



ARKANSAS DEPARTMENT OF TRANSPORTATION

ArDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

10324 Interstate 30 | P.O. Box 2261 | Little Rock, AR 72203-2261

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July 31, 2018

Mr. Angel Correa
Division Administrator
Federal Highway Administration
700 West Capitol, Room 3130
Little Rock, Arkansas 72201-3298

Re: Job Number 100976
FAP Number NHPP-0056(49)
Sunken Lands Bridge Painting (I-555) (S)
Route 555, Section 2
Poinsett County
Tier 3 Categorical Exclusion

Dear Mr. Correa:

The Environmental Division has reviewed the referenced project and it falls within the definition of the Tier 3 Categorical Exclusion as defined by the ARDOT/FHWA Memorandum of Agreement on the processing of Categorical Exclusions. The following information is included for your review and, if acceptable, approval as the environmental documentation for this project.

The purpose of the project is to remove and replace the existing paint systems on 12 bridges along I-555 in Poinsett County. A project location map is attached.

There are no relocations, environmental justice issues, wetlands, prime farmlands, or cultural resources associated with this project. Field inspections found no evidence of existing underground storage tanks or hazardous waste deposits on site. Hazardous waste generated in the form of lead paint debris will be removed, temporarily stored, and transported to an approved disposal facility as per Federal Regulation 40 CFR Part 260. No impacts to the St. Francis Sunken Lands Wildlife Management Area, owned by the Arkansas Game and Fish Commission, are expected.

The official species list obtained through the US Fish and Wildlife Service Information for Planning and Consultation website identified the following four species as potentially affected by the proposed project's activities: Fat Pocketbook (*Potamilus capax*), Rabbitsfoot (*Theliderma cylindrica*), Scaleshell Mussel (*Leptodea leptodon*), and

pondberry (*Lindera melissifolia*). A 'no effect' determination was made for the Rabbitsfoot, Scaleshell Mussel, and pondberry.

The Federally designated endangered Fat Pocketbook, (*Potamilus capax*), is known to occur within the immediate project area in Ditch No. 60, Ditch No. 61, St. Francis River, and the St. Francis Floodway. In an effort to avoid potential impacts to the endangered fat pocketbook, containment for any debris must be included in the job to minimize sediment and other materials from entering the aforementioned waterbodies. The USFWS concurred with our 'may affect, not likely to adversely affect' determination on June 26, 2018, see attached correspondence.

This job will not include any work in streams below the ordinary high water mark; therefore, no 404 permit will be required. A Migratory Bird Special Provision will accompany this job.

Noise predictions have been made for this project utilizing the Federal Highway Administration's RCNM 1.1 (Road Construction Noise Model) procedures. These procedures indicate that noise levels are above the FHWA noise criteria within 500 feet of the project. A Noise Analysis is enclosed.

If you have any questions, please contact the Environmental Division at 569-2281.

Sincerely,

APPROVED

Environmental Specialist
Federal Highway Administration
Date: 8/2/2018



John Fleming
Division Head
Environmental Division

Enclosures

JF:TT:fc

c: Program Management
Construction
Maintenance
District 10
Master File



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INTEROFFICE MEMORANDUM

April 30, 2018

TO: Environmental Job File

FROM: William McAlexander, Advanced Cultural Resources Specialist *WMA*

SUBJECT: Archeological Clearance
Job Number 100976
Sunken Lands Bridge Painting
(I-555) (S)
Route 1-555, Section 2
Poinsett County

The above referenced project involves painting bridges along Section 2 of I-555 in Poinsett County. There will be no excavation. Bridges 06040, A5445, B5445, A5446, B5446, A5447, B5447, A5448, B5448, 06230, A5189, and B5189 were cleared for rehabilitation under Job Number 100956.

The project will consist of scraping rust and painting. It does not have the potential to affect any undisturbed land surfaces or potential cultural resources. This project is subject to the 1999 MOA and falls under the exempted work category "Minor Bridge Work". This project is not considered an undertaking and requires no further work or Section 106 review.



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Arkansas Ecological Service Field Office
110 South Amity Road, Suite 300
Conway, Arkansas 72032



June 26, 2018

Mr. John Fleming
c/o Kayti Ewing
Arkansas Department of Transportation
10324 Interstate 30
Little Rock, Arkansas 72209

Dear Mr. Fleming:

Thank you for your email of June 19, 2018. The U.S. Fish and Wildlife Service (Service) is responding to your request, regarding the Arkansas Department of Transportation (ArDOT) proposal to re-paint, as part of routine maintenance, twelve bridges along Interstate 555 in Poinsett County between Marked Tree and Payneway (Job# 100976 Sunken Lands Bridge Painting (I-555)(S)), Poinsett County, Arkansas. The project was described and assessed as follows (abbreviated and summarized):

