



United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Memorandum

To: Deputy Regional Director, Region 2, Albuquerque, New Mexico

Through: Assistant Regional Director, Ecological Services, Region 2, Albuquerque,
New Mexico (Attention: Marty Tuegel) *Michelle Shaughnessy*

From: Field Supervisor, Oklahoma Ecological Services Office *John Achin*

Subject: Findings and Recommendations on Approval of the American Burying Beetle Oil
and Gas Industry Conservation Plan

I. DESCRIPTION OF PROPOSAL

The U.S. Fish and Wildlife Service (Service) has developed an Oil and Gas Industry Conservation Plan (ICP) pursuant to section 10(a)(1)(B) of the Endangered Species Act, as amended (16 USC § 1531-1544, ESA). The proposed ICP would be available for issuance of Incidental Take Permits (permit) for a period of 2 years and would authorize incidental take of the endangered American burying beetle (*Nicrophorus americanus*, ABB, Covered Species) through impacts to habitat, not to exceed a cumulative total from all permits under the ICP of 32,234 acres, for applicable oil and gas projects. Incidental take associated with construction of oil and gas projects may be permitted for up to 2 years, while incidental take associated operation and maintenance activities may be permitted for up to 20 years (for a maximum of 22 years after ICP approval). The ABB will be covered under "No Surprises" if all permit conditions are fully implemented.

Section 4.2 of the ICP, which is incorporated herein by reference, describes the measures potential applicants (Applicants) for permits under the ICP will implement to minimize and mitigate impacts from any expected incidental take of the Covered Species in accordance with the requirements of the ESA. The Environmental Assessment (EA) was prepared in compliance with the Service's National Environmental Policy Act (NEPA) policy and analyzes the effects of the proposed action and the no action alternative on the human environment.

The proposed activities include the geophysical exploration (seismic), development, extraction, or transport of crude oil, natural gas, and/or other petroleum products, and maintenance, operation, repair, and decommissioning of oil and gas pipelines and well field infrastructure (Covered Activities). The ICP will cover 45 Oklahoma counties (Planning Area), including Adair, Atoka, Bryan, Carter, Cherokee, Choctaw, Cleveland, Coal, Craig, Creek, Delaware,

Garvin, Haskell, Hughes, Johnston, Kay, Latimer, Le Flore, Lincoln, Love, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Okfuskee, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Rogers, Seminole, Sequoyah, Tulsa, Wagoner, and Washington. The Planning Area is the geographic area that is analyzed in the NEPA document.

The ABB, a listed endangered species, has been documented within many portions of the Planning Area. Habitat for the ABB may occur throughout the Planning Area. Several other federally-listed species are known to occur or have a potential to occur within the geographic scope of the ICP, however, they are not considered at risk of being taken by the Covered Activities because avoidance measures will be implemented. Our recommendations are provided in the *Species Take Avoidance Measures for Non-covered Species Related to Selected Oil and Gas Projects within the American Burying Beetle Range in Oklahoma* and the *Oklahoma Ecological Services Field Office Migratory Birds and Eagle Avoidance Measures from Actions Associated with Oil and Gas Projects* on the website at

<http://www.fws.gov/southwest/es/Oklahoma/ABBICP>. The species evaluated, but not included on the permits are the threatened Arkansas River shiner (*Notropis girardi*), endangered gray bat (*Myotis grisescens*), endangered harperella (*Ptilimnium nodosum*), endangered Indiana bat (*Myotis sodalis*), endangered least tern (*Sterna antillarum*), threatened leopard darter (*Percina pantherina*), threatened Neosho madtom (*Noturus placidus*), endangered Neosho mucket (*Lampsilis rafinesqueana*), endangered Ouachita rock pocketbook (*Arkansia wheeleri*), endangered Ozark big-eared bat (*Corynorhinus townsendii ingens*), threatened Ozark cavefish (*Amblyopsis rosae*), threatened piping plover (*Charadrius melodus*), threatened rabbitsfoot (*Quadrula cylindrica cylindrica*), endangered Red-cockaded woodpecker (*Picoides borealis*), endangered scaleshell mussel (*Leptodea leptodon*), endangered whooping crane (*Grus americana*), endangered winged mapleleaf (*Quadrula fragosa*), proposed endangered northern long-eared bat (*Myotis septentrionalis*), proposed threatened rufa red knot (*Calidris canutus rufa*), candidate Arkansas darter (*Etheostoma cragini*), candidate rattlesnake-master borer moth (*Papaipema eryngii*), and candidate Sprague's pipit (*Anthus spragueii*), as well as eagles and migratory birds.

The anticipated impacts of the proposed action are addressed in Section 3.3 of the ICP. The ICP was developed by the Service as the Proposed Alternative. It would allow for potential issuance of multiple permits while approving one conservation plan that would minimize and offset the potential impacts to the Covered Species by providing for on-site and off-site conservation measures that would be used to better manage the conservation of this species.

