgeon within the habitat area that may be harmed, killed, or harassed by construction work activities and increased turbidity levels, or harassed by pile driving noise above threshold disturbance levels.*	*Harm, Harass, or Kill*

7.2 Effect Of The Take

In the accompanying biological opinion, the Service determined that this level of anticipated take will not result in jeopardy to the species or destruction or adverse modification of designated critical habitat. Measures to reduce potential impacts to the Gulf sturgeon and its critical habitat have been incorporated into the plans for this road construction project.

7.3 Reasonable And Prudent Measures

The Service believes the following reasonable and prudent measures (RPMs) are necessary and appropriate to minimize the incidental take of Gulf sturgeon and its habitat as a result of road and bridge construction for widening SR 87. Each RPM will be implemented by associated terms and conditions given in the section to follow. Eglin AFB, as the lead federal agency, shall assure that the following reasonable and prudent measures, with their associated terms and conditions are implemented by the FDOT and their contractor.

RPM 1: Coordinate with the Service to ensure that completed project plans and updates specific to erosion control and stormwater management are implemented and include comprehensive monitoring and reporting.

RPM 2: Reduce and monitor the effect of take associated with underwater noise.

RPM 3: Ensure that the terms and conditions are accomplished and completed as detailed in this incidental take statement including completion of reporting requirements.

7.4 Terms and Conditions

In order to be exempt from the prohibition of section 9 of the Act, Eglin AFB must ensure that the FDOT and their contractors comply with the following terms and conditions, which implement the preceding reasonable and prudent measures. All conservation measures described in the BA and listed above are hereby incorporated by reference as terms and conditions within this document pursuant to 50 CFR § 402.14(I) with the addition of the following terms and conditions. All terms and conditions are non-discretionary.

RPM 1

1.1 An erosion and sediment control plan will be submitted and approved by the Service prior to the start of construction. This plan is to include re-vegetation of stream banks and riparian areas within the limit of construction, as needed. In the event of erosion control failure with impacts to the Yellow River, FDOT will implement a stream restoration plan. The Service will assist the FDOT with the plan development.

1.2 A post-construction field review will be conducted by FDOT and the Service to determine if site restoration is needed.

1.3 Conservation measures and best management practices outlined in the BA and these terms and condition shall be included as enforceable provisions of the construction contract. Failure to comply with all applicable conservation measures outlined in the BA, unless they conflict with provisions in these terms and conditions, and all terms and conditions included here may invalidate protective coverage of ESA section 7(o)(2) regarding the incidental take of listed species.

RPM 2

2.1 Underwater sound levels will not reach or exceed the threshold for physical injury, defined as a single strike threshold of 206 dB_{peak} and cumulative strike sound exposure level of 183[1] dB_{cSEL}. This level is the sound limit for the project. If the sound limit is reached, sound mitigation measures as identified in the underwater sound management

[1]. A value of 183 dB_{cSEL} was selected to address impacts to juvenile sturgeon which may have body weights of under 2 grams.

plan should be implemented to reduce levels below the limit. If mitigation measures are unsuccessful at reducing underwater sound to below the limit, then formal consultation should be reinitiated.

2.2 When engineering limits do not require impact driving, piles shall be advanced by vibration, oscillation, rotation, or pressing.

2.3 A pile-driving and underwater sound management plan will be submitted and approved by the Service prior to the letting date for construction. This will include additional measures to reduce underwater noise such as bubble curtains, temporary noise attenuation piles, air filled fabric barriers, and isolated piles or cofferdams.

2.4 As part of the underwater sound management plan, a test study will be done to accurately determine sound levels based on equipment, substrate, and method of pile installation. This assessment will be done proximate to the project site, in an area most conducive to sound production, and at 10 meters from the pile. Any change in pile materials and/or installation methodology will require a re-assessment of sound levels.

RPM 3

3.1 Upon locating a dead, injured, or sick individual of an endangered or threatened species, notification must be made to the Fish and Wildlife Service Law Enforcement Office, Groveland, Florida at (352) 429-1037 within 24 hours. FDOT will first contact Eglin Natural Resource Section at (850) 882-4164, who will then the Service's Law Enforcement within the 24-hour window. Eglin will provide additional notification to the Fish and Wildlife Service's Field Office at Panama City, Florida at (850) 769-0552 within 48 hours. Care should be taken in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury.

3.2 A report describing the actions taken to implement the terms and conditions of this incidental take statement shall be submitted to the Project Leader, U.S. Fish and Wildlife Service, 1601 Balboa Avenue, Panama City, Florida, 32405, within 60 days of the completion of construction. This report shall include the dates of work, assessment and actions taken to address impacts to the Gulf sturgeon, if they occurred.

8.0 CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by conducting conservation programs for the benefit of endangered and threatened species. Towards this end, conservation recommendations are discretionary activities that an action agency may undertake to minimize or avoid the adverse effects of a proposed action, help implement recovery plans, or develop information useful for the conservation of listed species.

Little is known on the effects of pile driving sound on Gulf sturgeon. There is not an extensive body of literature on effects of pile driving on fishes and many of the studies were conducted

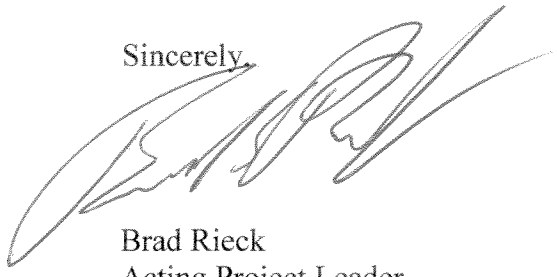
under conditions that make the interpretation of the results uncertain. FDOT has numerous upcoming projects on bridge construction in Gulf sturgeon critical habitat. Therefore, the Service recommends that Eglin AFB and FDOT fund a study on the effects of pile driving sound on Gulf sturgeon.

9.0 REINITIATION NOTICE

This concludes formal consultation on the action(s) outlined in the BA. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information shows that the action may affect listed species in a manner or to an extent not considered in this opinion; (3) the action is subsequently modified in a manner that causes an effect to the listed species not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. Our analysis did not address take through death or injury that may occur when sound pressure waves reach or exceed the threshold for physical injury. If sound levels reach this threshold, sound mitigation measures as identified in the underwater sound plan should be implemented. If mitigation measures are unsuccessful at reducing sound levels below the threshold, then formal consultation should be reinitiated. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation. This biological opinion was formulated by evaluating the effects of the action assuming that construction would begin within the next five years. If the let date does not occur within five years of this biological opinion, the Service would consider that the action was modified in a manner not considered in this opinion, and we would recommend reinitiating formal consultation.

We appreciate the cooperation of Eglin staff, FDOT and their consultants in preparing this Biological Opinion. We look forward to working closely with you in implementing its provisions and other conservation actions for the Gulf sturgeon. Please contact Ms. Mary Mittiga at ext. 236 for questions/comments on this consultation, or Ms. Karen Herrington at ext. 250 for information on the Gulf sturgeon.

Sincerely,



Brad Rieck
Acting Project Leader

cc: (electronic copies)
ACOE, Cocoa, FL (Andy Phillips)
FDOT, District 3, Chipley, FL (Laura Haddock)
FHWA, Tallahassee, FL (Joseph Sullivan)
FWC, Tallahassee, FL (Ted Hoehn, Jeffrey Wilcox)
FWS, Atlanta, GA (Ken Graham)
FWS, Niceville, FL (Bill Tate)

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APPENDIX A

SR 87 Yellow River Bridge

Additional FDOT Conservation Measures for
Red-cockaded Woodpecker
Reticulated Flatwoods Salamander
Eastern Indigo Snake
Bald Eagle
Freshwater Mussels

SR 87 Yellow River Bridge
Additional FDOT Conservation Measures for
Other Federally Protected Species

Bald Eagle

1. The FDOT, in coordination with Eglin Natural Resources, would re-survey the project corridor for the presence of bald eagle nests during final design and permitting phases of this project. The results of these surveys would provide a basis for modification of construction activities, if necessary. The FDOT would coordinate with Eglin Natural Resources and the Service throughout this process to establish adequate protection measures.

2. Foraging individuals can reasonably be expected to avoid the area during active construction and resume normal foraging activities within the habitat once work is complete.

3. Any removal of mature trees within this area is considered negligible in comparison to the available habitat adjacent to the Proposed Action area. However, tree removal of any magnitude would require coordination through Eglin Natural Resources Forestry and Wildlife Divisions.

4. The FDOT would familiarize contractors with the appearance of both bald eagles and their nest structures in the event of encountering either within the Proposed Action area.

5. In the event of encounters or sightings of bald eagles roosting in the work area, work crews would be instructed to stop work and notify the FDOT District Construction Project Manager and Eglin Natural Resources. Work would be allowed to resume only after the bird has been confirmed to have left the area. If a bald eagle nest is found within 660-feet of the project limits, work must stop in the area and the FDOT must coordinate with Eglin Natural Resources and the Service.

Eastern Indigo Snake

6. To assure the protection of the eastern indigo snake, design and construction would follow the "Avoidance and Minimization Measures" as provided in the FDOT District 3 Indigo Snake Protection Measures and the Eglin AFB Indigo Snake Programmatic Biological Opinion, Eglin AFB, FL.

7. Per Eglin requirement, the proponent is responsible for obtaining a gopher tortoise survey approximately one-month prior to clearing.

8. Any active gopher tortoise burrows would be given a mandatory 25-foot buffer. In the event an active burrow cannot be accommodated, the tortoise will need to be relocated in

coordination with Eglin Natural Resources (Mr. Bruce Hagedorn, 96 CEG/CEVSN, 850-883-1153).

9. Presence of gopher tortoise burrows would increase the likelihood of the presence of the eastern indigo snake. Per FDOT and Eglin Natural Resources, information signs would be posted in active construction areas alerting crews to the potential presence and appearance of these species and work crews would be instructed not to kill any snakes, especially black snakes.

10. If a live indigo snake is encountered during construction, work would cease while the species was present in the work area and the FDOT District Construction Project Manager and Eglin Natural Resources would be notified of the sighting.

Freshwater Mussels

11. Conservation measures such as sediment and erosion control would be utilized to minimize sedimentation at all times.

12. Methods such as turbidity monitoring may be instituted to ensure enforcement and effectiveness of erosion control measures.

13. Turbidity barriers would be placed in the river as needed for further siltation control.

14. Every effort would be made to avoid any chemical contamination to the waters and adjacent habitats of the Yellow River, and should any contamination of these habitats or waters occur, construction within the area would immediately cease while containment and remediation actions occur and the appropriate agencies are notified.

Red-cockaded Woodpecker

15. The FDOT, in coordination with Eglin Natural Resources, would re-survey the project corridor for the presence of RCW cavity trees during final design and permitting phases of this project. The results of these surveys would provide a basis for modification of construction activities, if necessary. The FDOT would coordinate with Eglin Natural Resources and the Service throughout this process to establish adequate protection measures.

16. Construction staging and storage areas would be sited to avoid effect to the foraging habitat, to the maximum extent practical.

17. All clearing and staging areas would require pre-approval through the Eglin Natural Resources Section. Initial analysis indicates that no active or inactive cavity trees or foraging habitat would be cleared.

18. Surveys would be conducted prior to construction to help verify no previously undocumented cavity trees exist in the proposed ROW and to verify that inactive trees have not become active due to RCW movement or dispersion.

19. If ground-survey indicates tree removal is necessary, inactive cavity trees would be screened following the survey to prevent RCW utilization prior to tree removal. All removal activities would be coordinated with Eglin Natural Resources.

20. FDOT will provide an educational package and presentation at the Pre-Construction Conference that will include information about the RCW and other listed species.

21. Any cavity trees (active or inactive) subsequently discovered during construction activities would be reported to Eglin Natural Resources.

22. Contractors would be instructed to avoid cavity trees and to stop work if live RCWs are encountered in the work area. If nesting activities are observed within 1,000 feet of the project limits, work would cease in the area and the FDOT would coordinate with Eglin Natural Resources and the Service.

Mitigation and Monitoring Plan

Florida Department of Transportation

State Road 87 Widening

from the southern boundary of Eglin Air Force Base to two miles south of the Yellow River Bridge [FPID 220442-4]; and

from approximately two miles south of the Yellow River Bridge to County Road 184 [FPID 220442-7]

RCS 09-208

Prepared for:

Florida Department of Transportation
and
U.S. Department of the Air Force, Eglin Air Force Base

February 2015

Prepared by:

HDR Engineering, Inc.
25 West Cedar Street, Suite 200
Pensacola, Florida 32502

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ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AOI	Area(s) of Influence
BA	Biological Assessment
BMPs	Best Management Practices
BO	Biological Opinion
CE	Categorical Exclusion
CEG	96th Civil Engineering Group
CEI	Construction, Engineering, and Inspection
EA	Environmental Assessment
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FONPA	Finding of No Practicable Alternative
FONSI	Finding of Significant Impact
FPID	Financial Project Identification Number
FWC	Florida Fish and Wildlife Conservation Commission
FY	Fiscal Year
MOA	Memorandum of Agreement
NPDES	National Pollution Discharge Elimination System
NRS	Natural Resources Section
MMP	Mitigation and Monitoring Plan
RCW	Red-cockaded Woodpecker
ROW	Right-of-Way
SR	State Road
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USFS	U.S. Forest Service

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) has developed this Mitigation and Monitoring Plan (MMP) to provide the U.S. Department of the Air Force (through Eglin Air Force Base (AFB)), a description that the environmental mitigations and monitoring associated with the widening of State Road (SR) 87 will be fully funded, developed, and implemented for the following two segments:

- South segment - Financial Project Identification Number (FPID) 220442-4: SR 87 from southern boundary of Eglin AFB to two miles south of the Yellow River Bridge (5.4 miles); and
- North segment - FPID 220442-7: SR 87 from approximately two miles south of the Yellow River Bridge to County Road (CR)184 (4.2 miles).

