

Endangered Species Act

Section 7 Technical Assistance

U.S. Fish and Wildlife Service, Indiana Ecological Services Field Office
March 2022

This document provides section 7 consultation guidance for federal agencies and their applicants and designated non-federal representatives. We provide this information to help ensure that federal agencies may fulfill their section 7 obligations while streamlining their interactions with U.S. Fish and Wildlife Service Indiana Ecological Services Field Office.

Context

Section 7 of the Endangered Species Act of 1973 (ESA) requires all Federal agencies to use their authorities to conserve endangered and threatened species in consultation with U.S. Fish and Wildlife Service (USFWS). This ‘proactive conservation mandate’ for Federal agencies is articulated in section 7(a)(1) of the law. Section 7(a)(2) contains a complementary consultation mandate for Federal agencies, which we discuss below.

Section 7(a)(2) Mandate

Section 7(a)(2) directs all Federal agencies to ensure that the actions they authorize, fund, or carry out do not jeopardize the continued existence of endangered or threatened species or destroy or adversely modify critical habitat. The Section 7 implementing regulations (50 CFR Part 402) specify how Federal agencies are to fulfill their section 7(a)(2) consultation requirements.

Section 7(a)(2) Responsibilities

Under the Section 7 implementing regulations (50 CFR Part 402), Federal agencies must review their actions to determine whether they may affect endangered or threatened species or critical habitat. To accomplish this, Federal agencies must determine whether any listed species may be present in the action area and whether that area overlaps with critical habitat. We explain how to do that in Step 2 of this guidance.

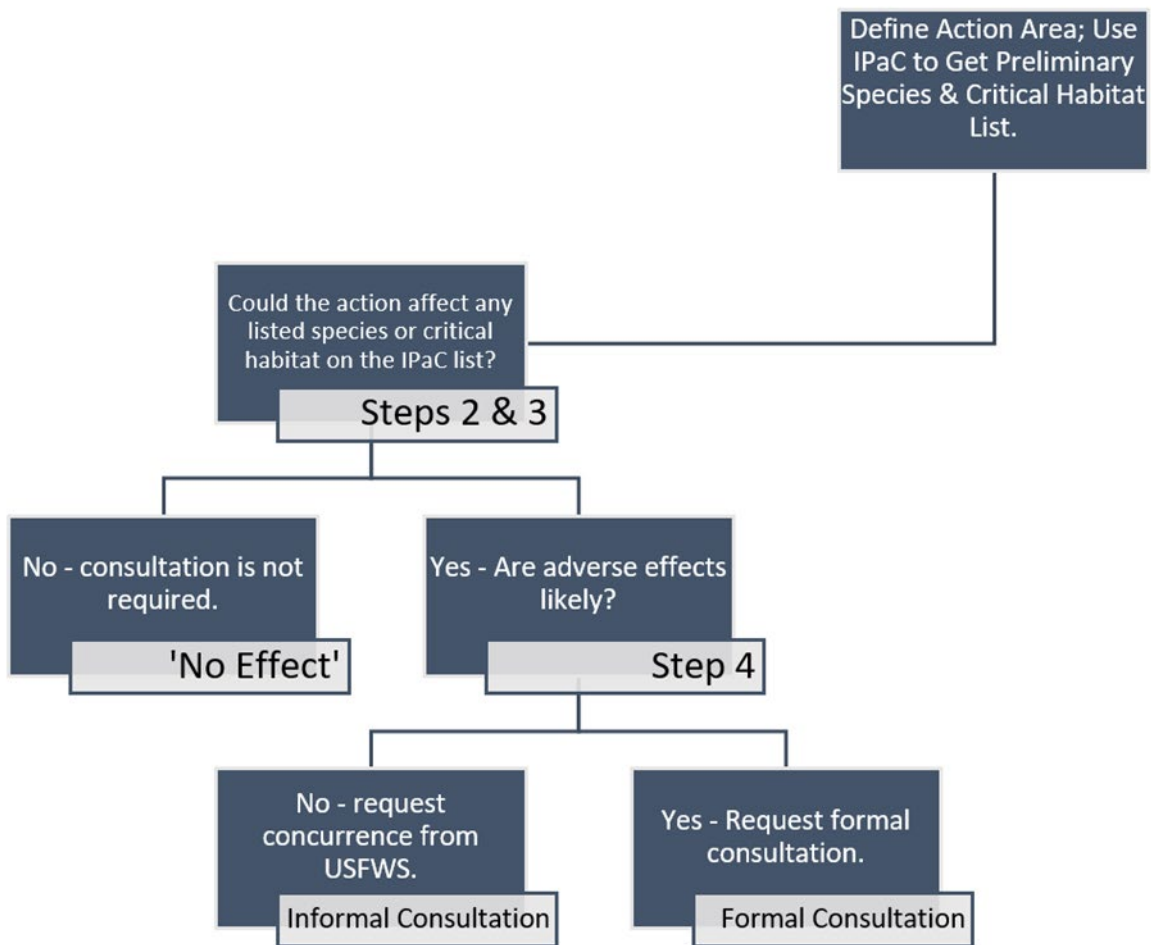
If one or more listed species may be present in the action area – or if critical habitat overlaps with the action area – agencies must evaluate the potential effects of their action (see Step 3 and Step 4 of this guidance). If no species or their critical habitat are present or affected, no consultation is required. Consultation will be either informal, ending with written concurrence from USFWS, or formal. Formal consultation concludes when USFWS delivers its biological opinion to the Federal agency.