Analysis of Effects

The effects of the action on the ABB and the other species named above are fully analyzed in the EA and biological opinion, which are incorporated herein by reference. Direct effects from implementation of the ICP on ABBs include mortality or injury to adults, larvae, or eggs from crushing and collision, habitat removal, and/or fragmentation. Indirect effects on ABBs from implementation of the ICP could occur in the form of an increased presence of predators and competitors for carrion.

Based on input from the oil and gas industry (primarily members of the Oklahoma Independent Petroleum Association), the Service estimates that up to 32,234 acres of ABB habitat may be impacted by Covered Activities during the ICP duration. This acreage estimate is approximately 0.16 percent of all ABB habitat within the Planning Area. These impacts may be temporary (less than 5 years in duration), a permanent change in cover type (fragmentation lasting longer than 5 years in duration), or permanent (more than five years in duration).

Before issuing a permit to an Applicant, the Service must find that the Applicant will minimize and mitigate the impacts of such taking to the maximum extent practicable. The measures described in Section 4.2 of the ICP are intended to minimize and mitigate those impacts that cannot be avoided. Minimization and mitigation measures are required for Covered Activities occurring in occupied ABB habitat (ABB habitat where ABBs are assumed or documented through a valid survey). Minimization and mitigation measures are not required for activities occurring in areas unfavorable for the ABB or within the effective area of a valid negative survey, as take is not expected in these areas.

Following permit issuance, Permittees will be required to submit Individual Project Packages (IPPs) and must have Service approval prior to the initiation of Covered Activities within occupied ABB habitat. Further requirements for permit issuance and IPP approval is described in Section 7.0 of the ICP. To mitigate effects of incidental take of ABBs, areas with temporary or permanent cover change will be restored to ABB habitat within 5 years of the impact start date (replacing top soil, relieving soil compaction, re-establishing vegetation, and inspecting for invasive plant species, and treating if necessary). Additional mitigation will be provided through off-site conservation and management of ABB habitat in perpetuity. Permittees will mitigate for temporary, permanent cover change, and permanent impacts that result in take of the ABB through individual- or Permittee-responsible mitigation lands, conservation bank credits, or third party mitigation lands. All preserve acquisitions and assignments of credits will be reviewed and approved by the Service's Regional Ecological Services Office in Albuquerque.

Additional minimization measures required under the ICP include:

- Reducing motor vehicle, machinery, and heavy equipment use;
- Reducing risk of motor vehicles sparking wildfire;
- Increasing safety and storage of operational-fluid (fuel, oil, or other fluids for maintenance of equipment);
- Reducing erosion and increasing soil stability;
- Providing educational program for construction personnel;
- Limiting use of artificial lighting;
- Limiting use of gas flares;
- Limiting disturbance from mechanical vegetation maintenance;
- Limiting herbicide use;
- Setting aside topsoil for replacement following construction (for temporary or permanent cover change impacts).

II. PUBLIC COMMENT

A Notice of Availability of the draft EA and draft ICP was published in the *Federal Register* on April 16, 2014 (79 FR 21480). The public comment period ended on April 30, 2014.

We received 5 sets of comments during the 14-day public comment period: 1) one from Janelle Rieland to inquire about an incorrect website link within the Federal Register Notice, which was corrected the following day; 2) one from Daniel Howard and Carrie Hall (Howard and Hall), professors of biology at Augustana College in Sioux Falls, South Dakota; 3) one from the Oklahoma Department of Wildlife Conservation; 4) one from Devon Energy Corporation; and 5) one from the Oklahoma Independent Petroleum Association (OIPA). A summary of the comments we received on the ICP, EA, and associated documents and how we addressed them is included in the final EA.

III. INCIDENTAL TAKE PERMIT CRITERIA - ANALYSIS AND FINDINGS

1. The proposed taking will be incidental to otherwise lawful activities

The proposed exploration, construction, operation, maintenance, and decommissioning of well pads, pipelines, and associated infrastructure will be certified by the Applicants as otherwise lawful activities prior to permit issuance. The associated take will be incidental to and not the purpose of these activities.

2. The Applicant will, to the maximum extent practicable, minimize and mitigate for the impacts of such taking.

Applicants will agree to minimize impacts that may result in take of ABBs, including reducing motor vehicle, machinery, or heavy equipment use, risk of motor vehicles sparking wildfire, risk of erosion and to increase soil stability, use of artificial lighting, use of gas flares, disturbance from mechanical vegetation maintenance, and herbicide use. In addition, Applicants will provide an educational program for construction personnel and promote safety during operation fluid (fuels and lubricants) use and storage. Applicants will also set topsoils aside for use during restoration following construction.

Applicants will agree to mitigate for temporary, permanent cover change, and permanent impacts to ABBs (see table below).

	AREAS OF IMPACT		
IMPACT PERIOD	ABB RANGE (BUT NOT WITHIN CPA)	CONSERVATION PRIORITY AREA	MITIGATION LAND
TEMPORARY	1:0.25	1:0.5	1:1.5*
PERMANENT COVER CHANGE	1:0.5	1:1	1:2*
PERMANENT	1:1	1:2	1:3*
*MITIGATION LAND RATIO IS EQUAL TO THE CPA RATIO PLUS THE MITIGATION ACRE(S) LOST.			