This MMP is a requirement of the Environmental Assessment (EA)/Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) signed 09 September, 2014, Col. Jeffrey M. Todd, Command Civil Engineer, Communications, Installations, and Mission Support. This MMP incorporates commitments from the following environmental approval documents:

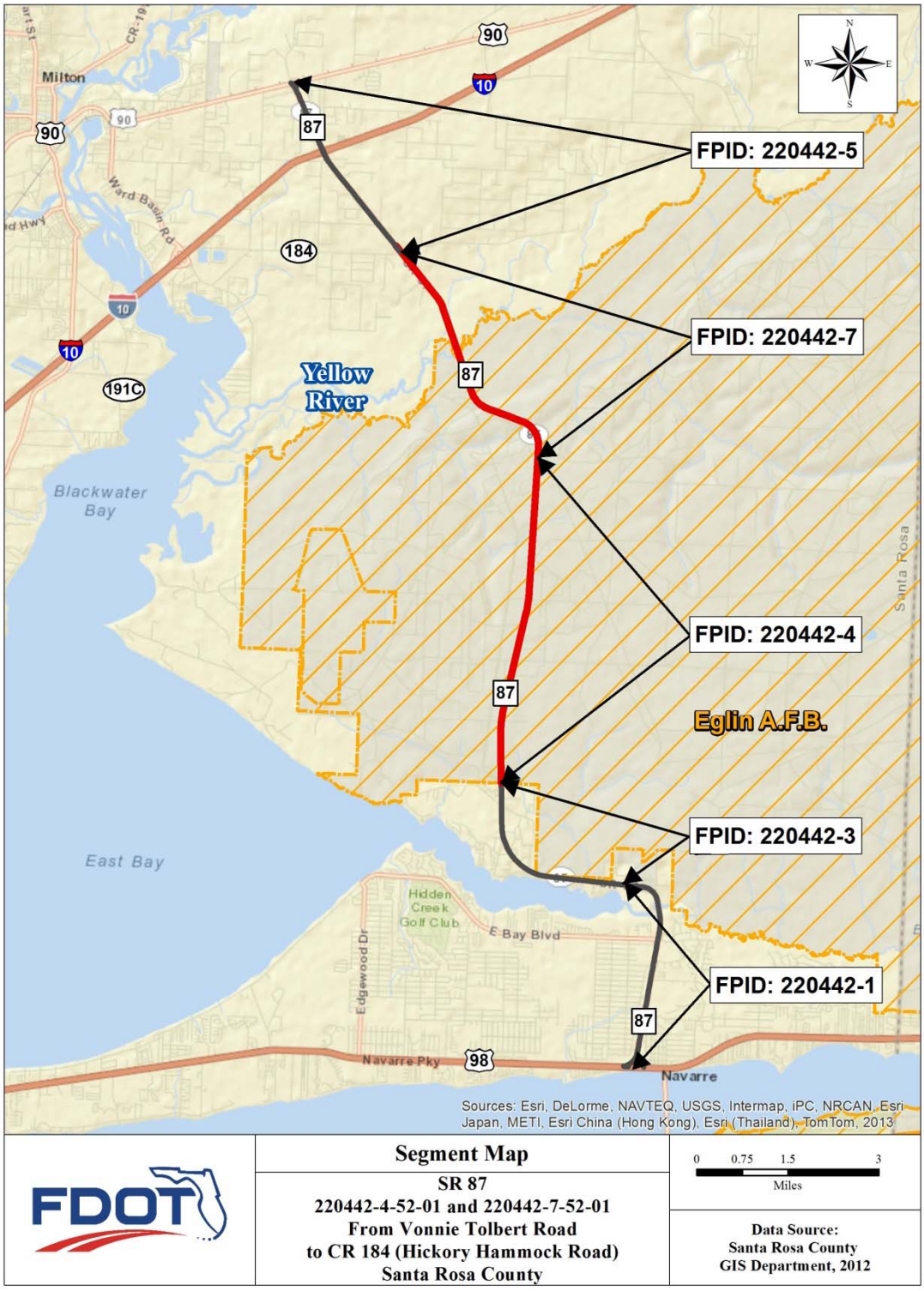
- EA [RCS 09-208] (July 2014)
- FONSI/FONPA [RCS 09-208] (September 2014)
- Biological Assessment (BA) [RCS 09-208] (October 2012)
- Biological Opinion (BO) [FWS 2013-F-0033] (April 2013)
- Categorical Exclusion (CE) [FPID 220403-1] (March 1997)
- Reevaluation [FPID 220442-4 and 220442-7] (September 2014)
- Memorandum of Agreement (MOA) with Eglin Air Force Base, Federal Highway Administration, (FHWA), and the State Historic Preservation Officer (SHPO) for the Broxson Resource Group (BRG 8SR2145)].

The SR 87 project has been divided into two segments as described above and shown in **Figure 1**. Each of these segments has different construction schedules (see Section 10.0 of this MMP) and therefore development and implementation of each segment's permitting, mitigation and monitoring requirements may occur at different times. Where applicable, each mitigation and monitoring requirement has been identified by the segment numbers, as listed above. **Construction is scheduled to begin in August 2015 for FPID 220442-4 (south segment) and in January 2016 for 220442-7 (north segment).**

Consistent with other Eglin MMP documents, this MMP is organized by functional resource category to assist Eglin with oversight and monitoring. Each resource section refers to the complete listing of commitments in **Appendix A** of this MMP. The following functional areas are identified: Biological Resources, Wetlands and Water Resources, Air Quality, Soils and Erosion, Cultural Resources, Hazardous Materials, Utilities / Transportation, and Trails / Recreation.

This MMP was prepared with input from Eglin and US Fish and Wildlife Service (FWS) personnel through two interagency coordination meetings: May 6, 2014; and January 28, 2015 (both at Jackson Guard), and informal communication between FWS and FDOT on February 3, 2015.

Figure 1: SR 87 Project Segments



2.0 BIOLOGICAL RESOURCES

Responsible Organization: FDOT
Collateral Organization of Responsibility: 96 CEG/CEVSN (Eglin Natural Resources Section (NRS)) and USFWS

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Jeremy Preston, Eglin NRS, (850) 883-1153, jeremy.preston@eglin.af.mil
- Ms. Kathy Gault, Eglin NRS, (850) 883-1145, kathleen.gault@us.af.mil
- Mr. Bill Tate, USFWS/Eglin, (850) 883-1189, bill_tate@fws.gov
- Mr. Scott Hassell, Chief, Forest Management, (850) 883-1126, scott.hassell@us.af.mil
- Mr. David (Ryan) Campbell, Eglin Forestry CEG/CEIEA. (850) 883-1139, David.campbell18@us.af.mil.

Specific mitigation commitments are identified for the following biological resources:

- Red-cockaded Woodpecker
- Eastern Indigo Snake
- Atlantic Sturgeon (Gulf Subspecies)
- Bald eagle
- Gopher tortoise
- Black bear
- Freshwater mussels

2.1 Red-cockaded Woodpecker

Red-cockaded Woodpecker (RCW) protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.1** and in **Appendix A**.

Table 2.1: Red-cockaded Woodpecker (RCW)

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	*220442-7 (North Segment)*
CE	1	Yes	Yes
BO	29	Yes	Yes
BO	30	Yes	Yes
BO	35	Yes	Yes
BO	36	Yes	Yes
BO	37	Yes	Yes

Table 2.1: Red-cockaded Woodpecker (RCW)			
Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
BO	64	Yes	Yes
BO	76	Yes	Yes
BO	77	Yes	Yes
BO	78	Yes	Yes
BO	79	Yes	Yes
BO	80	Yes	Yes
BO	81	Yes	Yes
BO	82	Yes	Yes
BO	83	Yes	Yes
EA	88	Yes	Yes

Time-Sensitive Commitments: (applies to both segments)

- Commitment 1 requires an RCW survey prior to construction for coordination with Eglin and USFWS. As agreed at the January 28, 2015 coordination meeting, the survey will be completed by FDOT **prior to Eglin tree harvesting.** Eglin Forestry will have oversight on pre-construction tree removal of harvestable timber. This removal will be selective and designated as a thinning rather than a clearing operation.

- Per communication from Kathy Gault (Eglin Natural Resources) [November 14, 2014], the best time to do the surveys is about a week or two before tree removal. There is an active cluster about a half mile from SR 87. Eglin does not require RCW survey on any stands that are comprised of sand pine or any plantations that are less than 50 years old.

- Commitment 76 requires RCW survey during final design and permitting. This commitment will be incorporated prior to selective tree harvesting.

- Informal communication from USFWS (December 9, 2014) indicates Eglin is not exempt from conducting RWC surveys for silviculture. For example, areas with sand pine would be excluded from surveys since it isn't suitable habitat for RCW. **A shapefile of the final corridor footprint was provided to Eglin forestry February 5, 2015.**

2.2 Eastern Indigo Snake

Eastern Indigo Snake protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.2** and in **Appendix A**.

Table 2.2: Eastern Indigo Snake

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	*220442-7 (North Segment)*
BO	29	Yes	Yes
BO	30	Yes	Yes
BO	35	Yes	Yes
BO	36	Yes	Yes
BO	37	Yes	Yes
BO	67	Yes	Yes
BO	70	Yes	Yes
BO	71	Yes	Yes
EA	88	Yes	Yes

Time-Sensitive Commitments: (applies to both segments)

- In accordance with the USFWS *Standard Protection Measures for the Eastern Indigo Snake* (Commitment 67), FDOT must notify the USFWS at least **30 days prior to any clearing** / land alteration activities. This includes the cultural resource data recovery operations and utility relocation.
- Eglin will provide notification to FWS prior to Eglin tree harvesting. Eglin notification is anticipated in April 2015 with tree harvesting to begin in May 2015. FDOT will provide notification to FWS prior to FDOT construction (clearing and grubbing). FDOT notification was provided in December 2014 prior to start of archaeological data recovery and will be provided again in July 2015 prior to start of clearing and grubbing for the construction project.

2.3 Atlantic Sturgeon (Gulf Subspecies)

Atlantic Sturgeon (Gulf Subspecies) protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.3** and in **Appendix A**.

Table 2.3: Atlantic Sturgeon (Gulf Subspecies)

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	*220442-7 (North Segment)*
CE	2	No	Yes
BO	29	No	Yes
BO	30	No	Yes
BO	31	No	Yes
BO	32	No	Yes
BO	33	No	Yes
BO	34	No	Yes
BO	35	No	Yes
BO	36	No	Yes
BO	37	No	Yes
BO	38	No	Yes
BO	39	No	Yes
BO	40	No	Yes
BO	41	No	Yes
BO	42	No	Yes
BO	43	No	Yes
BO	44	No	Yes
BO	45	No	Yes
BO	46	No	Yes
BO	47	No	Yes
BO	48	No	Yes
BO	49	No	Yes
BO	50	No	Yes
BO	51	No	Yes
BO	52	No	Yes
BO	53	No	Yes
BO	54	No	Yes
BO	55	No	Yes
BO	56	No	Yes
BO	57	No	Yes
BO	58	No	Yes
BO	59	No	Yes

Table 2.3: Atlantic Sturgeon (Gulf Subspecies)			
Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
BO	60	No	Yes
BO	61	No	Yes
BO	72	No	Yes
BO	73	No	Yes
BO	74	No	Yes
BO	75	No	Yes
EA	86	No	Yes
EA	88	No	Yes
EA	91	No	Yes
EA	96	No	Yes
EA	99	No	Yes
EA	100	No	Yes

Time-Sensitive Commitments: (applies to north segment only 220442-7)

- Commitment 32 requires purchase of two Vemco VR2w receivers and ten tags for sturgeon. At the Eglin coordination meeting on May 6, 2014, concerning tags and receivers to be used for Gulf Sturgeon monitoring, Bill Tate (USFWS) stated that the best approach would likely be to have FDOT purchase the equipment and release it to USFWS rather than FDOT paying USFWS directly for the equipment. He also stated that USFWS had specifications and a preferred company that they use for this equipment and that they could provide this to FDOT, but warned that it can take up to three months after ordering to receive the equipment. He also stated that they do not anticipate any technological changes between now and tagging activities and that the tags typically have a battery life of 2-5 years. **USFWS would like to perform tagging in the summer/fall** as fish are easier to catch while in the Yellow River rather than the Gulf.

- **January 28, 2015 update:** FWS and FDOT agree that FDOT will purchase 20 tags and no receivers. FWS will note this change to the Biological Opinion and no formal amendment or modification will be required.

- Commitment 40 requires "Placement of bridge piles will match the existing bridge locations." Information communication from USFWS (December 9, 2014) clarified that a change in the alignment of the piles should not affect FWS analysis. This change was agreed at the January 28, 2015 coordination meeting with FWS and FDOT and Eglin.

