

Appendix E



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

Concurrence Form for Indiana Bat Survey Reports

Contact Name: Traci Cummings

Email Address or Fax Number: traci.l.cummings@wv.gov

FWS File #: 2015-TA-0096 All future correspondence should clearly reference this FWS File #.

Project: Kerens to Parsons Sections 2 & 3 and US 219 Relocation Project

The U.S. Fish and Wildlife Service (Service) has reviewed the report on the bat **mist net** survey conducted in the proposed project area and submitted on November 1, 2017. The survey followed the protocol outlined in the current Range-wide Indiana Bat Summer Survey Guidelines. These Guidelines are acceptable to address the endangered Indiana bat (*Myotis sodalis*) and the threatened northern long-eared bat (*Myotis septentrionalis*) (NLEB). The survey covered 15 acres/kilometers of potential bat habitat and was conducted at 15 net sites from June 6 to August 11, 2016. No Indiana bats were captured.

Three NLEB were captured and none were tracked during this survey.

The NLEB occurs within the range of the proposed project, and may be affected by the proposed construction and operation of this project. Any take of NLEB occurring in conjunction with these activities that complies with the conservation measures (as outlined in the 4(d) rule), as necessary, is exempted from section 9 prohibitions by the 4(d) rule and does not require site specific incidental take authorization. Note that the 4(d) rule does not exempt take that may occur as a result of adverse effects to hibernacula and that no conservation measures are required as part of the 4(d) unless the proposed project: 1) involves tree removal within 0.25 miles of known NLEB hibernacula; or 2) cuts or destroys known, occupied maternity roost trees or any other trees within a 150-foot radius around known, occupied maternity tree during the pup season (June 1 to July 31). This proposed project is not located within any of these radii around known hibernacula or roost trees and will not affect any known NLEB hibernacula, therefore any take of NLEB associated with this project is exempted under the 4(d) rule and no conservation measures are required.

Surveys are considered current for 5 years (the summer they are completed and the following four summer seasons). In this case, the survey will expire on May 15, 2021. If a significant amendment is proposed to change or expand this project, or if timber will be removed after that date, a new survey may be necessary and the Service should be contacted.

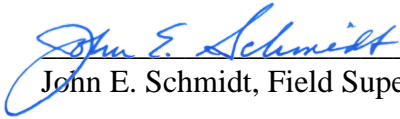
The area was surveyed for caves and abandoned mine portals and none were found in the project area.

Based on the information provided to us, the Service has concluded that no Indiana bats are expected to be adversely affected by the project and that any take of NLEB associated with this project is exempted under the 4(d) rule. Therefore, no biological assessment or further section 7 consultation under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered.

If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, ext. 15, or at the letterhead address.



Biologist 11/01/2017
Date



John E. Schmidt, Field Supervisor 11/01/2017
Date



United States Department of the Interior

FISH AND WILDLIFE SERVICE



West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

April 13, 2017

Mr. Ben Hark
West Virginia Department of Transportation
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, Appalachian Corridor H, Kerens to Parsons Section 2 & 3, Tucker County, West Virginia

Dear Mr. Hark:

This responds to your April 11, 2017, request for updated information regarding federally listed bats and migratory bird species along section 2 and 3 of the West Virginia Division of Highways (WVDOH) Appalachian Corridor H Kerens to Parsons project in Tucker County, West Virginia. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712).

Federally Listed Bats

Summer mist net surveys were completed in 2012 and while no Indiana bats (*Myotis sodalis*) were captured, northern long-eared bats (*Myotis septentrionalis*)(NLEB) were captured. Surveys are considered current for 5 years (the summer they are completed and the following four summer seasons). In this case, the survey expires on May 15, 2017.

Northern long-eared bat: The NLEB was proposed for listing in October 2013. The WVDOH proposed a NLEB conservation plan in October 2014 in an effort to be proactive prior to the potential listing of the NLEB to reach a may affect, not likely to adversely affect determination for this project. The West Virginia Field Office (WVFO) concurred with this plan on December 9, 2014. After the NLEB was formally listed as threatened in April 2015, with an interim 4(d) rule, the WVFO concurred with the effects determination in electronic correspondence on October 7, 2015.

