

Appendix D – U.S. Fish and Wildlife Service Correspondence

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

1208-B Main Street
Daphne, Alabama 36526

DEC 04 2007

IN REPLY REFER TO:

2007-FA-0240c

Mr. Bo Baxter
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, TN 37902

Dear Mr. Baxter:

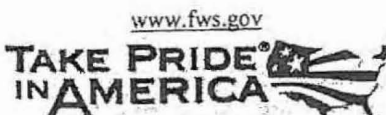
The U.S. Fish and Wildlife Service (Service) received, via an electronic mail message on November 27, 2007, from Ms. Samantha Strickland of the Tennessee Valley Authority's (TVA) Muscle Shoals Office, an aquatic survey conducted for two federally listed endangered species, the pink mucket pearlymussel (*Lampsilis abrupta*) and the rough pigtoe (*Pleurobema plenum*). The aquatic survey is associated with Limestone County's proposal to install a 30-inch water main pipeline from the City of Decatur, Alabama, across the Tennessee River near Tennessee River Mile 304.6, for the purposes of providing water service to portions of southeast Limestone County. As proposed the water main pipeline would be installed via directional boring approximately 30-feet below the river channel bottom and would extend approximately 2,500 feet from the south bank of the Tennessee River to the north bank. The remaining length of pipeline installation, approximately 5,700 feet, would be installed by using a cut-trench and backfill method from the north bank of the river channel through the overbank/mud flat area of Wheeler Reservoir to the north shoreline.

Based on the best information available at this time and the recent survey conducted in areas in close proximity to the proposed project, we believe that the requirements under Section 7 of the Endangered Species Act (ESA) of 1973, as amended, are fulfilled. Obligations under Section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not considered, (2) the action is subsequently modified to include activities which were not considered in this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. Therefore, this letter represents our concurrence with the proposed activities. However, we do have a few recommendations and comments that we believe should be considered by the TVA and/or the United States Army Corps of Engineers (USCOE) and included as contract language so as to avoid adverse impacts to threatened and endangered species, other fish and wildlife resources, and their habitats.

On November 28, 2007, a Service biologist met with TVA staff and representatives of Hethcoat & Davis, Inc., the contractor hired by the project applicant, Limestone County Water and Sewer Authority, to discuss the results of the aquatic survey for the proposed water main pipeline installation project and to ask questions of the applicant about techniques being considered for the

Piedmont - Wheeler Watershed Team	
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Mr. Bo Baxter

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pipeline installation. During the meeting, the Service biologist expressed that although the Service concurs with the results of the survey effort, concerns remain with certain aspects of the pipeline installation; particularly how the applicant plans to minimize impacts to water quality and river substrates in the areas of the cut-trench-backfill pipeline installation. We are especially interested in where the applicant plans to "daylight" the directionally bored portion of the pipeline north of the Tennessee River channel because the substrates in that area were considered to be marginal, yet suitable habitat for the two federally listed mussel species. Therefore, to avoid any potential for an adverse affect on the rough pigtoe or pink mucket pearly mussels or their potential habitat, we recommend the pipeline "daylight" several hundred feet north of the north bank of the Tennessee River channel, preferably northeast of the existing islands located in the vicinity of the proposed pipeline route.

Regardless the technique for installing the pipeline via cut-trench-backfill, those attending the meeting realize that this method of pipeline installation may create water quality issues in the Tennessee River/Wheeler Reservoir. A discussion then ensued on what methods or techniques are available to remedy or at least minimize the effects of siltation and turbidity from the cut-trench-backfill installation. The use of silt curtains was discussed, but given recent experience and observation of these devices deployed for a dredging project in Wheeler Reservoir, we are skeptical of their ability to contain silt and/or sediment. Further, from our observations and understanding, these devices for all practical purposes are incapable of reducing turbidity levels.