- **Commitment 58 requires an underwater sound management plan to be submitted to and approved by USFWS prior to the letting date for construction (September 2015). Commitment 59 requires a pile test study prior to development of the sound management plan.** However,

this cannot be accomplished prior to the letting date of construction because a construction contractor will not be on board to accomplish the work. FDOT will provide a Sound Management Plan to FWS in April 2015 for FWS approval prior to letting of the -7 project (scheduled for September 2015). It is understood that the Sound Management Plan will be generic in scope and will not include test pile data because such data is not yet available prior to letting. A formal amendment to the BO is not required (commitments 58 and 59).

- **The FDOT goal is to have the approved plan included in the 4/23/15 FDOT package submittal to plans processing with a final date of July 27, 2015 for inclusion in the Letting package.**

- Informal communication from USFWS (December 9, 2014) clarified a sound management plan is needed prior to letting the contract. The purpose is to get real data on underwater sound since the BO is based on estimates from literature. It should identify how sound will be measured (probably from a subset of the test piles similar to the US 331 bridge) and provide potential mitigation measures should those levels exceed the threshold for physical harm to sturgeon. Keeping levels below the physical injury threshold was one of the requirements of the BO (RPM 2.1). If levels can't be kept below the threshold, FDOT will need to reinitiate formal consultation and reassess the potential for take. The plan doesn't need to be extensive - just a plan of action to assess and mitigate sound as needed. The plan should specify the noise level that's allowed, the name of the bents involved, and what type of noise reducing device is acceptable. The FDOT/CEI will take noise readings while installing test piles at Bents x, y, z, and if levels exceed XX, then the contractor will install noise reducing devices.

- Informal communication from the USFWS (February 3, 2015) clarified the following:

    - The test study is primarily for data collection, but also for determining mitigation. The BO is based on an assumption that sound levels don't reach the threshold for physical injury. The test study will gather actual data based on test piles. If sound levels exceed the injury threshold, the sound mitigation measures (such as bubble curtains) would be needed. The results of the test study are to be communicated to FWS.

    - The Sound Management Plan will outline expectations for the test pile study data gathering. If sound levels are below the injury threshold, no further actions are required. If sound levels exceed the injury threshold, then sound mitigation measures will be implemented (such as bubble curtains, turbidity curtains, etc). Sound mitigation generally drops levels by ~16 dB cSEL (based on the US 331 BO). If sound levels still exceed the injury threshold with sound attenuation measures, then further coordination is needed with the USFWS. USFWS would determine if there is a need to amend the BO to take into account greater than expected sound levels.

- Commitment 2 prohibits construction in Yellow River March – May. Commitment 2 has been updated and replaced by Commitments 47 and 48 which prohibit pile installation in both March – April and September – October. Commitment 48 prohibits nighttime pile installation from March – November.

- Commitments 55 and 61 require a post-construction sturgeon report (within 60 days of completion of construction).

- Commitment 28 requires a post-construction field review to determine stream restoration requirements.

- If construction letting does not occur within five years of the Biological Opinion (which was approved April 2013), Section 7 consultation must be re-initiated.

- Information communication from USFWS (December 9, 2014) clarified FWS review of erosion control plan is required for only the -7 project. FWS review is independent of what is done by wetland dredge-and-fill state and federal permitting agencies (such as USACE).

2.4 Bald Eagle

Bald Eagle protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.4** and in **Appendix A**.

Table 2.4: Bald Eagle

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	*220442-7 (North Segment)*
BO	30	Yes	Yes
BO	35	Yes	Yes
BO	36	Yes	Yes
BO	37	Yes	Yes
BO	62	Yes	Yes
BO	63	Yes	Yes
BO	64	Yes	Yes
BO	65	Yes	Yes
BO	66	Yes	Yes
EA	88	Yes	Yes

Time-Sensitive Commitments:

- Commitment 62 requires a bald eagle survey in the final design and permitting phases of the project. This commitment will be incorporated with the RCW survey prior to selective tree harvesting.

2.5 Gopher Tortoise

Gopher Tortoise protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.5** and in **Appendix A**.

Table 2.5: Gopher Tortoise

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	*220442-7 (North Segment)*
BO	30	Yes	Yes
BO	35	Yes	Yes
BO	36	Yes	Yes
BO	37	Yes	Yes
BO	68	Yes	Yes
BO	69	Yes	Yes
BO	70	Yes	Yes
EA	88	Yes	Yes
EA	89	Yes	Yes

Time-Sensitive Commitments: (applies to both segments)

- Per coordination with Eglin Natural Resources (May 6, 2014), the selective timber removal is a silvicultural operation which does not require a gopher tortoise survey to be completed in advance. However, FDOT will perform the survey as a best management practice prior to the selective timber removal because the anticipated ground disturbance could be extensive and any gopher tortoise burrows would likely be destroyed if present. The gopher tortoise survey must be completed **within 30 days of any other grubbing or land clearing** which disturb the ground (Commitment 68). This includes the cultural resource data recovery operations and utility relocation. Identified gopher tortoise will require removal under FWC permit (which may require more than 30 days to complete).

2.6 Black Bear

Black Bear protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.6** and in **Appendix A**.

Table 2.6: Black Bear

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	***220442-7 (North Segment)***
CE	4	Yes	Yes
BO	30	Yes	Yes
BO	35	Yes	Yes
BO	36	Yes	Yes
BO	37	Yes	Yes
BO	84	Yes	Yes
EA	88	Yes	Yes
EA	90	Yes	Yes

Time-Sensitive Commitments: (applies to both segments)

- Commitment 4 requires FDOT to coordinate with Eglin **prior to construction** to review methods to avoid, minimize, or mitigate impacts to the black bear. This coordination was completed at the FDOT / Eglin coordination meeting on January 28, 2015 as summarized below.

- FDOT determined December 10, 2014 that the bear crossing should be 8x6 box culvert with six inches buried to provide an opening of 7.5 feet high x 6 feet wide with six inches of soil cover on the bottom (no light windows). This decision was reached after reviewing the Eglin EA which recommended 4x6 and considering FWC comments (April 2010) recommending a higher vertical head clearance (7 – 8 feet). This was communicated to Eglin at the coordination meeting on January 28, 2015.

2.7 Freshwater Mussels

Freshwater Mussel protection and monitoring, and habitat protection and monitoring procedures to minimize impacts from construction activities shall be implemented as identified in **Table 2.7** and in **Appendix A**.

Table 2.7: Freshwater Mussels

Source Document	*Commitment Number*	*Applicable Project*	
		220442-4 (South Segment)	***220442-7 (North Segment)***
BO	27	No	Yes
BO	72	No	Yes
BO	73	No	Yes
BO	74	No	Yes
BO	75	No	Yes

Time-Sensitive Commitments: (applies to north segment only)

- **Commitment 27 requires an erosion and sediment control plan to be approved by USFWS prior to construction of the -7 project (January 2016).** (Note: although the sediment control plan was required by the BO for specifically for sturgeon protection, the plan will also benefit freshwater mussel.)
- Information communication from USFWS (December 9, 2014) clarified FWS review of erosion control plan is required for only the -7 project. FWS review is independent of what is done by wetland dredge-and-fill state and federal permitting agencies (such as USACE).
- Protection for freshwater mussels will be achieved through FWS approval of a sediment control plan for the -7 project. No FWS review/approval is needed for the -4 project as agreed at January 28, 2015 coordination meeting.

3.0 WETLAND AND WATER RESOURCES

Responsible Organization: FDOT
Collateral Organization of Responsibility: FDEP, USACE, USFWS, and 96 CEG/CEVCE

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Chris Metcalf, USFWS Panama City Field Office, (850) 769-0552, chris_metcalf@fws.gov
- Mr. Russell Brown, 96 CEG/CEVC, (850) 882-7660, russell.brown@eglin.af.mil

Table 3.1: Wetlands and Water Resources

Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
CE	5	Yes	Yes
BO	33	No	Yes
BO	34	No	Yes
BO	39	No	Yes
BO	40	No	Yes
BO	41	No	Yes
BO	42	No	Yes
BO	43	No	Yes
BO	44	No	Yes
BO	45	No	Yes
BO	46	No	Yes
BO	72	No	Yes
BO	73	No	Yes
BO	74	No	Yes
BO	75	No	Yes
EA	86	Yes	Yes
EA	87	Yes	Yes
EA	88	Yes	Yes

Summary Status of Action/Timeline Completion: The FDOT will incorporate the above wetland and water resource mitigations into each segment's construction plans and specifications. Implementation, monitoring, and reporting of these mitigations by FDOT, with verification by USFWS and Eglin NRS, will be conducted.

Time-Sensitive Commitments:

- See Section 5.0.

4.0 AIR QUALITY RESOURCES

Responsible Organization: FDOT
Collateral Organization of Responsibility: Eglin NRS or 96 CEG/CEVC

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Jeremy Preston, Eglin NRS, (850) 883-1153, jeremy.preston@eglin.af.mil
- Mr. Harry Fortenberry (Air Quality Program Manager), 96 CEG/CEVC, (850) 882-7677, harry.fortenberry@eglin.af.mil

Table 4.1: Air Quality			
Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
EA	85	Yes	Yes

Summary Status of Action/Timeline Completion: The FDOT will incorporate the above air quality mitigations into each segment's construction specifications. Implementation and monitoring by the contractor will be required throughout construction of this project. Any burning plan by the contractor will need coordination and approval by the State Department of Forestry and Eglin NRS - Forestry Unit at (850) 883-1153.

As discussed at the Eglin coordination meeting (May 6, 2014), pile burning activities on Eglin AFB require the use of an air curtain incinerator due to proximity to airfields.

Time-Sensitive Commitments:

- None.

5.0 SOILS AND EROSION

Responsible Organization: FDOT
Collateral Organization of Responsibility: Eglin NRS or 96 CEG/CEVC

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Jeremy Preston, Eglin NRS, (850) 883-1153, jeremy.preston@eglin.af.mil
- Mr. Russell Brown, 96 CEG/CEVC, (850) 882-7660, russell.brown@eglin.af.mil
- Mr. Sandy Pizzolato, Eglin Forestry, (850) 883-1190, william.pizzolato@eglin.af.mil

Table 5.1: Soils and Erosion

Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
BO	27	No	Yes
BO	28	No	Yes
EA	86	Yes	Yes
EA	87	Yes	Yes
EA	88	Yes	Yes
EA	96	Yes	Yes
EA	99	Yes	Yes
EA	100	Yes	Yes

Summary Status of Action/Timeline Completion: The FDOT will incorporate the above soil and erosion mitigations into each segment's construction plans and specifications. Implementation, monitoring, and reporting of these mitigations by FDOT, with verification by FDEP, USFWS, and Eglin NRS, will be required prior to, throughout (monthly pursuant to NPDES Permit), and after construction, for the time period specified, as mentioned above and in the permits.

Time-Sensitive Commitments:

- **Commitment 27 requires an erosion and sediment control / revegetation plan to be approved by USFWS prior to construction of the -7 project (January 2016).**

- **If the contractor changes the plan, FDOT will have to send the new plan to FWS after the construction contract is in place (after January 2016)6.**

6.0 CULTURAL RESOURCES

Responsible Organization: FDOT
Collateral Organization of Responsibility: 96 CEG/CEIEA

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Ms. Lynn Shreve, 96 CEG/CEIEA, (850) 883-2102, rhena.shreve.1@us.af.mil
- Dr. Betsy Carlson, SEARCH (for FDOT), (352) 333-0049, betsy@searchinc.com
- Mr. Daniel McClarnon, FL Department of State, Division of Historical Resources (for SHPO), (850) 245-6372, Daniel.McClarnon@dos.myforida.com

Table 6.1: Cultural Resources

Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
MOA	8	No	Yes
MOA	9	No	Yes
MOA	10	No	Yes
MOA	11	No	Yes
MOA	12	No	Yes
MOA	13	No	Yes
MOA	14	No	Yes
MOA	15	No	Yes
MOA	16	No	Yes
BO	36	Yes	Yes
EA	92	No	Yes
EA	93	No	Yes
EA	94	No	Yes
EA	95	No	Yes

Summary Status of Action/Timeline Completion: The FDOT will coordinate with 96 CEG/CEIEA on any design changes and associated cultural resource reports.

FDOT has contracted with SEARCH to perform the archaeological data recovery for the Broxson Resource Group. Key milestones in that task include:

- November 2014: Kickoff meeting with Eglin staff and initiation of Eglin AF 103 permit
- December 2014: Research and interviews
- January 2015 – April 2015: Field work (site preparation and clearing surface documentation, ground-penetrating radar and metal detector surveys, site excavation).
- May 2015: Executive summary of field work results
- November 2015: Draft report to FHWA, FDOT, Eglin, SHPO.
- December 2015: Final report
- January 2016: Delivery of curated artifacts to Eglin AFB.

Time-Sensitive Commitments:

- Commitment 14: The existing MOA **expires December 31, 2015** and requires extension.
- Commitments 10 and 92 require archaeological data recovery **prior to construction**.
- Commitments 10, 15 and 92 reference the need to for FDOT to install fencing of archaeological sites. Construction project plans will note fencing to be installed. Fencing will be completed by the construction contractor for the -7 project and will begin in January 2016.
- Commitment 10 requires Eglin and SHPO concurrence with Management Summary that the treatment outlined in the Data Recovery Plan has been successfully completed **prior to any ground disturbing activities.** Data recovery fieldwork on the Broxson Resource Group will be finished by the end of April 2015. Advance tree harvesting on the -7 project could presumably start as early as May 2015.