On February 16, 2016, the final 4(d) rule for the NLEB went into effect. Projects clearing trees occurring outside of known use buffers for NLEB (¼-mile from hibernacula and 150-feet from

known roost trees) are exempt from take of the NLEB. In a letter dated March 29, 2016, the WVDOH requested to retract their October 2014 conservation plan for NLEB as the project is now exempt from take under the Final 4(d) rule. The WVFO concurred with this request on April 7, 2016. The project is exempt from take of the NLEB under the Final 4(d) rule.

Indiana bat: In the WVFO's December 9, 2014, letter, we concurred that the project may affect, but is not likely adversely affect the Indiana bat. Due to part of the project falling within a known-use buffer for Indiana bats, a conservation plan was developed for that portion of the proposed project. Conservation measures for the Indiana bat were included in the October 2014 conservation plan that also covered NLEB; however, a new conservation plan for Indiana bats was provided by the WVDOH on March 29, 2016, as take of the NLEB is now exempted under the Final 4(d) rule. Decota Consulting then provided an update to this conservation plan on January 25, 2017, which this office concurred with on March 13, 2017.

For portions of the project that fall within the Indian bat known-use area, the WVDOH has committed to do the following as a part of the new conservation plan for Indiana bats:

- Minimize limits of disturbance.
- Seasonally clear all trees ≥ 5 inches diameter at breast height between November 15 and March 31 within areas of the project that fall within 5-mile known-use buffers for the Indiana bat.
- Erect artificial roost structures on a 1:1 ratio for any potential primary roost trees cleared by the project (43 structures) and monitor those structures for 2 years.

Migratory Birds

The MBTA implements protection of all native migratory game and non-game birds with exceptions for the control of species that cause damage to agricultural or other interests. According to 50 CFR § 10.12, a migratory bird means any bird, whatever its origin and whether or not raised in captivity, which belongs to a species listed in the Service's regulations, or which is a mutation or a hybrid of any such species, including any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. In total, 836 bird species are protected by the MBTA.

The MBTA prohibits the take of any migratory bird, part, nest, egg or product. Take, as defined in the MBTA, includes by any means or in any manner any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof.

The MBTA does not explicitly include provisions for permits to authorize incidental take of migratory birds. While it is not possible to absolve individuals or companies from MBTA or the Bald and Golden Eagle Protection Act (BGEPA) liability, the Service's Office of Law Enforcement focuses its resources on investigating and prosecuting those who take migratory birds without identifying and implementing reasonable and effective measures to avoid take. The Service will regard a company's coordination and communication with the Service, as appropriate means of identifying and implementing reasonable and effective measures to avoid the take of species protected under the MBTA and BGEPA.

Mr. Ben Hark
April 3, 2017

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The potential exists, therefore, for avian mortality from habitat destruction and alteration within the project boundaries.

No biological assessment or further section 7 consultation under the ESA is required with the Service for the proposed project. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, ext. 15, or elizabeth_stout@fws.gov or at the letterhead address.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Schmidt", written in a cursive style.

John E. Schmidt
Field Supervisor

Mr. Ben Hark
April 3, 2017

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cc:

Project File

Reader File

ES:WVFO:LStout

Filename: P:\I - Users\Liz Stout\DOH\WVDOH Corridor H Kerens to Parsons section 2 and
3.docx



United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241



Concurrence Form for Indiana Bat Conservation Plans

Contact Name: Sydney Burke

Email Address or Fax Number: Sydney.T.Burke@wv.gov

FWS File # 2015-TA-0096 **All future correspondence should clearly reference this FWS File #.**

Project: Corridor H Kerens to Parsons

The U.S. Fish and Wildlife Service (Service) has received your Indiana Bat Conservation Plan dated 01/27/2017. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973 (ESA)(87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

This plan was developed because either: 1) you have chosen to assume that the federally listed Indiana bat (*Myotis sodalis*) is present within your project area; **OR** 2) that the federally listed Indiana bat is known to occur in the area as a result of summer maternity surveys **or** X winter hibernacula/fall swarming surveys. Habitat assessments were conducted within the proposed project area in March 2016. The results of the habitat assessment for the proposed project are as follows:

1. An estimated 575 acres of forest would be cleared for the project, which leaves an estimated 928 acres or 48.36 percent of forested habitat within the $\frac{1}{4}$ -mile buffer area after project clearing has been completed. The total number of acres in the buffer area is 1503.
2. 2935 potential bat roost trees were identified within the project area. None of these trees will be avoided during project construction.
3. No portals or caves were observed within the project area.