Requirements for Proposed Species and Proposed Critical Habitat

Agencies must confer with the USFWS per Section 7(a)(4) of the ESA if any action is likely to jeopardize a species proposed for listing or to destroy or adversely modify proposed critical habitat. To determine whether either of these are likely, agencies may follow the same approach that we recommend for listed species and designated critical habitat – that is, evaluate the likely effects of their actions on any proposed species that may be present in the action area and on any proposed critical habitat that overlaps with the action area.

Section 7 Consultation Technical Assistance Step-by-Step Instructions

S7 Process Flow Chart



NOTE: If at any time additional information is needed or you want personal assistance, you may contact us. Using this site in no way precludes project proponents from receiving personal assistance from the Indiana Ecological Services Field Office.

Step 1

Based on your project type (listed below), either contact the Indiana Ecological Services Field Office or proceed to Step 2:

- For wind energy projects, contact the Indiana Ecological Services Field Office for assistance.
- For projects installing towers that use guy wires or are over 200 feet in height, contact the Indiana Ecological Services Field Office for assistance.
- For all other projects, continue with Step 2.

Step 2

Determine whether a listed or proposed species or designated or proposed critical habitat may be present within the action area.

- A. Define the action area for your project.
- B. Enter the action area location into IPaC and review the resulting Resources list. The Endangered Species part of the IPaC Resources list will include endangered species, threatened species, species proposed for listing, candidate species, and critical habitats.
<https://ipac.ecosphere.fws.gov/>

If there are no species or critical habitats on the Endangered Species portion of the Resources list:

- conclude "no species and no critical habitat present" and document your finding. No consultation under ESA section 7(a)(2) is required if the action would result in no effects to listed species or critical habitat.
 - If any species or critical habitats are on the Resources list, continue to C.
- C. If your project is any of the following, follow the link to navigate directly to project specific instructions:
 - [a HUD project](#),
 - [a pipeline or buried utility project](#),
 - [a telecommunication project](#),
 - [a request for a Conditional Letter of Map Revision \(CLOMR\) from FEMA](#), or
 - [any project that is likely to affect only developed areas](#).

Carefully weigh any potential impacts to surface or groundwater that could have consequences for species or critical habitats even if project activities take place only in developed, cultivated, or disturbed areas.

- D. Review Species Guidelines attached to the Resources list, if any, or review species information pages and other information sources.