7.0 HAZARDOUS MATERIALS / HEALTH & SAFETY

Responsible Organization: FDOT
Collateral Organization of Responsibility: 96 CEG/CEVR and 96 Test Wing (TW), Weapons/ Explosive Ordnance Disposal (EOD) Safety

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Leon Johnson, CEG/CEVR, (850) 883-3041, leon.johnson@eglin.af.mil
- Mr. Mitch Bolin, Weapons/EOD Safety, (850) 882-8234 ; 96 TW/SEW, (850) 882-8234 or (850) 882-5204, mitchell.bolin@eglin.af.mil

Table 7.1: Hazardous Materials / Health & Safety

Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
CE	3	Yes	Yes
CE	6	No	Yes
CE	7	Yes	No
EA	97	Yes	Yes

Summary Status of Action/Timeline Completion: Implementation and monitoring of these mitigations by FDOT will be required for the duration of construction.

Time-Sensitive Commitments:

- None.

8.0 UTILITIES / TRANSPORTATION

Responsible Organization: FDOT
Collateral Organization of Responsibility: 96 CEG/CEAR

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Glenn Wagner, CEG/CEAR, (850) 882-4344, glenn.wagner@eglin.af.mil

Table 8.1: Utilities / Transportation			
Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
EA	98	Yes	Yes

Status of Action/Timeline Completion: The FDOT will incorporate the above utilities/transportation mitigations into each segment's construction plans and specifications. Implementation and coordination of these mitigations between FDOT and 96 CEG/CEAR will be required for the duration of construction.

Time-Sensitive Commitments:

- None.

9.0 TRAILS / RECREATION

Responsible Organization: FDOT
Collateral Organization of Responsibility: Eglin Natural Resources

Contact Information**:**

- Ms. Joy Swanson, FDOT District 3, (850) 330-1505, joy.swanson@dot.state.fl.us
- Mr. Dominic Richard, FDOT District 3 Construction Project Manager, (850) 981-2803, Dominic.Richard@dot.state.fl.us
- Mr. Justin Johnson, Eglin Natural Resources, (850) 883-1152; justin.johnson@eglin.af.mil

Table 9.1: Trails / Recreation

Source Document	***Commitment Number***	***Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
Reeval	17	No	Yes
Reeval	18	No	Yes
Reeval	19	No	Yes
Reeval	20	No	Yes
Reeval	21	Yes	Yes
Reeval	22	Yes	Yes
Reeval	23	Yes	Yes
Reeval	24	Yes	Yes
Reeval	25	No	Yes
Reeval	26	Yes	No

Status of Action/Timeline Completion: The FDOT will incorporate the above utilities/transportation mitigations into each segment's construction plans and specifications. Implementation and coordination of these mitigations between FDOT and Eglin Natural Resources will be required for the duration of construction.

Time-Sensitive Commitments:

- Commitments 20/24: **Prior to construction**, FDOT to provide construction schedule to U.S. Forest Service (USFS) and coordinate hiking and paddling trail notifications with USFS and Florida Department of Environmental Protection Office of Greenways and Trails.

10.0 PROJECT SCHEDULES AND KEY MITIGATION MILESTONES

Table **10.1** summarizes key events in the construction timelines for each project. **Table 10.2** summarizes key milestones in meeting the mitigation commitments.

Table 10.1: Construction Project Schedules		
Project Milestone	***Applicable Project***	
	220442-4 (South Segment)	***220442-7 (North Segment)***
Construction, Engineering, and Inspection (CEI) Selection by FDOT	March 2015	August 2015
Construction Authorization	March 2015	August 2015
Letting	April 2015	September 2015
CEI Contract Executed	May 2015	November 2015
Construction	**August 2015**	**January 2016**

Table 10.2: Key Mitigation Milestones			
Commitment Number(s)	***Commitment Milestone***	***Target Commitment Completion Date for Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
10/15/92	FDOT initiation of data recovery for Broxson Resource Group	N/A	November 2014
67	Notification to FWS of ground disturbing activities for cultural resources data recovery field work to begin January 2015	N/A	December 2014
10/15/92	archaeological data recovery initiated	N/A	January 2015
10/15/92	Fencing of archaeological sites	N/A	January 2016
32	FDOT procurement of sturgeon tags	N/A	March 2015
32	Eglin/USFWS sturgeon tagging	N/A	Summer 2015
1	FDOT to provide shape file to Eglin Forestry for area to be cleared and notification of archaeological sites to be protected.	February 2015	
27	Erosion and sediment control plan submitted to USFWS (-7 only)	N/A	July 2015
27	USFWS required approval of erosion and sediment control plan for -7 project. Contractor/CEI submits the NPDES plan after construction is let.	N/A	August 2015
67	Eastern Indigo Snake notification by Eglin to USFWS prior to tree harvesting	April 2015	
1	FDOT RCW survey prior to Eglin tree harvesting	April 2015	

Table 10.2: Key Mitigation Milestones			
Commitment Number(s)	***Commitment Milestone***	***Target Commitment Completion Date for Applicable Project***	
		220442-4 (South Segment)	***220442-7 (North Segment)***
	(for coordination with Eglin, FWC, FWS)		
62	FDOT Eagle survey prior to Eglin tree harvesting (for coordination with Eglin, FWC, FWS)	April 2015	
68	FDOT Gopher tortoise survey one month prior to Eglin tree harvesting. FWC relocation permit may be required.	April 2015	
--	**Pre-Construction Tree Harvesting by Eglin (excluding archaeological sites)**	**May 2015**	
58	Underwater Sound Management Plan submitted to USFWS	N/A	March 2015
58	Underwater Sound Management Plan approved by USFWS	N/A	April 2015
10/15/92	Eglin / SHPO certification of completion of archaeological data recovery.	N/A	January 2016
20/24	FDOT provides notification and construction schedules to US Forest Service (-4 and -7)	May 2015	November 2015
20/24	FDOT provides notification and construction schedules to Florida Department of Greenways and Trails (-7).	November 2015	
67	Eastern Indigo Snake notification to USFWS by FDOT prior to construction	July 2015	December 2015
68	FDOT Gopher tortoise survey one month prior to construction. FWC relocation permit required if gopher tortoise burrows found.	July 2015	December 2015
14	Extend cultural resources MOA with Eglin, FHWA, and SHPO	N/A	December 2015
--	**Pre-Construction Briefing**	**July 2015**	**December 2015**
--	**FDOT Construction**	**August 2015**	**January 2016**
59	Pile driving plan submitted to FWS	N/A	February 2016
59	Pile driving plan approved by FWS	N/A	March 2016
59	Post data collection and final report	N/A	To be determined
28	Post-construction field review to determine Yellow River restoration requirements	N/A	To be determined
--	Re-initiate Section 7 consultation	N/A	If construction is not let by April 2018

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APPENDIX A: COMMITMENTS

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[1]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[2] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
CE	1	*The FDOT will conduct additional foraging habitat surveys for the red-cockaded woodpecker prior to construction to determine the status of active clusters in the vicinity of Buck Pond. The results of this survey will be coordinated with the USFWS. If the new foraging habitat surveys show adverse impacts to the red-cockaded woodpecker (RCW) then appropriate action will be taken by the FDOT to mitigate these impacts.*	1A	**Commitment 1 has been updated and replaced by Commitments 76 – 83 as a result of the Biological Opinion.**	FDOT	--	--	FDOT	--	--	In the Biological Opinion issued April 10, 2013, the USFWS concurred with the determination that the road and bridge construction May Affect, but are Not Likely to Adversely Affect RCW (FWS Log No. 2013-F-0033). New commitments for the RCW were added by USFWS in the Biological Opinion and are reflected in this reevaluation document as **Commitments 76 – 83. The new commitments replace commitment #1.**
CE	2	*The FDOT will cease construction in the Yellow River during the months of March through May, thus avoiding the potential for impacts to the Gulf Sturgeon which uses these waters during the spawning season.*	2A	**Commitment #2 has been updated and <u>replaced</u> by Commitments 27 – 61 as a result of the Biological Opinion.**	--	--	--	FDOT	CEI	--	In the Biological Opinion issued April 10, 2013 (FWS Log No. 2013-F-0033), the USFWS defined Conservation Measures, and Terms and Conditions as non-discretionary actions to be fulfilled to minimize impact to the Gulf Sturgeon and to comply with conditions of the Incidental Take permit. **The Conservation Measures and Terms and Conditions are re-printed below as new Commitments 27 – 61. The new commitments replace commitment #2.**
CE	3	*The FDOT is committed to the construction of feasible noise abatement measures at the noise-impacted locations identified in the Noise Study Report (B9, B12, B13 and B18) contingent upon the following conditions.*	3A	Noise study report has been completed and approved. complete 12/20/13. No noise walls needed. **Complete**.	FDOT	--	--	FDOT	--	--	**Complete.** An updated noise study report was approved by FDOT (December 2013) for projects 220442-4/7. None of the noise sensitive receptors approach or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC). Of the 11 individual noise sensitive receptors found to exist along the project corridor, none were found to approach, exceed, or substantially exceed the FHWA NAC as a result of the 2037 Build Alternative. The change in relative noise levels directly attributable to the 2037 Build Alternative varies from 4.4 to 8.2 dB(A) greater than the noise levels predicted for the existing year (2012) alternative. Noise impacts are not predicted to occur as a result of the proposed project; therefore no noise abatement measures were evaluated.

[1] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[2] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[1]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[2] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
CE	4	*A study is presently ongoing by the Eglin Natural Resources Section and the University of Tennessee to learn more about the black bear population, movements, characteristics, etc. on the Eglin AFB property. Prior to construction, the FDOT will review the results of this study. If appropriate, the FDOT will consider methods to avoid, minimize, or mitigate potential impacts to the black bear.*	4A	FDOT implementation discussed with Eglin at January 28, 2015 coordination meeting.	FDOT	--	--	FDOT	--	--	In consultation with Eglin Natural Resources, it was determined that two highway underpasses (wildlife crossings) and continuous fencing erected along the proposed roadway will be sufficient to decrease the potential for roadway mortality and facilitate safe bear migration through the SR 87 corridor. Additionally, permanent signage will be placed in the corridor to warn motorists of potential species crossing the roadway to help further decrease the chance for roadway mortality. One crossing will be the open corridor beneath the bridges at the northern extent of Eglin AFB property. The second crossing will be situated approximately 3.2 miles south of the northern Eglin boundary in the proximity of an unnamed tributary of Weaver Creek. **FDOT will provide 8' x 6' box culvert with six inches buried to provide opening of 7.5 feet high x 6 feet wide with six inches of soil cover on bottom.** The crossings will reduce environmental impacts and enhance highway safety.
			4B	FDOT implementation discussed with Eglin at January 28, 2015 coordination meeting.	FDOT	--	--	FDOT	--	--	
CE	5	*FS 373.4137 provides a vehicle for the FDOT to allow the FDEP to implement mitigation design and construction for a fixed fee. The FDOT is committed to paying the FDEP a fixed fee established by F.S. 373.4137 based on the quantity of wetland impacted.*	5A	Re-survey wetlands. Completed September 2014 by HDR under contract to HMM as part of the Plans Update task.	FDOT	--	--	FDOT	--	--	FDOT will mitigate wetland impacts pursuant to F.S. 373.4137. Mitigation is planned to be accomplished at the Northwest Florida Water Management District 275-acre Yellow River Ranch, which was acquired for FDOT wetland mitigation. The mitigation represents type- for-type forested wetlands replacement, has similar wildlife habitat value, and is in the same riverine drainage basin.
			5B	Update FDEP ERP permit. To be incorporated into Plans Update.	FDOT	--	--	FDOT	--	--	
CE	6	*The FDOT will improve the substandard horizontal geometry of the two existing curves just south of the Yellow River by modifying the existing alignment as shown in the conceptual plans. In developing this alignment, the consultant has taken into consideration the alignment of the roadway required at the Yellow River Bridges (both existing and proposed), the minimization of impacts to the wetlands adjacent to the Yellow River, the minimization of impacts to RCW habitat in the area, the minimization of encroachment on Buck Pond (a fishing spot within the Eglin AFB Reservation), the minimization of the earthwork that will be required and the application of appropriate design criteria developed for the roadway.*	6A	To be incorporated into Plans Update and signed off by FDOT design PM.	--	--	--	FDOT	--	--	The radius for both horizontal curves just south of the Yellow River have been increased in order to improve the substandard horizontal geometry of the existing roadway in this area. The following factors dictated the proposed alignment: minimization of impacts to the wetlands adjacent to the Yellow River, to the RCW habitat, encroachment on Buck Pond, in the earthwork and the application of appropriate design criteria.
CE	7	*The FDOT will improve the substandard vertical geometry of the successive vertical curves just north of the entrance road to Choctaw OLF. The existing curves will be replaced with one long smooth curve that attempts to balance the cut and fill and will provide safe stopping sight distance along its length.*	7A	To be incorporated into Plans Update and signed off by FDOT design PM.	FDOT	--	--	--	--	--	The two existing vertical curves just north of the entrance road to Choctaw Outlying Field have been replaced in the proposed design with larger and smoother vertical curves that attempt to balance the cut and fill and provide a safe stopping sight distance.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[1]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[2] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
MOA	8	*The project will be constructed by FDOT within the right-of-way (ROW) according to plans entitled State of Florida Department of Transportation Contract Plans, Financial Project IDs 220442-4-52-01 and 220442-7-52-01, Santa Rosa County (58040) State Road 87 (hereafter referred to as the Plans) (An excerpt of the areas adjacent to the BRG is provided in Appendix C). If alterations are necessary during the Project design phase to achieve the Project's purpose, FDOT will notify Eglin AFB. All design changes require review by the SHPO and consultation between the signatory parties to identify and resolve potential effects prior to ground disturbing activities. The FDOT will install barrier fencing of a type approved by Eglin AFB to mark the physical limits of the ROW within the area of cultural concern where the APE encompasses the BRG (8SR2145) and parts of two contributing sites extend into the ROW (as depicted in Appendix B). The precise limits for fencing the ROW on the west side of the road are between Station 1765+35 Lt. and Station 1782+75 Lt. and on the east between Station 1765+35 Lt. and Station 1792 Lt.[3] where bridge construction extends within the resource group boundaries on Eglin AFB property to the Yellow River (see ROW fencing marked on map of the BRG [8SR2145] in Appendix D).*	8A	Verify fencing on project plans. Verify fencing installed in the field. If changes have occurred, prepare and coordinate design change memo for Eglin and SHPO concurrence. Design change memo to be prepared for SHPO and Eglin review as part of Plans Update. Also covers 13A.	--	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated at the Plans Update phase to ensure conformance with the fencing requirements. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. There is an error in the MOA. The stationing should read: "… and on the east between Station 1765+35 Rt. and Station 1792 Rt." This error will be corrected when the MOA is extended.
MOA	9	*Without disclosing the presence of historic properties, the FDOT will further ensure protection from inadvertent impact in the area of cultural concern by labeling "No staging, storage, parking or disturbance of any kind allowed in areas outside of ROW" on construction plans and other drawings included in all requests for proposals (RFPs) issued by the FDOT in conjunction with the Project. Also without disclosing cultural sensitivity, RFPs will include language regarding no ground disturbance within the ROW pertinent to mitigation measures in Stipulation II. Compliance with Stipulations I and II will be a requirement of all contracts awarded for the Project and all responses to the RFPs must acknowledge understanding of the stipulations in the quality assurance/quality control (QA/QC) program, clearly outlining measures to be followed in the event of violation by members of their team (prime and subcontractors).*	9A	Prepare Eglin plans review memo. Prepare Eglin review memo to be incorporated into Plans Update.	--	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated at the Plans Update phase to ensure conformance with the fencing requirements. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events needed to be tracked will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