In the Indiana Bat Conservation Plan, the project proponent stated their commitment to the avoidance, minimization, and conservation measures listed on the attached summary sheet.

These measures are designed to address the potential direct and indirect effects that may occur as a result of the project, and will ensure that no Indiana bats will be directly killed by the removal of trees, and that roosting and foraging habitat will remain within the project area after project construction.

Based on the commitment to implement these measures, the Service does not anticipate that this project is likely to adversely affect the Indiana bat. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing or any project construction activities on any portion of the parcel should occur until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. Section 7 consultation is not complete until the federal action agency submits a determination of effects to this office, the Service concurs with the federal action agency's determination, and the federal action agency agrees to incorporate this Indiana Bat Conservation Plan as a mandatory condition for any permit decision rendered for this project. All measures must be implemented as proposed. If there is no federal nexus associated with this project, then no further coordination with this office is required.

Based on the information provided, the Service has determined that the northern long-eared bat (NLEB) (*Myotis septentrionalis*) is within the range of the proposed project, and may be affected by the proposed construction and operation of this project. Any take of NLEB occurring in conjunction with these activities that complies with the conservation measures (as outlined in the 4(d) rule), as necessary, is exempted from section 9 prohibitions by the 4(d) rule and does not require site specific incidental take authorization. Note that the 4(d) rule does not exempt take that may occur as a result of adverse effects to hibernacula and that no conservation measures are required as part of the 4(d) unless the proposed project (1) involves tree removal within 0.25 miles of known NLEB hibernacula; or (2) cuts or destroys known, occupied maternity roost trees or any other trees within a 150-foot radius around known, occupied maternity tree during the pup season (June 1 to July 31). This proposed project is not located within any of these radii around known hibernacula or roost trees and will not affect any known NLEB hibernacula, therefore any take of NLEB associated with this project is exempted under the 4(d) rule and no conservation measures are required.

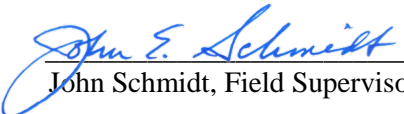
Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered.

If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, ext. 15, or at the letterhead address.



 Biologist
 01/30/2017

 Date



 John Schmidt, Field Supervisor
 1/31/2017

 Date

Avoidance and Minimization Measures to be Applied on Project

- Seasonal tree clearing (all trees greater than 5" DBH) **REQUIRED**
- Avoid cutting potential roost trees
- Avoid high quality foraging areas
- Minimize limits of disturbance (narrowed LOD or ROW)
- Minimize impacts (clearing) around suitable swarming and summer habitat and wetland/riparian zones
- 50-foot or greater forested buffer left along both sides of streams
- Collocate project features with previously disturbed or cleared areas
- Phase tree clearing over multiple years
- Reforest disturbed areas
- Restore or enhanced riparian/wetland areas
- Strong erosion and sedimentation best management practices
- Pollution control plan in place
- Suitable habitat acreage permanently preserved within or adjacent to the project site
- Other: _____
- Other: _____
- Other: _____

Conservation Measures to be Applied on Project

- Erecting artificial roosting structures on a 1:1 ratio for each potential primary roost tree that is lost during project development (a 2-year minimum monitoring plan of artificial structures) (55 structures)
- Erecting artificial roosting structures on a 4:1 ratio to replace potential secondary roost trees that are lost during project development (a 2-year minimum monitoring plan of artificial structures) (___ structures)
- Erecting artificial bark, bat boxes, or other artificial roosting structures (a 2-year minimum monitoring plan of artificial structures) (_____ structures)
- Girdling trees on a 1:1 ratio for each potential secondary roost tree that is lost during project development (___ trees)
- Preservation of suitable Indiana bat habitat within or adjacent to the project site (110 acres)
- Creation of watering areas, wetlands, or ponds
- Other: _____
- Other: _____
- Other: _____