Based on the discussion, no one in attendance was aware of any one particular best management practice (BMP) that could be implemented that would address minimization of siltation/turbidity. Therefore, the discussion became that of monitoring siltation/turbidity and determining a level or limit of siltation/turbidity that would be allowed to occur with the proposed activities. The Service biologist mentioned that in past projects, some guidance on monitoring for turbidity has been provided to applicants and that it may be a possibility with this project. No decisions were made concerning the monitoring or turbidity limits for the proposed action, but that further discussion and consideration of this matter was warranted and would be carried out prior to permit issuance.

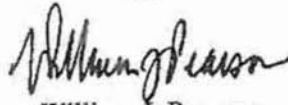
Another topic raised and recommendation mentioned during the meeting by the Service was in regards to having on-site, during the initial dredging/pipeline installation activities (especially in the area considered the "staging area" located north of the north bank of the Tennessee River channel), a malacologist to observe these activities. We recommend the malacologist monitor the spoils for any state or federally listed sensitive aquatic species. The malacologist hired should be in possession of a current, valid ESA, Section 10 permit, verifying that they are in compliance with the ESA and capable of identifying and handling the endangered rough pigtoe and pink mucket pearly mussels. We have recommended these activities in the past with similar dredging and other water-related projects in or near known habitat of federally listed endangered or threatened species. We encourage TVA and/or USCOE consider including this recommendation into the applicant's construction contract. Of course, if at any time a federally listed species is observed during the pipeline installation project, the Service's Wheeler National Wildlife Refuge Office would need to be immediately contacted (see contact information below) so that we have an opportunity to evaluate impacts to the federally listed species.

Mr. Bo Baxter

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Our report has been prepared in accordance with the requirements of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). We appreciate the opportunity to review the results of the aquatic mussel survey and request that you keep us informed on the progress of the proposed project. If you have any questions or need additional assistance, please call Mr. Rob Hurt of my staff at (256) 353-7243, ext. 29. In correspondence, please refer to and use the number located at the top of this letter.

Sincerely,



William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

cc: Ms. Samantha Strickland, TVA, Muscle Shoals, AL
Ms. Lisa Morris, USCOE, Nashville, TN
Mr. James Cherry, ADCNR, Montgomery, AL
Mr. James McAfee, ADEM, Montgomery, AL
EPA, Atlanta, GA
Mr. Rob Hurt, USFWS, Decatur, AL



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:

2007-FA-0240

MAY 23 2012

Nashville District Corps of Engineers
Regulatory Branch
3701 Bell Road
Nashville, TN 37214

ATTN: Lisa R. Morris

Dear Sir:

This is the report of the U.S. Fish and Wildlife Service (Service) concerning public notice (PN) number 12-05 dated April 9, 2012, a joint public notice between the U.S. Army Corps of Engineers (Corps) and the State of Alabama, Department of Environmental Management (ADEM). We understand that since the proposed action would be located on Tennessee Valley Authority (TVA) property (TVA easement), TVA will be issuing a separate public notice limited to the land action and will serve as the lead federal agency for this action. This proposed action was previously addressed by the Service in 2007 as PN 07-55 (Application No. 2007-00977). However, because of the time that has lapsed since the previous review and because of new species listings that have occurred during that time, we are again reviewing this project.

We understand that the applicant (Limestone County Water and Sewer Authority) is proposing to install a 30-inch diameter municipal water transmission main across the Tennessee River and across 1.09 acres of wetlands on TVA property. The pipeline installation would be installed by a combination of horizontal directional drilling (HDD), and trenching and backfill. The pipeline would be installed by HDD roughly 30 feet under the maintained commercial channel bottom from Sta. 0+00 to 35+00. Upon day lighting on the north bank, that waterline would follow existing CSX railroad ROW. From Sta. 35+00 to 82+00, marine trenching operations would use a shallow draft barge to trench, assemble, and lay the pipe. The pipeline would be installed over a bed of crushed stone, then backfilled to a minimum 3-ft cover with original stockpiled soils to preconstruction grade. Floating turbidity barriers would be utilized to minimize siltation from construction activities. Hardwood wetland trees would be cleared from the 1.09 acres of north bank wetlands, to establish a 20-ft wide construction zone corridor for the pipeline, approximately 3,000-ft in length.