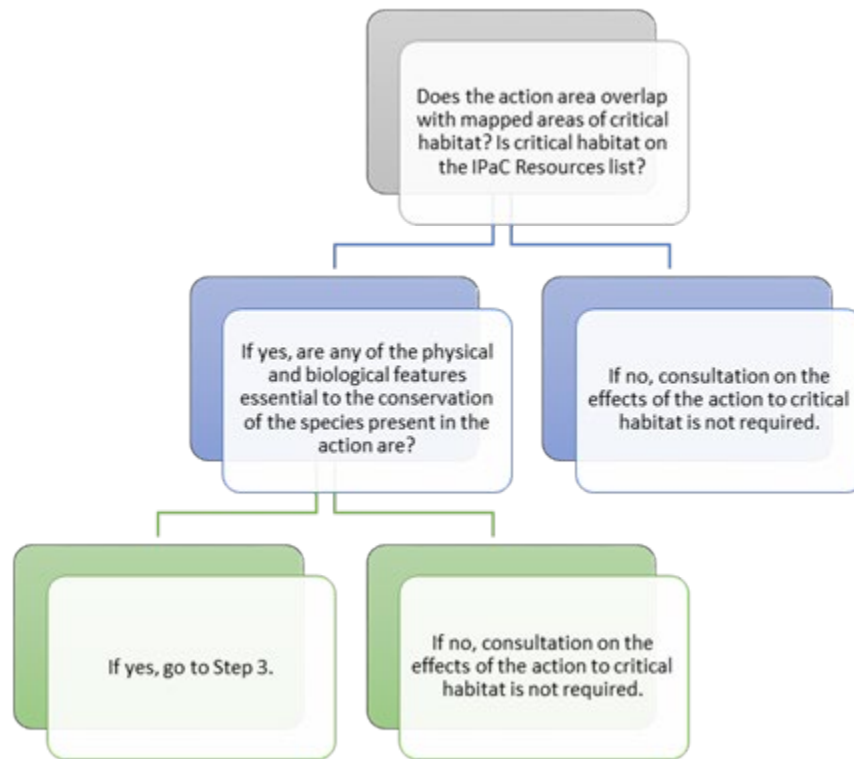
Cross-reference the species information with your knowledge of the action area, including the results of surveys. Review Table 1 and Figure 1 to determine the next step for each species and critical habitat.

Note that for some species or projects, IPaC will present you with *Determination Keys*. You may be able to use one or more Determination Keys to conclude consultation on your action.

Certain projects nearly always warrant a “No Effect” determination. This guidance is intended to assist project proponents in determining whether their project qualifies as one of these types of projects, and if so, to provide a streamlined mechanism for [documenting their "No Effect" finding](#). If your project does not meet the criteria outlined in the following pages, your action requires further review.

Table 1. General guidelines for evaluating whether species on the IPaC Endangered Species list may be present in an action area. If species-specific survey guidelines are available, follow those guidelines to carry out surveys and to interpret results, as appropriate.

Is the Species' Habitat Present in the Action Area?	Species Survey Result	Conclusion	Next Step	Comments
No	Survey not warranted	Species not present in action area	Consultation not required	Consider the potential for the species' habitat to become established in the action area before effects of the action have ended.
Yes	Survey(s) for species in the action area are negative	Species not present in action area ¹	Consultation not required	¹ Plan and implement surveys and interpret results in coordination with USFWS and/or in accordance with USFWS-recommended survey protocols.
Yes	Survey data unavailable or inconclusive for action area	Assume species is present in the action area.	Proceed to Step 3	
Yes	Survey(s) for species in the action area are positive	Species is present		



Step 3

Determine whether the proposed action may affect listed or proposed species or designated or proposed critical habitat.

In step 2, you found that (1) a listed species is likely to be present in the action area or (2) the action area overlaps with critical habitat. In this step, you will determine whether your project may affect a listed species or critical habitat and whether consultation is required.