[3] There is an error in the MOA. Should be "Rt" for stationing on the east side: ". . . *and on the east between Station 1765+35 Rt. and Station 1792 Rt."* This will be a global change throughout and not footnoted for each occurrence. To be corrected with updated MOA.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[4]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[5] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
MOA	10	*Portions of two contributing sites (8SR1726 and 8SR1728) in the BRG (8SR2145) threatened with adverse effect from ground disturbance activities on the east side of the road within the ROW between Station 1765+35 Lt. and Station 1792 Lt. will be mitigated through data recovery (see Data Recovery Plans [DRP] in the Treatment Document in Appendix E). No initial preparation (cleaning and grubbing), earth moving, and/or ground disturbance of any kind will take place within the ROW on the east side of the road between Station 1765+35 Lt. to Station 1792 Lt. until completion of data recovery and notification by Eglin AFB of SHPO concurrence with the Management Summary that treatment outlined in the DRPs has been successfully completed.*	10A	Archaeologist to carry out Data Recovery Plan. To be completed by SEARCH contract under DEMO.	--	--	--	FDOT	--	--	FDOT has contracted with SEARCH to perform the archaeological data recovery for the Broxson Resource Group. Kickoff meeting with Eglin staff and initiation of Eglin AF 103 permit initiated November 2014. Dig Permit AF103 issued to SEARCH 19 Dec 2014 (work order 81114).
			10B	Eglin approval that Data Recovery Plan is complete. To be completed by SEARCH contract under DEMO.	--	--	--	FDOT	--	--	
MOA	11	*Eglin AFB has established the boundary of the BRG (8SR2145) on the basis of Phase I (Cultural Resources Survey) and Phase II (Test and Evaluation) investigations, which together have sampled only a small percentage of each contributing property. Therefore, the presence of associated cultural remains outside the site areas scheduled for data recovery, but within the Project ROW, cannot be ruled out on either side of SR 87. To avoid inadvertent impact of such remains, the FDOT will task a professional archaeologist to monitor all ground disturbance activities on the west side of the existing road between Station 1765+35 Lt. and Station 1782+75 Lt. and on the east side between Station 1765+35 Lt. and Station 1792 Lt.[6] If cultural remains are encountered, the FDOT will follow procedures set forth in cultural resource assessment survey documentation and corresponding letters, and consistent with procedures for unexpected discoveries established by Eglin AFB (see summary in Appendix F). The qualifications of key personnel in charge of tasks related to mitigative data recovery and archaeological monitoring will meet or exceed the Secretary of the Interior's Standards and Guidelines for Archaeology as described in 36 CFR Part 61, Appendix A.*	11A	FDOT will task a professional archaeologist to monitor all ground disturbance activities on the west side of the existing road between Station 1765+35 Lt. and Station 1782+75 Lt. and on the east side between Station 1765+35 Rt. and Station 1792 Rt. To be completed by SEARCH contract under DEMO.	--	--	--	--	FDOT	--	FDOT District 3 Environmental Management Office holds a contract with a consultant (independent of the construction contractor) who will be tasked with archaeological monitoring. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system. Dig Permit AF103 issued to SEARCH 19 Dec 2014 (work order 81114).
			11B	If cultural remains are encountered, the FDOT will follow procedures for unexpected discoveries in coordination with Eglin. To be determined if new discoveries are made during construction. Will require separate scope and task.	--	--	--	--	FDOT	--	

[4] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[5] Brown shaded cells indicate commitment applies during project phase.

[6] There is an error in the MOA. Should be "Rt" for stationing on the east side: ". . . *and on the east between Station 1765+35 Rt. and Station 1792 Rt."*

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[7]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase***[8] ***and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
MOA	12	*Unless otherwise agreed, Eglin AFB, the FHWA, and the SHPO will have a review period of thirty (30) work days for commenting on all documents, plans, and specifications under the terms of this MOA; the Advisory Council on Historic Preservation (ACHP) will be consulted only in the event of a dispute between the reviewing agencies who are signatories to this document.*	12	MOA complete.	--	--	--	FDOT	--	--	The MOA was approved by SHPO on 01/14/14; FHWA on 01/21/14; Eglin on 03/05/14; and concurred by FDOT on 04/10/14. 36 CFR 800.6(b)(1)(iv) states: "The agency official must submit a copy of the executed memorandum of agreement, along with the documentation . . .to the Council [Advisory Council on Historic Preservation (ACHP)] prior to approving the undertaking in order to meet the requirements of section 106 and this subpart." Notification to the ACHP was made by Eglin AFB.
MOA	13	*Any signatory to this agreement may request that the agreement be amended, whereupon the other parties will have thirty (30) work days for consultation to consider such amendment. If consensus among the signatories is not reached, the ACHP will be consulted per Stipulation III A.* ***Any changes to the ROW resulting from project redesign will require an amendment to this MOA showing the new design in relation to historic properties.*** *No ground disturbing activities associated with the redesign will be authorized by Eglin AFB until an amended MOA is executed and signed.*	13A	Prepare and coordinate design change memo for Eglin. Included with Task 8A. Prepare design change memo for Eglin. **Included with Task 8A.**	--	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in a Plans Update phase. However, no R/W (easement) changes are anticipated as a result of the plans update phase.
			13B	If there are r/w changes, MOA to be revised under separate scope and task. If there are r/w changes, MOA to be revised under separate scope and task.	--	--	--	FDOT	--	--	
MOA	14	*The terms of this MOA are valid through* ***December 31, 2015*** *or completion of all phases of the Project,* ***whichever comes first,*** *unless otherwise agreed to by the signatories to the MOA*	14A	Extend MOA for FDOT approval	--	--	--	FDOT	--	--	Eglin Cultural Resources was notified by FDOT on May 6, 2014 that an extension will be needed. FDOT will process an extension. Eglin Cultural Resources envisions the MOA amendment as a short one-page update.
			14B	Extend MOA for Eglin approval	--	--	--	FDOT	--	--	
			14C	Extend MOA for SHPO approval	--	--	--	FDOT	--	--	
			14D	Extend MOA for FHWA approval	--	--	--	FDOT	--	--	

[7] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[8] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[7]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase***[8] ***and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
MOA	15	*All artifacts recovered and records produced during archaeological data recovery, monitoring, and any associated archaeological investigation within the APE conducted pursuant to this agreement will be deliverables, prepared and submitted as outlined in Eglin AFB's Curation Standards (included as an attachment in the Treatment Document DRPs in Appendix E). All deliverables will be housed in the Eglin AFB on-base curation facility, which meets criteria for permanent storage of federal collections listed in 36 CFR Part 79.9.*	15A	Complete Data Recovery Plan to Eglin's satisfaction. To be completed by SEARCH contract under DEMO.	--	--	--	FDOT	--	--	FDOT holds a contract with a consultant (independent of the construction contractor) who will be tasked with overseeing the curation consistent with the terms of the MOA.
MOA	16	*Future ground disturbing activities within the BRG (8SR2145) on the west side of SR 87 between Station 1765+35 Lt. and Station 1782+75 Lt. and on the east side between Station 1765+35 Lt. and Station 1792 Lt.*[9] *will require coordination with Eglin AFB through the AF Form 813 (Dig Permit) process.*	**16A**	The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities.	**--**	--	--	FDOT	CEI	--	The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify conformance and completion of the Data Recovery Plan. **Dig Permit AF103 issued to SEARCH 19 Dec 2014 (work order 81114).**
REEVAL	17	*The Yellow River is a state designated Paddling Trail. FDOT will require the contractor to maintain boat traffic on the Yellow River during construction of the project except when very brief temporary closings are necessary for safety reasons due to certain construction/demolition activities.*	17A	FDOT to incorporate into permit memo.	--	--	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment for the project to maintain boat traffic access except as necessary for safety reasons. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
REEVAL	18	*During construction, signs will be strategically posted along the Yellow River Paddling Trail and at canoe launch areas alerting paddlers of the construction activity.*	18A	FDOT to incorporate into permit memo.	--	--	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.

[9] There is an error in the MOA. Should be "Rt" for stationing on the east side: ". . . *and on the east between Station 1765+35 Rt. and Station 1792 Rt."*

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[7]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[8] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
REEVAL	19	*The Contractor/CEI Consultant will develop Informational brochures that provide Paddling Trail users with pertinent information concerning the construction project. The brochures shall be made available at boating outfitters in the area and/or posted at boat landings along the Yellow River (downstream and upstream). FDOT's District 3 Environmental Management Office (DEMO) and Public Information Office (PIO) shall review and approve the brochures prior to printing and distribution.*	19A	Construction contractor to prepare for FDOT DEMO and PIO review.	--	--	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. FDOT DEMO will be responsible for reviewing the brochures in conjunction with the FDOT PIO.
REEVAL	20	*The FDEP, Office of Greenways and Trails, will be notified prior to construction so that they may post pertinent project schedule and impacts information on their website.*	20A	Construction contractor to prepare for FDOT DEMO and PIO review.	--	--	--	FDOT	FDOT	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. FDOT DEMO will be responsible for completing the notifications to FDEP. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
REEVAL	21	*The Florida National Scenic Trail (FNST) is a federally-designated non-motorized recreation trail for hiking. The U.S. Forest Service is designated as the administrator of the FNST. FDOT will require the contractor to maintain hiking use and access of the FNST during construction of the project.*	21A	FDOT to incorporate into permit memo.	--	CEI	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
REEVAL	22	*During construction, the Contractor/CEI will strategically post signs along the FNST alerting hikers of the construction activity.*	22A	FDOT to incorporate into permit memo. Construction contractor to prepare for FDOT DEMO and PIO review	--	CEI	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
REEVAL	23	*The Contractor/CEI Consultant will develop Informational brochures that provide FNST users with pertinent information concerning the construction project. The brochures shall be made available at hiking outfitters in the area and/or posted at trail heads along the FNST in the Eglin vicinity. FDOT's District 3 Environmental Management Office (DEMO) and Public Information Office (PIO) shall review and approve the brochures prior to printing and distribution.*	23A	Construction contractor to prepare for FDOT DEMO and PIO review.	CEI/FDOT	--	--	CEI/FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. FDOT DEMO will be responsible for reviewing the notification signs in conjunction with the FDOT PIO. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[7]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[8] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
REEVAL	24	*Prior to Construction the Contractor/CEI will provide the USFS with pertinent project schedule and impacts information so that the USFS may post this information on their website.*	24A	Construction contractor to prepare for FDOT DEMO and PIO review.	FDOT	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. FDOT DEMO will be responsible for completing the notifications to FDEP. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
REEVAL	25	*The Department has revisited the concept of a protected pedestrian feature in association with the new bridge and has determined it to be feasible. The redesign of the proposed bridge to include the pedestrian feature will occur over the next year during the Plans Update Phase.*	25A	Plans Update to define pedestrian feature.	--	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. A five-foot sidewalk on the bridge has been added to the project plans to incorporate the trail.
			25B	Write memo and coordinate with USFS for resolution	--	--	--	FDOT	--	--	
REEVAL	26	*Regarding your [the US Forest Service] question related to room for a parking area at the FNST crossing located one mile north of Eglin's southern boundary, this also will be reviewed during the Plans Update Phase to determine its feasibility.*	26A	Plans Update to define parking area.	FDOT	--	--	--	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Additional parking is being considered within the proposed stormwater pond site r/w at this southern trail crossing.
			26B	Write memo and coordinate with USFS for resolution	FDOT	-	--	--	--	--	