The Arkansas Department of Transportation proposes to re-paint, as part of routine maintenance, twelve bridges along Interstate 555 in Poinsett County between Marked Tree and Payneway (Job# 100976 Sunken Lands Bridge Painting (I-555)(S)). All twelve bridges will be sandblasted prior to painting to maximize the paint coat life and to ensure proper paint adhesion to the steel structures. Sandblasting utilizes highly pressurized sand to remove any impurities from the bridges' steel surface deck, such as the previous coat of paint, to prepare and clean the surface for the new paint. All of the bridges will be accompanied by the proper containment, as specified in the plans, to minimize dust and other toxins from leaving the worksite. This containment operation also ensure that the material is collected and properly disposed of. This project crosses several water bodies: the St. Francis River, the St. Francis River Floodway Relief, Sand Slough, Ditch No. 61 and Ditch No. 60.

IPaC identified four federally listed species with the potential to occur in the project area—Fat Pocketbook (*Potamilus capax*), Rabbitsfoot (*Theliderma cylindrica*), Scaleshell Mussel (*Leptodea leptodon*), and Pondberry (*Lindera melissifolia*). Fat Pocketbook (*Potamilus capax*) was the only one determined as having a “may affect”.

P. capax is found in large rivers with sand, mud, and fine gravel substrates. It has been shown that man-made ditches, sloughs and streams in the St. Francis watershed provide suitable habitat (Miller and Payne 2005). *P. capax* is locally known in the project area from all waterbodies mentioned above, according to ANHC records. While there are known species and suitable habitat present, proper containment procedures are specified and must be followed to ensure collection and disposal of all debris associated with the surface preparation operations in order to prevent materials from entering water bodies. Therefore, it is our determination that the project is “not likely to adversely affect” *P. capax*. We request your concurrence with our determination.

Mr. John Fleming

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Based on the location of this action, the minimal habitat being affected immediately adjacent to existing roadway, on existing bridges, and right of way, the distance to known species locations, conservation measures, and application of standard sediment and erosion controls; the Service agrees with your assessment and concurs with your determinations of "may affect, not likely to adversely affect" for Fat Pocketbook. Furthermore, the Service agrees with your species assessments and no further consultation for this action regarding federally listed species is necessary at this time.

If you have any questions regarding our response or if you need additional information, please contact Lindsey Lewis at (501) 513-4489 or lindsey_lewis@fws.gov.

Sincerely,



Melvin L. Tobin
Field Supervisor

cc: Project File

Read File

Filename: C:\Users\lilewis\Documents\PROJECTS\FY2018\ARDOT\Consultation_100976 Sunken Lands Bridge Painting (I-555)(S)\Comments - Consultation_100976 Sunken Lands Bridge Painting (I-555)(S).docx



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480
<http://www.fws.gov/arkansas-es>

In Reply Refer To:

June 19, 2018

Consultation Code: 04ER1000-2018-SLI-1161

Event Code: 04ER1000-2018-E-01737

Project Name: 100976 Sunken Lands Bridge Painting (I-555) (S)

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

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). **This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.**

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

Please visit our website at <http://www.fws.gov/arkansas-es/IPaC/home.html> for species-specific guidance to avoid and minimize adverse effects to federally endangered, threatened, proposed, and candidate species. Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project specific guidance at <http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit <http://www.fws.gov/arkansas-es/IPaC/Karst.html> to determine if your project occurs in the karst region and to view karst specific-guidance.** Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities. Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be

completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Arkansas Ecological Services Field Office

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

Project Summary

Consultation Code: 04ER1000-2018-SLI-1161

Event Code: 04ER1000-2018-E-01737

Project Name: 100976 Sunken Lands Bridge Painting (I-555) (S)

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: 12 bridges will be painted along I-555 between Payneway and Marked Tree. Two bridges over the St. Francis River; one bridge over Highway 63; two bridges over the Floodway Relief; two bridges over Sandy Slough; two bridges over Ditch No. 60; two bridges over Ditch No. 61, and one bridge over County Road 270A. Prior to receiving a new coat of paint, the bridges will be sandblasted clean to ensure proper paint adhesion. Appropriate containment procedures will take place to collect any debris.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/35.52536985550006N90.42884026512593W>



Counties: Poinsett, AR

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Clams

NAME	STATUS
Fat Pocketbook <i>Potamilus capax</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2780	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5165	Threatened
Scaleshell Mussel <i>Leptodea leptodon</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5881	Endangered

Flowering Plants

NAME	STATUS
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered

Critical habitats

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

ARDOT Job Number 100976
Noise Analysis

Fundamentals of Sound and Noise

“Noise” is defined as an unwanted sound. Sounds are described as noise if they interfere with an activity or disturb the person hearing them. Sound is measured in a logarithmic unit called a decibel (dB). The human ear is more sensitive to middle and high frequency sounds than it is to low frequency sounds, so sound levels are weighted to more closely reflect human perceptions. These “A-weighted” sounds are measured using the decibel unit dB(A). Because the dB(A) is based on a logarithmic scale, a 10 dB(A) increase in sound level is generally perceived as twice as loud while a 3 dB(A) increase is just barely perceptible to the human ear.