- A. Describe the action and the effects of the action. Identify stressors or effects to the species and to the essential physical and biological features of any critical habitat that overlaps with the action area.
- B. Determine whether any of the species are likely to be exposed to stressors caused by the proposed action. Consider all consequences of the action and assess the potential for each life stage of the species that occurs in the action area to be exposed to the stressors. Deconstruct the action into its component parts to be sure that you do not miss any part of the action that could cause effects to the species.

If no listed or proposed species will be exposed to stressors caused by the action, a 'no effect' conclusion may be appropriate – be sure to separately assess effects to critical habitat, if any overlaps with the action area.

Stressors that affect species' resources may have consequences even if the species is not present when the project is implemented. For example, removal of Indiana bat maternity roost trees during the winter would affect females when they return from hibernacula in the spring.

- C. If the action area does not overlap with critical habitat, go to Step D. If it does, determine whether the proposed action or other activities that are caused by the proposed action will affect any of the physical and biological features (PBF) of critical habitat. Deconstruct the action into its component parts to be sure that you do not inadvertently exclude any potential consequences of the action. Go to Step D.
- D. Determine whether – and how – the species or critical habitat PBFs are likely to respond or change, respectively, upon exposure. Check the pertinent "SPECIES INFO" thumbnail available from within IPaC for useful information sources.

Determination and Next Steps

No Effect

A 'no effect' conclusion would be appropriate if the proposed action – or other activities that are caused by the proposed action – would have no consequences to listed species or critical habitat.

Document your finding. The ESA does not require consultation if the proposed action and other activities that are caused by the proposed action will result in no effect whatsoever to listed species or critical habitat.

If the proposed action – or other activities that are caused by the proposed action – may affect proposed species or proposed critical habitat, determine whether a conference [ESA §7(a)(4)] is required.

May Affect

A 'may affect' determination would be appropriate if the proposed action – or other activities that are caused by the proposed action – may have consequences to listed species or critical habitat. For example, one or more individuals of a listed species may respond to a stressor caused by the proposed action or by other activities that are caused by the proposed action; or, the proposed action or other activities that are caused by the proposed action may result in changes to one or more critical habitat PBFs in the action area.

To determine whether the potential effects are likely to be adverse, proceed to Step 4.

Adequacy of Information & Surveys

Agencies may base their determinations on the best evidence that is available or can be developed during consultation. Agencies must give the benefit of any doubt to the species

when there are any inadequacies in the information. Inadequacies may include uncertainty in any step of the analysis. If determinations are based on inadequate information, then the Federal agency has a “continuing obligation to make a reasonable effort to develop that information.”

To provide adequate information on which to base a determination, it may be appropriate to conduct surveys to determine whether listed species are present in the action area. Please contact the Indiana Ecological Services Field Office for more information or see the survey guidelines that the Service has made available in IPaC.

Step 4

Determine whether listed or proposed species or designated or proposed critical habitat may be adversely affected.

In Step 3, you determined that the proposed action or other activities that are caused by the proposed action may affect a species or critical habitat. The next step is to describe the manner in which they will respond or be altered. Specifically, to assess whether the species/critical habitat is "not likely to be adversely affected" or "likely to be adversely affected." Consider the following in making your finding:

- A. When you are basing your determination on effects to the species' habitat or other resources rather than to the species itself, conduct a two-part assessment:
 - 1) determine how the habitat or the resource will respond to the proposed action (for example, changes in habitat quality, quantity, availability, or distribution), and
 - 2) assess how the species is expected to respond to the effects to its habitat or other resources.
- B. Critical habitat analyses focus on how the proposed action will affect the physical and biological features of the critical habitat in the action area.
- C. A proposed action warrants a "may affect, not likely to be adversely affect" finding when its effects – and the effects of other activities that are caused by the proposed action – are wholly beneficial, insignificant, or discountable.

If there will be only beneficial effects, conclude "may affect, not likely to adversely affect" and submit your finding and supporting rationale to the Indiana Ecological Services Field Office and request concurrence.