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[10]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[11] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
BO	27	*An erosion and sediment control plan will be submitted and approved by the Service prior to the start of construction. This plan is to include re-vegetation of stream banks and riparian areas within the limit of construction, as needed. In the event of erosion control failure with impacts to the Yellow River, FDOT will implement a stream restoration plan. The Service will assist the FDOT with the plan development.*	**27A**	Plans update to prepare SWPPP	--	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
			27B	Prepare Restoration Plan for Yellow River	--	--	--	FDOT	--	--	If required, restoration Plan to be developed under separate FDOT contract. This is a post-construction activity following the post construction field review with FWS (**see commitment 28**).
			27C	SWPPP to be coordinated with US FWS and Eglin for review and approval. Ensure SWPPP incorporates sturgeon protection measures from BO.	--	--	--	FDOT	--	--	Project plans for 22044-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
			27D	Field monitoring of erosion control measures at construction site	--	--	--	--	CEI	--	

[10] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[11] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[12]	***No.***	***Commitment***	***Task No.***	***Implementation Tasks***	***Project Segment Construction Phase[13] and Responsible Entity***						***Status (January 2015)***
					-4 (south segment)			*-7 (north segment)*			
					Pre	***During***	***Post***	***Pre***	***During***	***Post***	
BO	28	*A post-construction field review will be conducted by FDOT and the Service to determine if site restoration is needed.*	28A	Post-construction field review with FWS to determine if restoration is needed.	--	--	--	--	--	FDOT	The FDOT District 3 Environmental Management Office will be responsible for completing the post-construction field review. A pre-construction baseline stream assessment survey has been prepared. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
			28B	Carry out restoration plan if FWS directs.	--	--	--	--	--	FDOT	
BO	29	*Conservation measures and best management practices outlined in the BA and these terms and condition shall be included as enforceable provisions of the construction contract. Failure to comply with all applicable conservation measures outlined in the BA, unless they conflict with provisions in these terms and conditions, and all terms and conditions included here may invalidate protective coverage of ESA section 7(o)(2) regarding the incidental take of listed species.*	29A	Permit memo to specify compliance to be carried out by construction contractor.	FDOT	CEI	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement.
BO	30	*Prior to construction, a Construction and Engineering Inspection (CEI) team will be assigned to the project. The CEI supervisor will work with the FDOT District Construction Project Manager and the contractor to provide instructions and educational material to familiarize the contractor and construction personnel with listed species and other sensitive issues associated with the project during a pre-construction conference. Eglin Natural Resources, the Service, and the Florida Fish and Wildlife Conservation Commission will be invited to provide input during the pre-construction conference. The contractor and the CEI supervisor will be tasked with ensuring construction personnel attend a site orientation briefing and for monitoring compliance with mandates and directives outlined therein.*	30A	FDOT and CEI will provide pre-con meeting to ensure provisions are met.	FDOT/CEI	--	--	FDOT/CEI	--	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

[12] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[13] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[14]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[15] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	31	*The FDOT will implement appropriate measures resulting from the consultation with the Service for the Gulf sturgeon, such as: timing bridge construction activities to account for the sturgeon spawning season; implementation of innovative bridge construction technologies; implementation of applicable BMPs with substitutions (increased placement of on-land erosion control, where applicable) or modifications to these measures (alternate placement in or removal from the river channel) to allow for normal Gulf sturgeon migration and routine habitat usage by sturgeon of any life stage.*	31A	To be completed as part of Task 27C. **Only applicable to -7 project.**	--	--	--	FDOT	--	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
BO	32	*The FDOT will contribute towards conservation and monitoring of Gulf sturgeon via a one-time purchase of two Vemco VR2w receivers and ten tags.*	32A	FDOT to procure. **Only applicable to -7 project.**	--	--	--	FDOT	--	--	Purchase of the receivers and tags will be coordinated through the FDOT District 3 Environmental Management Office and were discussed with Eglin and FWS at a coordination meeting on May 6, 2014. Bill Tate (USFWS) stated that the best approach would likely be to have FDOT's environmental contractor purchase the equipment and release it to USFWS rather than FDOT paying USFWS directly for the equipment. He also stated that USFWS had specifications and a preferred company that they use for this equipment and that they could provide this to FDOT, but warned that it can take up to three months after ordering to receive the equipment. He also stated that they do not anticipate any technological changes between now and tagging activities and that the tags typically have a battery life of 2-5 years. USFWS would like to perform tagging in the summer/fall as fish are easier to catch while in the Yellow River rather than the Gulf. **At coordination meeting on January 28, 2015, FWS and FDOT agreed that FWS would rather have 20 tags and no receivers. FDOT agrees and will purchase 20 tags in coordination with Bill Tate (FWS). FWS will send FDOT an e-mail to reflect this change in the BA/BO. A formal amendment to the BO is not required (commitment 32).**

[14] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[15] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[14]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[15] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
			33B	USFWS/Eglin to tag sturgeon	--	--	--	Eglin/FWS	--	--	To be performed in Summer 2015.
BO	33	*FDOT will permit the bridge in accordance with the state's water quality rules from Chapter 62-346 through the Florida Department of Environmental Protection.*	33A	FDOT will acquire permits during final design phase. **Only applicable to -7 project.**	--	--	--	FDOT	--	--	FDOT District 3 Environmental Management Office will submit application for the required permits. A Permit Clear memo will be provided prior to the start of construction. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
BO	34	*In order to protect wetlands, the agency will comply with the procedures and practices outlined in EO 11990, 44 CFR 9.6, AFI 32-7064, and 32 CFR 989.*	34A	H FDOT will acquire permits during final design phase.	--	--	--	FDOT	--	--	FDOT District 3 Environmental Management Office will submit application for the required permits. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	35	*The FDOT will provide an information package at the Pre-Construction Conference to educate the Contractor on the subject of the listed species, the laws protecting such species, and the civil and criminal penalties for harming, harassing, or killing such species.*	35A	Pre-con meeting coordination. FDOT/CEI contractor is required to conduct pre-con meeting. FDOT to provide instruction at pre-con meeting to ensure provisions are met.	FDOT/CEI	--	--	FDOT/CEI	--	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
BO	36	*Eglin Natural and Cultural Resources will designate appropriate staging and storage areas void of environmentally or archeologically sensitive habitats.*	36A	Eglin to review and approve Plans Update. FDOT to prepare memo for Eglin approval.	Eglin	--	--	Eglin	--	--	The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify use of staging and storage areas.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[16]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[17] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	37	*Signs will be posted as continuous reminders to warn workers of the potential presence of protected species such as sturgeon in work areas, their endangered status and federal protection, and precautions needed.*	37A	Construction contractor to maintain signs on sign boards. Construction contractor to maintain signs on sign boards.	--	CEI	--	--	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. Verification of project signage will be the responsibility of the construction Project Manager.
BO	38	*The Contractor will consider and implement, where practical, innovative, environmentally sensitive construction techniques to avoid/minimize impacts to listed species and sensitive areas.*	38A	Construction contractor to follow permit conditions. Construction contractor to follow permit conditions.	--	CEI	--	--	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012).
BO	39	*No dredging of the river bottom will be conducted for barge access.*	39A	Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	--	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012).
BO	40	*Placement of bridge piles will match the existing bridge locations.*	40A	Plans Update to redesign bridge. Plans Update to redesign bridge. Only applicable to -7 project.	--	--	--	FDOT	--	--	At the coordination meeting on January 28, 2015, it was agreed that piles do not need to match. It was discussed and understood that it is not desirable for bridge pile spacing to match existing because it would obstruct passage for both recreational users and sturgeon. The Biological Opinion will be modified by e-mail communication from FWS to FDOT (commitment 40).
			40B	Bridge design to be coordinated with FWS and Eglin. Bridge design to be coordinated with FWS and Eglin. Only applicable to -7 project.	--	--	--	FDOT	--	--	

[16] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[17] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[16]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[17] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	41	*Drilled shaft pile construction will be used whenever prudent and feasible as determined by FDOT.*	41A	Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	--	FDOT	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement.
BO	42	*Care will be taken in lowering equipment or material below the water surface and into the stream bed to ensure no harm occurs to any sturgeon that may have entered the construction area undetected. Additionally, the use of a spotter would help avoid a direct strike on a sturgeon during in-river bridge pile placement and installation. FDOT could also use sidescan sonar as an alternative method for detecting sturgeon during periods of high turbidity when water visibility is low. A spotter will not be required from December through February when sturgeon are not present in the river.*	42	This is a CEI activity during construction. Prior to construction, project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). The noise Test Study will abide by this commitment, too.	--	--	--	CEI/FDOT	CEI/FDOT	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012).
					--	--	--	CEI/FDOT	CEI/FDOT		
					--	--	--	--	FDOT		
BO	43	*Construction debris will not be discarded into the water.*	43A	Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	--	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012).
BO	44	*All applicable BMPs (silt fence, sediment traps/basins, staked and floating turbidity barriers, synthetic bales, sandbags, rock bags, etc.) will be utilized to ensure control of fugitive soil movement, excessive sedimentation, and turbidity, with substitutions (increased placement of on-land erosion control, where applicable) or modifications to these measures (alternate placement in, or removal from, the river channel) as needed to allow for normal Gulf sturgeon migration and routine habitat usage by sturgeon of any life stage.*	44A	Coordinated with 27C for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions.	--	--	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The Plans Update phase will provide a revised Stormwater Pollution Prevention Plan. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[18]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[19] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	45	*Siltation barriers should be properly secured, monitored regularly to avoid entrapment of any species, and made of material in which a sturgeon cannot become entangled. Such barriers will not block entire width of the waterway at any time.*	45A	Coordinated with 27C for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions.	--	--	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The Plans Update phase will provide a revised Stormwater Pollution Prevention Plan. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
BO	46	*Exposed soil surfaces will be sodded or seeded in accordance with contract plans as soon as practicable following soil disturbing activities for stability and erosion control.*	46A	Coordinated with 27C for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions.	--	CEI	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The Plans Update phase will provide a revised Stormwater Pollution Prevention Plan. The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
BO	47	*In-river bridge construction related activities will be timed to take place avoiding periods of known increased Gulf sturgeon activity such as during peak fall and spring migration periods, allowing safe and unobstructed migratory passage to and from the sturgeon's riverine spawning sites. For example, no piling installation will be conducted in March/April or September/October in the Yellow River.*	47A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.

[18] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[19] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[20]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[21] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	48	*No nighttime piling installation will be conducted from March through November, with nighttime defined as 30-minutes after sunset to 30-minutes before sunrise.*	48A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	49	*When piling installation does occur, pile-driving hammers would initially be operated at low levels, then gradually increase to the minimum necessary power required for pile removal or installation. During this ramp-up procedure, any sturgeon in the area would have the opportunity to detect the presence of increased sound and leave the area before full power pile driving commences.*	49A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	50	*All in-river pile driving restrictions will also apply to the proposed temporary work bridge.*	50A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	51	*Boats and barges utilized in support of construction activities will be removed from the main migration route during periods of inactivity.*	51A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.

[20] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[21] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[22]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[23] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	52	*If a sturgeon is seen within 100 yards of active daily construction operations or vessel movement, all appropriate precautions should be implemented to ensure its protection. These precautions should include ceasing operation of any in-river moving equipment (such as a boat or barge) so that it comes no closer than 50 feet of a sturgeon. Furthermore, operation of any mechanical construction equipment should cease immediately if a sturgeon is seen within a 50-foot radius of the equipment. Activities should not resume until the protected species has departed the project area of its own volition.*	52A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	53	*If a sturgeon is in imminent danger, distress, or has been injured or killed, work will cease in the area and FDOT and/or their contractor will immediately coordinate with Eglin Natural Resources.*	53A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	54	*Any dead sturgeon will be secured on site for carcass analysis by notified agency representative.*	54A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	The project will incorporate the FWS/NMFS Construction Special Provisions Sturgeon Protection Guidelines (2012). Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	55	*Following completion of the project, a report summarizing any involvement with sturgeon will be prepared for the Service.*	55A	To be prepared following project completion. (see also Task 61A). To be prepared following completion of project. Only applicable to -7 project.	--	--	--	--	FDOT/CEI	FDOT/CEI	The FDOT Construction Project Manager will be responsible for coordinating with FDOT District 3 Environmental Management Office for a post-construction report to the U.S. Fish and Wildlife Service. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

[22] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[23] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[24]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[25] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	56	*Underwater sound levels will not reach or exceed the threshold for physical injury, defined as a single strike threshold of 206 dBpeak and cumulative strike sound exposure level of 183 dBcSEL. This level is the sound limit for the project. If the sound limit is reached, sound mitigation measures as identified in the underwater sound management plan should be implemented to reduce levels below the limit. If mitigation measures are unsuccessful at reducing underwater sound to below the limit, then formal consultation should be reinitiated.*	56A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	57	*When engineering limits do not require impact driving, piles shall be advanced by vibration, oscillation, rotation, or pressing.*	57A	To be incorporated into sturgeon monitoring / noise monitoring plan. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	58	*A pile-driving and underwater sound management plan will be submitted and approved by the Service prior to the letting date for construction.*	58A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.