Sound levels fluctuate with time depending on the sources of the sound audible at a specific location. In addition, the degree of annoyance associated with certain sounds varies by time of day, depending on other ambient sounds affecting the listener and the activities of the listener. The time-varying fluctuations in sound levels at a fixed location can be quite complex, so they are typically reported using statistical or mathematical descriptors that are a function of sound intensity and time. A commonly used descriptor of the equivalent sound level is Leq , which represents the equivalent of a steady, unvarying level over a defined period of time containing the same level of sound energy as the time varying noise environment. $Leq(h)$ is a sound level averaged over one hour. For this project, the $Leq(h)$ is used to describe sandblasting sound levels at locations of outdoor human use and activity (such as residences).

Noise Impact Criteria

Noise impacts take place when the predicted noise levels approach or exceed the noise abatement standard. The noise abatement standard of 67 dB(A) is used for sensitive noise receptors such as residences, schools, churches, and parks. The term “approach” is considered to be one dB(A) less than the noise abatement standard.

The noise impacts for this project was estimated utilizing the Federal Highway Administration’s Roadway Construction Noise Model 1.1 (RCNM 1.1).

Sandblasting noise analyses

The project duration is expected to be completed in a period of two weeks per bridge. Standard sandblasting equipment include a sand separator, vacuum excavator, single nozzle sandblaster, generator and compressor. Hourly average noise levels from sandblasting on each project site were determined

ARDOT Job Number 100976
Noise Analysis

using RCNM 1.1. As the RCNM 1.1 covers no sand separator equipment, noise levels from a vibrating hopper was used as a substitute in the model. Shielding in the form of metal enclosures, mufflers, etc. usually found on these types of equipment was conservatively assumed to be 5 db(A).

Results

The five noisiest pieces of sand-blasting equipment described previously generate maximum noise levels ranging from 85.8 db(A) at 50 feet to 59.8 db(A) at 1000 feet. Temporary impacts to residents are expected to occur within 500 feet of the blasting operation as shown in the table below.

RCNM Results		
Distance to Receptor (feet)	**Lmax db(A)	Leq(h) db(A)
50	90.7	85.8
75	87.1	82.3
100	84.6	79.8
200	78.6	73.8
300	75.1	70.2
400	72.6	67.7
500	70.7	65.8
600	69.1	64.2
700	67.7	62.9
800	66.6	61.7
900	65.6	60.7
1000	64.6	59.8

*Calculated Lmax is the value produced by the loudest piece of equipment (spray nozzle)

Any excessive project noise, due to sandblasting operations, should be of short duration and have a minimum adverse effect on land uses or activities associated with each project area. Should noise from the project becomes problematic, additional shielding such as plywood barriers, noise blankets, etc. can be utilized to reduce noise impacts.

AHTD ENVIRONMENTAL IMPACTS ASSESSMENT FORM

AHTD Job Number 100976 FAP Number NHPP-0056(49)

Job Title Sunken Lands Bridge Painting (I-555)(S)

Environmental Impacts	None	Minor	Major	Comments
Air Quality	X			
Construction Impacts		X		Temporary
Cultural Resources	X			
Economic	X			
Endangered Species		X		See USFWS correspondence
Energy Resources	X			
Environmental Justice/Title VI	X			
Fish and Wildlife	X			
Floodplains	X			
Forest Service Property	X			
Hazardous Materials/Landfills		X		Lead paint removal
Land Use Impacts	X			
Migratory Birds		X		Bird SP
Navigation/Coast Guard	X			
Noise Levels		X		Noise Analysis attached.
Prime Farmland	X			
Protected Waters		X		Containment during bridge painting
Public Recreation Lands	X			No impacts expected to AG&FC lands
Public Water Supply/WHPA	X			
Relocatees	X			
Section 4(f)/6(f)	X			
Social	X			
Underground Storage Tanks	X			
Visual Impacts	X			
Stream Impacts	X			
Water Quality		X		Containment during bridge painting
Wetlands	X			
Wildlife Refuges	X			

Section 401 Water Quality Certification Required? No
 Short-term Activity Authorization Required? No
 Section 404 Permit Required? No Type N/A

Remarks: _____

Signature of Evaluator  Date July 31, 2018