If all effects of the action are:

- Only beneficial, conclude “may effect, not likely to adversely affect”
- expected to be insignificant, conclude "may affect, not likely to adversely affect"

- expected to be discountable, then conclude “may affect, not likely to adversely affect”

[Submit your finding and supporting rationale](#) to the Indiana Ecological Services Field Office and request concurrence. You may submit your request electronically to IndianaFO@fws.gov.

- D. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, check the Species-Specific Section 7 Guidance and Conservation Measures to determine whether there are any measures that may be implemented to avoid or minimize the negative effects. See also any species guidelines made available through IPaC (see Step 3).

If you modify your proposed action to include conservation measures, assess how inclusion of those measures will likely change the effects of the action.

Conservation measures may, for example, alter or eliminate the exposure of species or critical habitat PBFs to stressors or they may modify how the species or PBFs are likely to respond to such exposure. Repeat Step 3 and document your conclusion, as appropriate. Be sure to identify the specific conservation measures you intend to incorporate and their associated biological consequences.

- E. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, contact the Indiana Ecological Services Field Office for assistance.

HUD Projects

Step 3

Does your project meet both of the following criteria?

- located entirely within a "developed area" (an area that is already paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping), and
- does not entail any new construction activities?

Yes – Continue to Step 4 of the “no effect” determination process.

No - Your project requires further review. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

Step 4

Does your project entail one of the following?

- the rehabilitation of existing buildings, if the rehabilitation does not significantly alter present capacity or use, or
- the reconstruction or resurfacing of existing infrastructure (e.g., streets, sewers, sidewalks, etc.) without disturbance to previously undisturbed ground, or the removal of urban blight, through the demolition of unwanted and unsightly structures, provided that the locations for disposal and stockpiling of demolition debris are clearly described in project plans and do not contain plant or animal habitats, or
- the refinancing or remortgaging of existing buildings or structures.

Yes - Go to Step 5 to complete the "no effect" determination process.

No - Your project requires further review. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

Step 5

"No Effect" Determination and Documentation

Your project is located entirely within an urban area (incorporated village or city) and does not involve any new construction activities. Additionally, your project entails one of the following characteristics:

- the rehabilitation of existing buildings, if the rehabilitation does not significantly alter present capacity or use, or
- the reconstruction or resurfacing of existing infrastructure (e.g., streets, sewers, sidewalks, etc.) without disturbance to previously undisturbed ground, or
- the removal of urban blight, through the demolition of unwanted and unsightly structures, provided that the locations for disposal and stockpiling of demolition debris are clearly described in project plans and do not contain plant or animal habitats.

Based on these characteristics, a "No Effect" determination is appropriate because the project will not occur within suitable habitat for any listed species and/or no habitat disturbance is anticipated. Hence, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

Pipeline or Buried Utilities Projects

Step 3

Is your project located entirely within existing, fenced, graveled/mowed, and maintained facility yards?

Yes - Continue to Step 4 of the "no effect" determination process.

No - Your project requires further review. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

Step 4

Is the Karner blue butterfly on the species list?

Yes - Your project requires further review. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

No - Go to Step 5 to complete the "no effect" determination process.

Step 5

"No Effect" Determination and Documentation

A "No Effect" determination is appropriate for your project. As it is located entirely within existing, fenced, graveled/mowed, and maintained facility yards and the Karner blue butterfly is not on the county list, your project will not affect suitable habitat for any listed species. Therefore, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

Telecommunication Projects

Step 3

A. Does your project involve installing towers that include use of guy wires?

Yes - Your project requires further review. Please contact the Indiana Ecological Services Field Office for assistance.

No - Continue to Step 3.B.

B. Does your project involve removal of native vegetation (i.e., vegetation other than cultivated plants and lawns)?

Yes - Your project requires further review. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

No - Continue to Step 4 of the "no effect" determination process.