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

November 8, 2016

Mr. Ben Hark
West Virginia Department of Transportation
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, Appalachian Corridor H, Kerens to Parsons
Section 2, Tucker County, West Virginia

Dear Mr. Hark:

This responds to your August 16, 2016, request for updated information regarding federally listed small whorled pogonia (SWP) (*Isotria medeoloides*) along the proposed West Virginia Division of Highways (WVDOH) Appalachian Corridor H Kerens to Parsons Section 2 in Tucker County, West Virginia. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Botanical surveys on the Kerens to Parsons section of Appalachian Corridor H were completed in 2012 and 2013 and found two populations of SWP on Section 1. Through coordination with the West Virginia Field Office, and implementation of multiple avoidance and minimization measures, WVDOH was able to avoid effects to these populations of SWP and received concurrence from this office in a letter dated December 9, 2014.

Due to the passing of time since these surveys were completed and minor adjustments to the alignment over time, more botanical surveys were conducted during the 2016 survey season. On June 24, 2016, a new population of SWP was found within U.S. Forest Service owned property of Kerens to Parson Section 2. The proposed alignment of Corridor H would have directly impacted this population. WVDOH prepared an engineering study to evaluate alternatives to avoid and minimize effects to this population to the maximum extent practicable.

Three options for shifting the alignment away from the population were examined: one option to the north and two options to the south. Because the northern option was more costly and would result in impacts to hydrology around the SWP population, WVDOH did not carry this option forward for more analysis. Of the two southern alignment options evaluated, WVDOH proceeded with a more detailed investigation of the route that was further away from the SWP population (250 feet as opposed to 180 feet). Analyses to examine how construction of the road

Mr. Ben Hark
November 8, 2016

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in this new southern alignment may affect and alter the microclimate of the population were also performed. The results of these analyses are as follows:

1. The southern alignment is south of the SWP population, 200 feet lower in elevation, and 250 feet from the population at it's nearest point and there will be no effect to existing canopy cover or sun exposure.
2. Because the population does not occur adjacent to a stream and is higher in elevation than nearly all of the proposed cut for the highway construction, hydrology will not be impacted. Additionally, with this new alignment, there will be 3,000 feet of fewer impacts to streams.
3. The shadow analysis demonstrated that there will be no effect to the current pattern of direct sunlight exposure on the SWP population or its surroundings due to the construction of the highway.

In addition to the above, WVDOH will avoid locating access roads and waste areas in locations where they may affect the SWP population. WVDOH has also retained SWP experts from the Smithsonian Institution to implement a monitoring plan for this population and the other populations of SWP found along Corridor H.

As a result of the above information, the Service concurs that the proposed project is not likely to adversely affect SWP.

No biological assessment or further section 7 consultation under the ESA is required with the Service for the proposed project. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, Ext. 15, elizabeth_stout@fws.gov, or at the letterhead address.

Sincerely,



John E. Schmidt
Field Supervisor



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

August 1, 2016

Mr. Ben Hark
West Virginia Department of Transportation
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, Appalachian Corridor H, Kerens to Parsons
Section 3, Tucker County, West Virginia (FWS File No. 2015-TA-0096)

Dear Mr. Hark:

This responds to your July 22, 2016, request for updated information regarding federally listed running buffalo clover (*Trifolium soloniferum*) along the proposed West Virginia Division of Highways (WVDOH) Appalachian Corridor H Kerens to Parsons Section 3 in Tucker County, West Virginia. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Botanical surveys on the Kerens to Parsons section of Appalachian Corridor H were completed in 2012 and 2013 and found no populations of running buffalo clover. Due to the passing of time since these surveys were completed and minor adjustments to the alignment over time, more botanical surveys were conducted during the 2016 survey season.

On May 26, 2016, an 8-foot by 15-foot population of running buffalo was found on section 3 of the Kerens to Parsons section of Corridor H. The current alignment of Corridor H will directly impact this population. WVDOH prepared an engineering study to evaluate alternatives to avoid and minimize impacts to this population to the maximum extent practicable.