[24] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[25] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[26]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[27] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	59	*As part of the underwater sound management plan, a test study will be done to accurately determine sound levels based on equipment, substrate, and method of pile installation. This assessment will be done proximate to the project site, in an area most conducive to sound production, and at 10 meters from the pile. Any change in pile materials and/or installation methodology will require a re-assessment of sound levels.*	59A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	60	*Upon locating a dead, injured, or sick individual of an endangered or threatened species, notification must be made to the Fish and Wildlife Service Law Enforcement Office, Groveland, Florida at (352) 429-1037 within 24 hours.*	60A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment.
BO	61	*A report describing the actions taken to implement the terms and conditions of this incidental take statement shall be submitted to the Project Leader, U.S. Fish and Wildlife Service, 1601 Balboa Avenue, Panama City, Florida, 32405, within 60 days of the completion of construction. This report shall include the dates of work, assessment and actions taken to address impacts to the Gulf sturgeon, if they occurred.*	61A	To be prepared following project completion (see also Task 55A). Only applicable to -7 project.	--	--	--	--	--	FDOT	The FDOT Construction Project Manager will be responsible for coordinating with FDOT District 3 Environmental Management Office for a post-construction report to the U.S. Fish and Wildlife Service. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
BO	62	*The FDOT, in coordination with Eglin Natural Resources, would re-survey the project corridor for the presence of bald eagle nests during final design and permitting phases of this project. The results of these surveys would provide a basis for modification of construction activities, if necessary. The FDOT would coordinate with Eglin Natural Resources and the Service throughout this process to establish adequate protection measures.*	62A	Complete Eagle survey.	FDOT	--	--	FDOT	--	--	The FDOT District 3 Environmental Management Office will be responsible for a pre-construction eagle survey and coordination with Eglin, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission as appropriate. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
			62B	Report Eagle survey to Eglin, FWC, FWS.	FDOT	--	--	FDOT	--	--	

[26] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[27] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[26]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[27] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	63	*Foraging individuals can reasonably be expected to avoid the area during active construction and resume normal foraging activities within the habitat once work is complete.*	63A	Incorporated in Pre-con meeting coordination task.	FDOT	--	--	FDOT	--	--	The FDOT District 3 Environmental Management Office will be responsible for a pre-construction eagle survey and coordination with Eglin, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission as appropriate.
BO	64	*Any removal of mature trees within this area is considered negligible in comparison to the available habitat adjacent to the Proposed Action area. However, tree removal of any magnitude would require coordination through Eglin Natural Resources Forestry and Wildlife Divisions.*	64A	Review tree removal plan with Eglin. Document responsibilities for tree removal by Eglin prior to FDOT project letting.	FDOT/CIE/ Eglin	--	--	FDOT/CIE/ Eglin	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment.
BO	65	*The FDOT would familiarize contractors with the appearance of both bald eagles and their nest structures in the event of encountering either within the Proposed Action area.*	65A	Incorporated in Pre-con meeting coordination task (Task 30A). CEI is required to conduct pre-con meeting. FDOT to provide pre-con meeting support.	FDOT	CEI	--	FDOT	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
BO	66	*In the event of encounters or sightings of bald eagles roosting in the work area, work crews would be instructed to stop work and notify the FDOT District Construction Project Manager and Eglin Natural Resources. Work would be allowed to resume only after the bird has been confirmed to have left the area. If a bald eagle nest is found within 660-feet of the project limits, work must stop in the area and the FDOT must coordinate with Eglin Natural Resources and the Service.*	66A	Incorporated in Pre-con meeting coordination task (Task 30A). CEI is required to conduct pre-con meeting. FDOT to provide pre-con meeting support.	FDOT	CEI	--	FDOT	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[26]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[27] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	67	*To assure the protection of the eastern indigo snake, design and construction would follow the "Avoidance and Minimization Measures" as provided in the FDOT District 3 Indigo Snake Protection Measures and the Eglin AFB Indigo Snake Programmatic Biological Opinion, Eglin AFB, FL.*	67A	Incorporated in Pre-con meeting coordination task (Task 30A). CEI is required to conduct pre-con meeting. FDOT to provide pre-con meeting support.	FDOT	CEI	--	FDOT	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
BO	68	*Per Eglin requirement, the proponent is responsible for obtaining a gopher tortoise survey approximately one-month prior to clearing.*	68A	Complete gopher tortoise survey.	FDOT	--	--	FDOT	--	--	FDOT District 3 Environmental Management Office will be responsible for completing the gopher tortoise survey. The survey will need to be completed several months prior to construction to allow sufficient time to obtain an FWC Gopher Tortoise Relocation Permit prior to land clearing. The terms of the permit include restrictions for relocation and temperature requirements that may be difficult to meet in the winter season. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
			68B	Report gopher tortoise survey to Eglin, FWC, FWS.	FDOT	--	--	FDOT	--	--	
BO	69	*Any active gopher tortoise burrows would be given a mandatory 25-foot buffer. In the event an active burrow cannot be accommodated, the tortoise will need to be relocated in coordination with Eglin Natural Resources (Mr. Bruce Hagedorn, 96 CEG/CEVSN, 850-883-1153).*	69A	Coordinate gopher tortoise permit with FWC.	CEI	--	--	CEI	--	--	A gopher tortoise survey will need to be completed several months prior to construction to allow sufficient time to obtain an FWC Gopher Tortoise Relocation Permit prior to land clearing. The terms of the permit include restrictions for relocation and temperature requirements that may be difficult to meet in the winter season. The FDOT Construction Project Manager, in coordination with the FDOT District 3 Environmental Management Office, will be responsible for coordinating with Eglin for wildlife protection requirement implementation.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[26]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[27] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	70	*Presence of gopher tortoise burrows would increase the likelihood of the presence of the eastern indigo snake. Per FDOT and Eglin Natural Resources, information signs would be posted in active construction areas alerting crews to the potential presence and appearance of these species and work crews would be instructed not to kill any snakes, especially black snakes.*	70A	Post gopher tortoise signage.	CEI	CEI	--	CEI	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
			70B	Incorporate gopher tortoise in pre-con (Task 30A).	FDOT	CEI	--	FDOT	CEI	--	
BO	71	*If a live indigo snake is encountered during construction, work would cease while the species was present in the work area and the FDOT District Construction Project Manager and Eglin Natural Resources would be notified of the sighting.*	71A	Incorporate in pre-con (Task 30A).	FDOT	CEI	--	FDOT	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum and as appropriate, included on the Design Plans as Technical Specifications or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
BO	72	*Conservation measures such as sediment and erosion control would be utilized to minimize sedimentation at all times.*	72A	SWPP to be coordinated with US FWS and Eglin for review and approval. Ensure SWPP incorporates mussel protection measures from BO (incorporated into Task 27C).	CEI	CEI	--	CEI	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
BO	73	*Methods such as turbidity monitoring may be instituted to ensure enforcement and effectiveness of erosion control measures.*	73A	SWPP to be coordinated with US FWS and Eglin for review and approval. Ensure SWPP incorporates mussel protection measures from BO (incorporated into Task 72A).	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[26]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[27] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	74	*Turbidity barriers would be placed in the river as needed for further siltation control.*	74A	SWPP to be coordinated with US FWS and Eglin for review and approval. Ensure SWPP incorporates mussel protection measures from BO (incorporated into Task 72A).	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
BO	75	*Every effort would be made to avoid any chemical contamination to the waters and adjacent habitats of the Yellow River, and should any contamination of these habitats or waters occur, construction within the area would immediately cease while containment and remediation actions occur and the appropriate agencies are notified.*	75A	SWPP to be coordinated with US FWS and Eglin for review and approval. Ensure SWPP incorporates mussel protection measures from BO (incorporated into Task 72A).	--	--	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
BO	*76*	*The FDOT, in coordination with Eglin Natural Resources, would re-survey the project corridor for the presence of RCW cavity trees during final design and permitting phases of this project. The results of these surveys would provide a basis for modification of construction activities, if necessary. The FDOT would coordinate with Eglin Natural Resources and the Service throughout this process to establish adequate protection measures.*	76A	Complete RCW survey.	FDOT	--	--	FDOT	--	--	The FDOT District 3 Environmental Management Office will be responsible for a pre-construction Red-cockaded Woodpecker survey and coordination with Eglin, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission as appropriate.
			76B	Report RCW survey to Eglin, FWC, FWS to determine applicable protection measures.	FDOT	--	--	FDOT	--	--	
BO	*77*	*Construction staging and storage areas would be sited to avoid effect to the foraging habitat, to the maximum extent practical.*	77A	Complete Eglin review of staging / storage areas to avoid RCW trees.	FDOT	CEI	--	FDOT	CEI	--	The Contractor will be required to obtain and maintain an Eglin Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify storage and staging areas.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[28]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[29] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	78	*All clearing and staging areas would require pre-approval through the Eglin Natural Resources Section. Initial analysis indicates that no active or inactive cavity trees or foraging habitat would be cleared.*	78A	Complete Eglin review of staging / storage areas to avoid RCW trees. Incorporated into Task 77A.	FDOT	CEI	--	FDOT	CEI	--	The Contractor will be required to obtain and maintain an Eglin AF-103Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify storage and staging areas.
BO	79	*Surveys would be conducted prior to construction to help verify no previously undocumented cavity trees exist in the proposed ROW and to verify that inactive trees have not become active due to RCW movement or dispersion.*	79A	Complete RCW survey (Part of Task 76A).	FDOT	--	--	FDOT	--	--	The FDOT District 3 Environmental Management Office will be responsible for a pre-construction Red-cockaded Woodpecker survey and coordination with Eglin, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission as appropriate.
BO	80	*If ground-survey indicates tree removal is necessary, inactive cavity trees would be screened following the survey to prevent RCW utilization prior to tree removal. All removal activities would be coordinated with Eglin Natural Resources.*	80A	Complete RCW survey (Part of Task 76A).	FDOT	--	--	FDOT	--	--	The FDOT District 3 Environmental Management Office will be responsible for a pre-construction Red-cockaded Woodpecker survey (including cavity tree screening) and coordination with Eglin, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission as appropriate.
BO	81	*FDOT will provide an educational package and presentation at the Pre-Construction Conference that will include information about the RCW and other listed species.*	81A	Incorporate in pre-con (Task 30A).	FDOT	--	--	FDOT	--	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.

[28] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[29] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[28]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[29] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
BO	82	*Any cavity trees (active or inactive) subsequently discovered during construction activities would be reported to Eglin Natural Resources.*	82A	Incorporate in pre-con (Task 30A).	FDOT	CEI	--	FDOT	CEI	--	Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office.
BO	83	*Contractors would be instructed to avoid cavity trees and to stop work if live RCWs are encountered in the work area. If nesting activities are observed within 1,000 feet of the project limits, work would cease in the area and the FDOT would coordinate with Eglin Natural Resources and the Service.*	83A	Incorporate in pre-con (Task 30A).	FDOT	CEI	--	FDOT	CEI	--	
REEVAL	84	*Consistent with the Final June 27, 2012 Florida Fish and Wildlife Conservation Commission (FWC) Black Bear Management Plan, the contractor shall properly remove garbage and food debris from the construction site daily to eliminate possible sources of food that could encourage and attract bears. The contractor shall report nuisance black bears to the FWC at the Wildlife Alert Hotline at 1-888-404-3922.*	84A	Incorporate in pre-con (Task 30A).	FDOT	CEI	--	FDOT	CEI	--	
EA	85	*Application of water sprays, revegetation of disturbed areas, and use of geotextiles would be utilized as needed to minimize fugitive particulate emissions during ground-disturbing activities in accordance with the FDOT Erosion and Sediment Control Manual and Standard Specifications for Road and Bridge Construction.*	85A	Coordinated with 27B for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo.	--	CEI	--	--	CEI	--	The Plans Update will incorporate the requirement to follow the FDOT Erosion and Sediment Control Manual and Standard Specifications for Road and Bridge Construction.
EA	86	*FDOT site design plans and permits would include site-specific management requirements for erosion and sediment control BMPs. BMPs include: silt fencing, sand bags, rock bags, sediment traps, sediment basins, synthetic bales, floating and staked turbidity barriers, application of water sprays, revegetation of disturbed areas, and use of geotextiles, as needed. (FAC 62-621, 62-346, and FDOT Standard Specifications for Road and Bridge Construction)*	86A	Coordinated with 27B for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo.	FDOT	CEI	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[30]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[31] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
EA	87	*Design plan measures to help prevent and control dissemination of invasive species including: the prohibition of natural hay or stray bales; requirements for sod and fill material inspection; and certification from the Department of Agriculture and Consumer Services, Division of Plant Industry, stating that the sod, mulch, and fill materials are free from noxious weeds, including soda apple and cogon grass prior to incorporation into the project. (EO 13112, FAC Chapter 5B-57, and FDOT Standard Specifications for Road and Bridge Construction)*	87A	Coordinated with 27B for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo.	--	CEI	--	--	CEI	--	The Plans Update will incorporate the requirement to follow the FDOT Erosion and Sediment Control Manual and Standard Specifications for Road and Bridge Construction.
EA	88	*In accordance with Eglin and FDOT Wildlife Guidelines, all equipment staging and storage areas would be intentionally sited so as to minimize disturbance on any listed plant or animal species or their respective habitat.*	88A	Prepare Eglin plans review memo (in coordination with Task 9A)	FDOT	CEI /Eglin	--	FDOT	CEI /Eglin	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service. The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify storage and staging areas.