Step 4

Does your project entail one of the following?

- Addition of communication-related devices to existing tower structures, along with any associated equipment, within existing disturbed areas, or
- Installation of new towers, antennas, and associated equipment in previously disturbed areas, in basements, or on existing buildings, rooftops, billboards, and bridges, or
- Expansion of tower compounds in previously disturbed areas.

Yes - Go to Step 5 to complete the "no effect" determination process.

No - Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

Step 5

"No Effect" Determination and Documentation

Your project does not involve removal of any native vegetation and entails one of the following activities:

- Addition of communication-related devices to existing tower structures, along with any associated equipment, within existing disturbed areas (e.g., manicured lawns, active agricultural fields, paved, graveled, or otherwise unvegetated areas that do not require impacts to trees)

- Construction of new or existing towers, antennas and associated equipment installed on or in existing buildings, rooftops, billboards, basements, or bridges, or located in previously disturbed areas (e.g., manicured lawns, active agricultural fields, paved, graveled, or otherwise unvegetated areas that do not require impacts to trees).
- Expansion of tower compounds in previously disturbed areas (e.g., manicured lawns, active agricultural fields, paved, graveled, or otherwise unvegetated areas that do not require impacts to trees).

Based on these factors, a "No Effect" determination is appropriate because the project will not remove suitable habitat for any listed species and/or no habitat disturbance is anticipated. Hence, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

FEMA: Conditional Letter of Map Revision (CLOMR) Projects

The Federal Emergency Management Agency (FEMA) is responsible for demonstrating compliance with section 7 of the Endangered Species Act for all projects proposed within Special Flood Hazard Areas where a Conditional Letter of Map Revision (CLOMR) or CLOMR-F (with Fill) request is made for FEMA's review.

As part of the CLOMR application process, FEMA asks applicants to ensure that Endangered Species Act compliance has been achieved prior to submitting their CLOMR applications to FEMA.

We anticipate that many of the CLOMR projects will not affect federally listed species. Thus, we developed the following process to assist CLOMR applicants in quickly assessing whether they require further assistance from us in meeting their Endangered Species Act requirements per FEMA instructions. The following steps (4 to 6) help determine whether a proposed action will have an effect on listed species, and if a "no effect" determination is reached, provide documentation to accompany the FEMA application.

Step 3

Is your project located entirely within a "developed area" (an area that is paved or supports structures and vegetation limited to grass or conventional landscaping)?

No - Continue to Step 4 of the "no effect" determination process.

Yes - Go to Step 5 to complete the "no effect" determination process.

Step 4

Does your project meet one of the following criteria?

- Suitable habitat is not present in the action area for any of the species on the IPaC species list, or
- Suitable habitat is present, but current data (e.g., surveys) are sufficient to determine that none of the species or critical habitats on the IPaC list are present in the action area.

Yes – Go to Step 5 to complete the "no effect" determination process.

No – Your project requires further review. If suitable habitat is present, and no other data indicate species or critical habitat are absent, a survey may be conducted to determine whether listed species or critical habitat are present. Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

Step 5

["No Effect" Determination and Documentation](#)

You have determined that the action for which you are seeking a Conditional Letter of Map Revision (or CLOMR-F) will have no effect on listed species because it meets one of the following criteria.

- Is located entirely within a "developed area" (an area that is paved or supports structures and vegetation limited to grass or conventional landscaping), or
- Suitable habitat is not present in the action area of your project, or
- Suitable habitat is present, but current data (e.g., surveys) indicate species and critical habitat are absent from the action area. (Documentation of survey or other evidence is attached to this form).

Based on these characteristics, a "No Effect" determination is appropriate because the project will not occur within suitable habitat for any listed species, no habitat disturbance is anticipated, or listed species are known to not occur within the action area. Hence, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

Projects within a Developed Area

Developed areas are already paved; covered by structures or lawns; or, mowed too frequently to develop semi-natural characteristics. Be careful when assessing actions that affect – 1) rights-of-ways that contains natural or semi-natural vegetation despite periodic mowing or other management; and 2) surface water or groundwater. Several species inhabit rights-of-ways, and you should carefully consider effects to surface water or groundwater, which often extend outside of a project's immediate footprint.