Three options for shifting the alignment ≥ 200 feet from the population were examined: two options to the north and one option to the south. Because the southern option had fewer impacts to streams, WVDOH proceeded with a more detailed investigation of that route. They also performed analyses to examine how construction of the road in this new southern alignment may impact and alter the microclimate of the population. These analyses examined how the road's construction may impact wind, hydrology, and solar exposure. The results of these analyses are as follows:

1. The southern alignment is south of the running buffalo clover population, lower in elevation, and 250 feet from the population at it's nearest point.
2. Because the population does not occur adjacent to a stream and is higher in elevation than nearly all of the proposed cut for the highway construction, hydrology will not be impacted.
3. Due to the highway being 250 feet away to the south and lower in elevation, the construction will not have an impact on winds reaching the population as these winds are predominantly from the west-northwest.
4. The shadow analysis demonstrated that there will be no effect to the current pattern of direct sunlight exposure on the running buffalo clover population or its surroundings due to the construction of the highway.

As a result of this information, the Service concurs that the proposed project is not likely to adversely affect running buffalo clover.

No biological assessment or further section 7 consultation under the ESA is required with the Service for the proposed project. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, Ext. 15, elizabeth_stout@fws.gov or at the letterhead address.

Sincerely,



John E. Schmidt
Field Supervisor



United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241



April 7, 2016

Mr. Ben Hark
West Virginia Department of Transportation
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, Appalachian Corridor H, Kerens to Parsons Section,
Randolph and Tucker Counties, West Virginia - Update on Bats

Dear Mr. Hark:

This responds to your March 29, 2016, request for updated information regarding the federally listed Indiana (*Myotis sodalis*) and northern long-eared (*Myotis septentrionalis*)(NLEB) bat species along the proposed West Virginia Division of Highways (WVDOH) Appalachian Corridor H Kerens to Parsons Section in Randolph and Tucker Counties, West Virginia. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Summer mist net surveys were completed in 2012 and while no Indiana bats were captured, NLEB were captured. Surveys are considered current for 5 years (the summer they are completed and the following four summer seasons). In this case, the survey expires on May 15, 2017.

Northern long-eared bat

The NLEB was proposed for listing in October 2013. The WVDOH proposed a NLEB conservation plan in October 2014. This plan was an effort to be proactive prior to the potential listing of the NLEB and reach a may affect, not likely to adversely affect determination for this project. The West Virginia Field Office (WVFO) concurred with this plan on December 9, 2014. After the NLEB was formally listed as threatened in April 2015, with an interim 4(d) rule, the WVFO concurred with the effects determination in electronic correspondence on October 7, 2015.

On February 16, 2016, the final 4(d) rule for the NLEB went into effect. Projects clearing trees occurring outside of known use buffers for NLEB (¼-mile from hibernacula and 150-feet from known roost trees) are exempt from take of the NLEB. In a letter dated March 29, 2016, the WVDOH requested to retract their October 2014, conservation plan for NLEB as the project is now exempt from take under the Final 4(d) rule. The WVFO concurs with this request; the project is exempt from take of the NLEB under the Final 4(d) rule.

Mr. Ben Hark
April 7, 2016

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Indiana bat

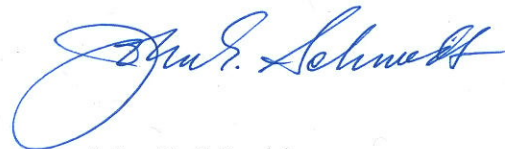
In the WVFO's December 9, 2014, letter, we concurred that the project may affect, but not likely adversely affect the Indiana bat. Conservation measures for the Indiana bat were included in the October 2014 conservation plan that also covered NLEB, however a new conservation plan for Indiana bats has been provided with your March 29, 2016, correspondence as take of the NLEB is now exempted under the Final 4(d) rule.

The WVDOH commits to do the following as a part of the new conservation plan for Indiana bats:

- Minimize limits of disturbance.
- Seasonally clear all trees \geq 5 inches diameter at breast height between November 15 and March 31 within areas of the project that fall within 5-mile known-use buffers for the Indiana bat.
- Erect artificial roost structures on a 1:1 ratio for any potential primary roost trees cleared by the project (43 structures) and monitor those structures for 2 years.

No biological assessment or further section 7 consultation under the ESA is required with the Service for the proposed core borings project. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, Ext. 15, elizabeth_stout@fws.gov, or at the letterhead address.

Sincerely,



John E. Schmidt
Field Supervisor