This report is prepared in accordance with the requirements of the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e) and the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), and is to be used in your determination of 404(b) (1)

PHONE: 251-441-5181

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FAX: 251-441-6222

Ms. Lisa R. Morris

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guidelines compliance (40 CFR 230) and in your public interest review (33 CFR 320.4) as they relate to protection of fish and wildlife resources.

Endangered Species Act

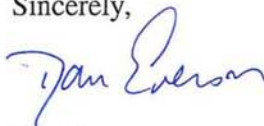
Our records indicate that the following endangered freshwater mussels may occur within or near to the project area:

Pink mucket pearlymussel (*Lampsilis abrupta*) – Endangered
Rough pigtoe (*Pleurobema plenum*) – Endangered
Spectaclecase (*Cumberlandia monodonta*) – Endangered
Sheepnose (*Plethobasus cyphus*) – Endangered

While the October 12, 2007, survey conducted by AST Environmental did not produce any of the above listed species, the survey did document other freshwater mussel species, many of which share the same habitat needs/requirements as the listed species of concern within the proposed geotechnical bore or trench alignment locations. Given the amount of time that has lapsed since the previous survey and the additional consideration of two newly listed species with potential to occur within the project area, we are requesting that an updated survey be completed within the project area. We believe the survey area can be reduced to include only the sites that were previously determined to have at least marginal habitat quality or marginal habitat suitability, or sites where freshwater mussels were previously collected (Tables 1 and 2 - AST Environmental 2007). Sites where habitat quality was determined to be poor or where habitat was not suitable and where freshwater mussels were not found can be eliminated from this updated survey.

We will finalize our ESA Section 7 review upon receipt of the requested species/habitat survey. For further discussion, please contact Mr. Anthony Ford of my staff at (251) 441-5838.

Sincerely,



Dan Everson
Deputy Field Supervisor
Alabama Ecological Services Field Office

cc: Ms. Samantha Strickland, TVA, Pickwick-Wheeler Watershed Office, Muscle Shoals, AL
Mr. Bo Baxter, TVA, Endangered Species Compliance Group, Knoxville, TN
ADEM, Field Operations Division, Montgomery, AL



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

October 25, 2012

Mr. Bill Pearson
Field Supervisor
U.S. Fish and Wildlife Service
Alabama Field Office
1208-B Main Street
Daphne, Alabama 36526

Dear Mr. Pearson:

CONCURRENCE REQUEST - LIMESTONE COUNTY WATERLINE NEAR TENNESSEE RIVER MILE 304.6 NOT LIKELY TO ADVERSELY AFFECT FEDERALLY ENDANGERED PINK MUCKET AND ROUGH PIGTOE (FWS 2007-FA-0240)

Limestone County Water and Sewer Authority (LCWSA) has applied for a land easement from the Tennessee Valley Authority (TVA) lead agency and permits from the U.S. Army Corps of Engineers (USACE) pursuant to Section 10 of the *Rivers and Harbors Act of 1899* and Section 404 of the *Clean Water Act* for construction of a subterranean water pipeline across the Tennessee River near mile 304.6 (Wheeler Reservoir) in Limestone and Morgan Counties, Alabama. This project was previously proposed and coordinated with your office in 2007 (2007-FA-0240; see Attachment A [USFWS coordination letter to TVA]). In 2012, the LCWSA resumed plans for the project, which is described in the TVA Land Use Application (Attachment B). Given the time lapse since the initial application, your office requested (Attachment C) an updated mussel survey of the proposed project area (AST 2012 - Attachment D) to evaluate potential effects to federally listed as endangered mussels that may occur within or near the project area (pink mucket [*Lampsilis abrupta*], rough pigtoe [*Pleurobema plenum*], spectaclecase [*Cumberlandia monodonta*], and sheepnose [*Plethobasus cyphus*]). The 2012 survey report includes a description of these listed species in addition to habitat and mussels observed at the site.