[30] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[31] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks											
Source[32]	**No.**	**Commitment**	**Task No.**	**Implementation Tasks**	**Project Segment Construction Phase[33] and Responsible Entity**						**Status (January 2015)**
					-4 (south segment)			-7 (north segment)			
					Pre	**During**	**Post**	**Pre**	**During**	**Post**	
EA	89	*Furthermore, species surveys (including gopher tortoise) would be performed prior to commencing construction. Any active gopher tortoise burrows would be given a mandatory 25-foot buffer or the tortoise would be relocated under permit. The presence of gopher tortoise burrows would increase the likelihood of the presence of the eastern indigo snake. Per Eglin and FDOT regulations, information signs would be posted in active construction areas alerting crews to the potential presence of the snake and other protected species. Contractors would familiarize work crews with the appearance of potential protected species and instruct work crews not to kill any snakes, especially black snakes.*	89A	Complete gopher tortoise survey (in coordination with Task 68A).	FDOT	--	--	FDOT	--	--	FDOT District 3 Environmental Management Office will be responsible for completing the gopher tortoise survey. The survey will need to be completed more several months prior to construction to allow sufficient time to obtain an FWC Gopher Tortoise Relocation Permit prior to land clearing. The terms of the permit include restrictions for relocation and temperature requirements that may be difficult to meet in the winter season. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

[32] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[33] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[34]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[35] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
EA	90	*Other safeguards such as predator-proof waste containers would be utilized during construction so as to avoid attracting bears or other species. Work crews would be instructed to stop work if protected animal species are encountered and to only resume work once the species leave the area. Certain species or activities such as nesting within or near the project area may require further consultation with the FDOT District Environmental Administrator, Eglin Natural Resources, the FWC, or the USFWS.*	90A	Incorporate requirement for predator-proof waste containers into contract plans.	FDOT	CEI	--	FDOT	CEI	--	This commitment is to be incorporated in the Plans Update phase. The contractor shall provide bear-resistant garbage disposal containers or shall otherwise properly remove garbage and food debris from the construction site daily to eliminate possible sources of food that could encourage and attract bears. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
EA	91	*Reasonable and prudent measures (RPMs) are necessary and appropriate to minimize the incidental take of Gulf sturgeon and its habitat as a result of road and bridge construction for widening SR 87.*	91A	A pile-driving and underwater sound management plan will be submitted and approved by FWS. Construction contractor to follow permit conditions. Only applicable to -7 project.	--	--	--	FDOT	--	--	The Biological Opinion RPMs are specified as commitment numbers 27 – 61 of this re-evaluation document and are not repeated here.
EA	92	*Following consultation procedures established in Section 106 (36 CFR 800), before any ground disturbance activities associated with the Proposed Action begin, data recovery to mitigate adverse effects where direct impact threatens portions of historic properties would be completed with concurrence of consulting parties. Historic properties threatened with indirect impact will be protected from adverse effect through avoidance. These properties will be identified on construction plans as "No Staging/No Disturbance" zones and cordoned off with barrier fencing to be installed using pre-set (GPS) geo-reference points shown on the plans.*	92A	Archaeologist to carry out Data Recovery Plan (Task 10A). To be completed by SEARCH contract under DEMO. See commitments 27-61.	--	--	--	FDOT	CEI	--	The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify conformance and completion of the signage, fencing, and Data Recovery Plan. **Dig Permit AF103 issued to SEARCH 19 Dec 2014 (work order 81114).**

[34] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[35] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[34]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[35] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
EA	93	*A Memorandum of Agreement (MOA) developed for cultural resources concerns of the Proposed Action includes stipulations on procedures to mitigate adverse effect where direct impact is threatened and to avoid adverse effect where indirect impact threatens historic properties. Without identifying specific details on cultural resources, the MOA stipulations would be included in all requests for proposals (RFPs) for all tasks resulting in ground disturbance for the Proposed Action. The RFP would include concise wording that no work may begin in areas of direct impact between specified station markers until notice is given by FDOT that mitigation is complete. The RFPs would include concise wording on the avoidance and fencing of "No Staging/No Disturbance" zones. Contractors responding to RFPs would be required to acknowledge their understanding of the stipulations of the PA as part of their quality assurance/quality control (QA/QC) program, include procedures to ensure against violations by any member of their teams, and specify measures to be followed in the event of violation of any part of the PA by a member of their team. The type(s) of barrier fencing for cordoning off the "No Staging/No Disturbance" areas, pre-approved by Eglin AFB, would be included in the RFPs. Contractors responding to the RFPs would identify the type of barrier fencing to be used and any specifications on installation.*	93A	Prepare Eglin plans review memo (Task 9A)	--	--	--	FDOT	CEI	--	Commitments 8 - 16 are from the Stipulations in the Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145).
EA	94	*The MOA stipulations would be part of the Work Clearance Request (AF 103) permit and contractors would be required to acknowledge their understanding before 96th Civil Engineering/ Cultural Resources (96 CEG/CEVSH) would affix an authorizing signature.*	94A	The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. (Task 16A)	--	CEI	--	--	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The Contractor will be required to obtain and maintain an Eglin AF-103 Work Clearance Request (Dig Permit) prior to any ground disturbing activities. Dig permits must be revalidated every 30-days until construction is complete. Separate dig permits will be required for each construction segment. As part of the process of issuing the Dig Permit, Eglin personnel will verify conformance and completion of the Data Recovery Plan. Note: 96CEG/CEVSH is now 96CEG/CEIEA.
EA	95	*As a final measure of resolving the threat of adverse effect, a professional archaeologist would monitor all stages of construction that result in ground disturbance, including fence installation, within the area of cultural sensitivity denoted by station markers on construction plans.*	95A	FDOT will task a professional archaeologist to monitor all ground disturbance activities (Task 11A). To be completed by SEARCH contract under DEMO.	--	--	--	--	FDOT	--	FDOT District 3 Environmental Management Office holds a contract with a consultant (independent of the construction contractor) who will be tasked with archaeological monitoring. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[36]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[37] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
EA	96	*FDOT site design plans and permits would include site-specific management requirements for erosion and sediment control BMPs. BMPs include: silt fencing, sand bags, rock bags, sediment traps, sediment basins, synthetic bales, floating and staked turbidity barriers, application of water sprays, revegetation of disturbed areas, and use of geotextiles, as needed. (FAC 62-621, 62-346, and FDOT Standard Specifications for Road and Bridge Construction). Stormwater management controls, inspections, and required remedial actions would be implemented as necessary in accordance with the Project Stormwater Pollution Prevention Plan. (FAC 62-621.300). Construction activities would be sequenced to limit length of soil exposure. Areas of existing vegetation that would not be disturbed by construction activities would be marked and identified.*	96A	Coordinated with 27B for Eglin / FWS SWPPP approval. Construction contractor to follow permit conditions. FDOT to incorporate requirement into permit memo. Construction contractor to follow permit conditions.	FDOT	CEI	--	FDOT	CEI	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.
EA	97	*Occupational Safety and Health Act (OSHA) (29 USC Section 651) - specifies the amount and types of training required for workers, standard work protocols and procedures, the use of protective equipment, the implementation of engineering controls, and maximum exposure limits for workplace stressors.* *FDOT 2010 Loss Prevention Manual - addresses jobsite safety and includes items such as safe work practices, protective equipment, and incident reporting and investigation procedures. 2012 Florida Strategic Highway Safety Plan - defines a system and process for managing the roadway system to achieve the highest level of highway safety.* *Motorist Awareness System (MAS) (FDOT 2013 Design Standards, Index No. 670) - Includes a series of standardized advanced warning signs, warning devices (i.e. rumble strips and enforcement lights), portable message signs, radar speed display units, and flashing regulatory speed limit signs to alert motorists of work zone attributes such as lane shifts, lane closures, and modified speed limits.* *Bird aircraft strike hazard (BASH) avoidance measures - includes stormwater pond design to maximize recovery rates (full recovery in less than 48-hours where practicable) to eliminate standing water to the extent possible, bird monitoring protocols, and a routine mowing schedule to control grass height.*	97A	Prepare Eglin plans review memo (Incorporated in Task 9A).	FDOT	CEI	--	FDOT	CEI	--	Pond design intent is to provide for dry ponds that recover in 72 hours. Project commitments will be provided to the contractor as an attachment to the Permit Transmittal Memorandum through the Mitigation Monitoring Program (MMP) and/or included as Technical Specifications, or as otherwise required by the commitment. A presentation by the Department at the pre-construction conference will inform the contractor of his responsibility to implement the project commitments. Contractor/CEI will be educated at the pre-construction meeting (not yet scheduled) and given appropriate contact information to include the District 3 Environmental Management Office. Events will also be included in the FDOT Project Suite Enterprise Edition (PSEE) scheduling system.

[36] Source code: CE [Type II Categorical Exclusion March 1997]; MOA [Memorandum of Agreement (MOA) with Eglin Air Force Base, FHWA, and the SHPO to resolve the finding of adverse effect to the Broxson Resource Group (BRG 8SR2145)]; REEVAL [Right-of-Way and Construction Reevaluation]; BO [Biological Opinion issued by U.S. Fish and Wildlife Service April 10, 2013 (FWS Log No. 2013-F-0033)]; EA[Environmental Assessment (RCS 09-208) and FONSI (Finding of No Significant Impact) as signed by Col. Todd, USAF September 9, 2014].

[37] Brown shaded cells indicate commitment applies during project phase.

Table A-1: FPID 220442-4/-7 Commitment Implementation Tasks

Source[36]	No.	Commitment	Task No.	Implementation Tasks	Project Segment Construction Phase[37] and Responsible Entity						Status (January 2015)
					-4 (south segment)			-7 (north segment)			
					Pre	During	Post	Pre	During	Post	
EA	98	*Relocation of drinking water and wastewater infrastructure would be coordinated with local utility service providers and the 96 Range Group to ensure no conflict or damage is experienced.*	98A	Prepare Eglin plans review memo (Incorporated in Task 9A). No relat6ion of water or wastewater is proposed in -4 project. Relocation of water is outside Eglin boundary in -7 project.	FDOT	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement.
EA	99	*FDOT Site design plans and permits would include site-specific management requirements for erosion and sediment control BMPs. BMPs include: silt fencing, sand bags, rock bags, sediment traps, sediment basins, synthetic bales, floating and staked turbidity barriers, application of water sprays, revegetation of disturbed areas, and use of geotextiles, as needed. (FAC 62-621, 62-346, and FDOT Standard Specifications for Road and Bridge Construction).*	99A	Prepare Eglin plans review memo (Incorporated in Task 9A).	FDOT	--	--	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
EA	100	*Stormwater management controls, inspections, and required remedial actions, as necessary in accordance with the Project Stormwater Pollution Prevention Plan. (FAC 62-621.300) Recommendations from the Formal Section 7 Consultation with USFWS as stated above.*	100A	Prepare Eglin plans review memo (Incorporated in Task 9A).	FDOT	--	-- --	FDOT	--	--	Project plans for 220442-4-52-01 and 220442-7-52-01 are being evaluated in the Plans Update phase which is incorporating the commitment requirement. The FDOT Project Manager of the Plans Update phase will be responsible for coordinating with FDOT District 3 Environmental Management Office for approval of the Stormwater Pollution Prevention Plan with the U.S. Fish and Wildlife Service.
FONSI	101	*Prepare Mitigation Monitoring and Reporting Program for Eglin Signature. A MMP will be developed and implemented prior to the start of SR 87 project activities but no later than 90 days from the date of this FONSI (September 9, 2014).*	101A	Prepare Mitigation Monitoring and Reporting Program for Eglin Signature	FDOT	--	--	FDOT	--	--	Fulfilled with this document.
FONSI	102	*It is expected mitigation monitoring will generally consist of on-the-ground inspections and any subsequent actions necessary to address deficiencies discovered during the inspections. The EA refers to the use of BMPs. For this FONSI/FONPA, and in compliance with Air Force regulation, BMPs will be carried forward in the MMP.*	102A	Prepare quarterly status report to update progress in meeting Mitigation Monitoring and Reporting Program for distribution to Eglin, FWC, FWS.	FDOT	CEI	FDOT	FDOT	CEI	FDOT	FDOT District 3 Environmental Management Office will provide for construction oversight through the construction contractor. Reporting will be prepared by or for the District 3 Environmental Management Office.

[End]