Step 3

Is your project located within or adjacent to any un-landscaped areas that support native vegetation (trees, shrubs, or grasses)?

No – Go to Step 4 to complete the “no effect” determination process.

Yes – Continue to Step 5 of the “no effect” determination process.

Step 4

["No Effect" Determination and Documentation](#)

Your project will have "no effect" on federally listed species. A "No Effect" determination is appropriate because your project is:

- within a Developed Area (an area that is already paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping), and
- is not within or adjacent to any un-landscaped areas that support native vegetation (trees, shrubs, or grasses).

Since your project is not within suitable habitat for listed species, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

Step 5

Does your project involve removal of native vegetation (i.e., vegetation other than cultivated plants and lawns)?

Yes - Return to [Step 2](#) of the S7 Technical Assistance Step-by-Step Instructions.

No – Go to Step 6 to continue with the "No Effect" determination process.

Step 6

["No Effect" Determination and Documentation](#)

Your project will have "no effect" on federally listed species. A "No Effect" determination is appropriate because your project is:

- within a Developed Area (an area that is already paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping), and
- does not involve removing native vegetation.

Since it will not affect suitable habitat for listed species, no listed species or designated critical habitat is anticipated to be directly or indirectly affected by this action.

Example “No Effect” Determination Documentation¹

MEMO

TO: Federal Energy Regulatory Commission

FROM: Dave Woods, Senior Project Engineer

DATE: August 10, 2006

RE: Section 7 Endangered Species Act Consultation – Stewart Branchline Extension - BT Project No: 555

Big Tree Oil Company operates natural gas pipelines in Iowa by authority of the Federal Energy Regulatory Commission (FERC) and is in the process of completing a NEPA Checklist for the Stewart Branchline Extension Project (BT Project Number: 555) in Decatur County, Iowa (T69N, R25W, Section 26).

The Stewart Branchline Extension consists of construction of 800 additional feet of 10-inch pipe. The project footprint includes an area approximately 10 feet by 800 feet with an additional 100-foot by 200-foot temporary workspace. Project construction is scheduled in October or November 2006.

Big Tree carefully reviewed the U.S. Fish and Wildlife technical assistance website on June 30, 2006, for federally listed threatened and endangered species. According to the website, 4 species are listed and may be present in Decatur County: the Indiana bat, eastern prairie fringed orchid, and Mead’s milkweed are listed as occurring in Decatur County, the bald eagle is listed as potentially occurring in any Iowa county, and the prairie bush clover and western prairie fringed orchid are listed as potentially occurring in any Iowa counties containing dry, mesic, or wet prairies.

The action area for the proposed project is made up almost entirely of agricultural row crop, however approximately 25 feet will bisect the southeast corner of the 100-acre Pretty Prairie.

On July 15, 2006, a survey for potential habitat for above species was performed within Pretty Prairie by consulting botanist, Joy O. Nature. Three individual Mead’s milkweed plants were found within 50 feet of the pipeline alignment. No other listed plant species were found. No trees were found within the project area which would provide potential habitat for the Indiana bat or bald eagle.

To avoid any direct or indirect effects to the Mead’s milkweed in Pretty Prairie, Big Tree will install the pipeline at least 6 feet deep under the prairie extending 50 feet on both sides using directional drilling. Big Tree has concluded that by using these drilling techniques the Mead’s milkweed will not be exposed to project.

For these reasons, we conclude the Stewart Branchline Extension Project will have “no effect” on listed species, their habitats, or proposed or designated critical habitat.

¹ The U.S. Fish and Wildlife Service does not provide concurrence with “no effect” determinations. Therefore, documentation of a “no effect” determination does not need to be submitted to the Indiana Ecological Services Field Office.