The 2012 survey found low abundances of mussels (e.g. mean density <0.2 mussels/m²) represented by nine species, which were all common species tolerant of soft, fine sediments, like that found throughout most of the project area. No live or dead specimens of federally listed species were collected. Based on these survey results, as well as historical records and habitat requirements for spectaclecase and sheepnose, TVA determined that these two species likely do not occupy the project area and would not be affected by the project. Since more recent records of pink mucket and rough pigtoe occur near the site, and because these species are known to tolerate sand/silt/clay mixtures in large rivers and reservoirs, these two species could still occupy the river near the project. However, given the very low density of mussels and species richness in the project area, the pink mucket and rough pigtoe probably occur in such extremely low numbers that TVA has determined potential affects to these species would be discountable.

Mr. Bill Pearson
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October 25, 2012

Consequently, the TVA and USACE respectfully request your concurrence with our determination that the referenced project May Affect, but is Not Likely to Adversely Affect the federally listed as endangered pink mucket and rough pigtoe mussels. If you have any questions, please contact me in Knoxville, Tennessee at (865) 632-3360 or Chuck Howard at (865) 632-2092 of my staff.

Sincerely,

A handwritten signature in black ink, appearing to read "John (Bo) T. Baxter". The signature is fluid and cursive, with the first name "John" being more prominent.

John (Bo) T. Baxter
Manager
Endangered Species Act Compliance

Enclosures



United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:

NOV 09 2012

2013-I-0069

Mr. John T. Baxter, Manager
Tennessee Valley Authority
Endangered Species Act Compliance
400 West Summit Hill Drive
Knoxville, TN 37902-1499

Dear Mr. Baxter:

Thank you for your letter of October 25, 2012, requesting Endangered Species Act (ESA) Section 7 concurrence on the Tennessee Valley Authority (TVA) effects determination made in coordination with the U.S. Army Corps of Engineers (Corps) for the proposed installation of Limestone County's 30-inch water main pipeline from the City of Decatur, Alabama, across the Tennessee River near Tennessee River Mile 304.6, for the purpose of providing water service to portions of southeast Limestone County. Our comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

We understand that the June and July 2012 survey conducted in response to our previous letter (May 23, 2012) indicated no listed species found within the survey area and only marginally suitable habitat in very few areas for these listed species. Based upon this survey, we understand that a determination of May Affect, is but Not Likely to Adversely Affect has been made for the endangered pink mucket (*Lampsilis abrupta*) and rough pigtoe (*Pleurobema plenum*) mussels. Based on the size and type of effects associated with this project, and the reduced potential for impacts to these listed mussels, we believe that any effects will be discountable, and as such, concur with the TVA's determination that this project May Affect, but Not Likely to Adversely the endangered pink mucket and rough pigtoe mussels. Therefore, no further endangered species consultation will be required for this portion of the project unless: 1) the identified action is subsequently modified in a manner that causes an effect on a listed species or on proposed or designated critical habitat; 2) new information reveals the identified action may affect federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or a critical habitat is designated under the Endangered Species Act that may be affected by the identified action.

PHONE: 251-441-5181

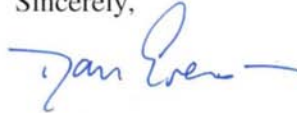
FAX: 251-441-6222

Mr. John T. Baxter

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For further discussion, please contact Mr. Anthony Ford of my staff at (251) 441-5838. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,



Dan Everson
Deputy Field Supervisor
Alabama Ecological Services Field Office

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