Example “May Effect, Not Likely to Adversely Affect” Determination Letter

(date)

Re: Village of Middleville Water System Improvements Project, Not Likely to Adversely Affect Indiana Bat Concurrence Request

Dear _____:

We are requesting concurrence from the U.S. Fish and Wildlife Service that the proposed water system improvements project is *not likely to adversely affect* the endangered Indiana bat (*Myotis sodalis*). The proposed project is located in Middleville (T4N-R10E-S23), Barry County, Michigan. Funding for this project is provided by the U.S. Environmental Protection Agency (USEPA). The project involves drilling a new community water well and watermain installation, which is adjacent to, but does not directly impact a wooded area. All work will be performed between July 1, and October 31, 2006.

Specifically, the proposed well is to be drilled in a currently open area located in an abandoned railway right-of-way (ROW). No trees are proposed for removal. The adjacent wooded area to the east contains several trees with diameters greater than 9 inches in diameter. Although dead trees with peeling bark are scattered throughout the area, the majority are living trees without any peeling bark (see attached photos).

A drilling rig will be driven onto the site using the existing access road and abandoned ROW. The drilling process involves drilling a vertical hole in the ground approximately 200 feet deep. The area of disturbance at the surface is limited to the diameter of the bore hole, which is less than 10 inches. A diesel engine will operate the rig. During the drilling process, there will be periodic noise and exhaust from the engine. The completed well will be a steel pipe that extends about 1 foot above grade with a locked cap. No well house will be built at this site.

In addition to the well, a 12-inch diameter watermain will be installed, connecting the well to the adjacent residential area. The watermain route will traverse the ROW and existing access road. This portion of the project also does not involve any tree removal. During the watermain installation, periodic noise and engine exhaust is expected.

According to your Section 7 Consultation website (June 1, 2006), the only listed species that may be present in the action area is the endangered Indiana bat. The site was evaluated on June 9 and 10, 2006 to determine whether habitat suitable for summer roosting Indiana bats is present in the action area. Suitable habitat for Indiana bat exists in areas adjacent to the proposed project site. Indiana bats have been documented in Barry County; surveys for the bats have not been conducted on site. As the project site is within the core of the summer range for Indiana bats, and as potential roosting trees are present in the vicinity, we conclude that Indiana bats may be present.

Although tree removal is not a proposed project activity, Indiana bats will likely be exposed to increased noise disturbance as a result of operating the diesel engine. Test drilling activities will be performed in July and August; final installation will occur in October. All activities will occur during daylight hours. Exposure to noise is not likely during final installation activities as

this action will occur after (October) the bats have left to return to their hibernation sites. During the test drilling period (July and August 2006), adult and newly volant juvenile bats present will likely be exposed to noise.

There is little data on how bats will respond to noise disturbance and what does exist is equivocal. It appears, however, that Indiana bats are tolerant of some noise disturbance provided that it is not very near to their roosting site. For example, Indiana bats are known to roost and forage in suitable habitat in the vicinity of the Indianapolis International Airport (Ritzi et al. 2005; Sparks et al. 2005). Given that Indiana bat roosting habitat is not adjacent to the area where construction activities will occur, we anticipate that Indiana bats exposed to the noise will not respond in a meaningful or detectable manner.

Based on the above analysis, we conclude that our action may affect but is not likely to adversely affect Indiana bat. We request, on behalf of U.S. EPA, your concurrence with our determination.

REFERENCES

Ritzi, C.M., B.L. Everson and J.O. Whitaker, Jr. 2005. Use of bat boxes by a maternity colony of Indiana bats (*Myotis sodalis*). *Northeastern Naturalist* 12(2):217-220.

Sparks, D.W., C.M. Ritzi, J.E. Duchamp, and J.O. Whitaker, Jr. 2005. Foraging habitat of the Indiana bat (*Myotis sodalis*) at an urban-rural interface. *Journal of Mammalogy* 86(4):713-718.