Based on the above mitigation ratios, the Service anticipates conserving, in perpetuity, between 0.04 (8,059 acres) and 0.32 (64,468 acres) percent of the ABB habitat in the Planning Area (19,612,333 acres), assuming full use of authorized take described in Section 3.3.4 of the ICP. Additionally, Permittees will minimize impacts and restore areas with temporary or permanent cover change impacts within 5 years of the impact start date.

The ABB mortality that occurs as a result of ICP implementation would constitute a short-term effect to the populations in Oklahoma, which would have minimal impact on the species as a whole, and the mitigation is anticipated to provide secure areas for ABB and mitigate for these short-term effects.

3. The proposed taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

The legislative history of the ESA establishes the intent of Congress that this issuance criteria be based on a finding of “not likely to jeopardize” under section 7(a)(2) [see 50 CFR 402.02]. As a result, approval of the ICP has also been reviewed by the Service under section 7 of the Act. In our biological opinion, dated May 21, 2014, which is incorporated herein by reference, the Service concluded that issuance of permits to Applicants, for a cumulative total from all permits under the ICP of 32,234 acres (approximately 0.16 percent of the 19,612,333 acres [7,936,830 hectares] of suitable ABB habitat within the Planning Area), would not likely jeopardize the continued existence of the ABB in the wild.

The methods used to determine the amount of ABB habitat within the ICP Planning Area in Oklahoma (described in Section 3.3.2) have not been applied to other states within the ABB range. However, given that the ABB range expands well beyond Oklahoma, the Service anticipates that the overall percentage of rangewide ABB habitat that may be impacted by Covered Activities in this ICP is likely much smaller than 0.16 percent (the percentage of Oklahoma ABB habitat in that may be impacted by Covered Activities).

4. The Applicant has met other requirements imposed by the Secretary of the Interior, such as monitoring and reporting.

The Permittees or their successors will submit annual reports to the Service by January 31st of each year their permit is in effect that will allow the Service to adequately monitor the implementation of the minimization and mitigation practices described in Section 4.2 of the ICP. Annual reports will be submitted by the Permittees to the local and regional offices of the Service by the reporting deadline. Additionally, Permittees with temporary or permanent cover change impacts will report on the status of their restoration efforts annually and submit a restoration report within 5 years of the impact start date. If restoration is not successful, Permittees will increase their off-site mitigation from temporary or permanent cover change to the appropriate permanent mitigation ratio.

The ICP incorporates all elements determined by the Service to be necessary for approval of the ICP and issuance of the permits.

5. The Secretary of the Interior has received assurances that the plan will be implemented.

Permittees will provide funding for the acquisition of mitigation credits or mitigation lands to the Service for approval with IPPs (prior to impacts). Additionally, the Service has identified and described within Section 6.0 of the ICP six methods that Permittees may utilize to demonstrate funding assurances for full implementation of the ICP, including implementation of changed circumstances and restoration of areas with temporary or permanent cover change. These options include a financial test and corporate guarantee, a letter of credit, trust fund, surety bond, performance bond, and insurance. Permittees will provide funding assurances prior to IPP approval by the Service.

The Service issued additional policy statements in recent years that are intended to enhance the effectiveness of the HCP process and provide assurances to permit holders who are properly implementing approved HCPs. This includes the five-point policy.

The Service included the five-point policy as an addendum to the Habitat Conservation Planning Handbook on July 3, 2000 (65 FR 35242). The policy emphasizes the development of biological goals and objectives, adaptive management strategies, monitoring provisions, permit duration considerations, and public participation into HCPs as a way to increase their effectiveness. This ICP addresses each of the criteria for permit issuance and incorporates the relevant aspects of the five-point policy.

6. Alternatives.

A more detailed description and analysis of the following Alternatives are contained in the EA and Finding of No Significant Impact.

- A. No Action Alternative. Under this alternative the proposed ICP would not be approved and no incidental take permits would be issued. Oil and gas companies in Oklahoma within the range of the ABB would comply with the ESA by avoiding

impacts (take) to the Covered Species where practicable. If take could not be avoided and a Federal nexus existed (funded, authorized, or carried out by a Federal agency), an operator or individual would seek take coverage through consultation and a biological opinion issued by the Service to the Federal action agency. If no Federal involvement existed, Applicants or individuals could develop an HCP and apply for incidental take authorization from the Service on a project-by-project basis. Each application would also require independent evaluation under NEPA.

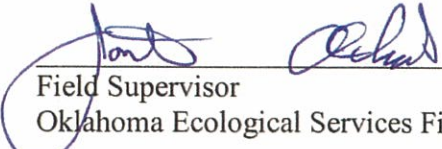
- B. Proposed Alternative. The proposed alternative is approval of the ICP as written, subsequent issuance of multiple permits for incidental take of the ABB within the Planning Area during the 22-year term of the ICP, and implementation of the ICP as proposed. Incidental take would be limited to a cumulative total (from all permits issued under the ICP) of 32,234 acres (0.16 percent of the 19,612,333 acres of ABB habitat within the Plan Area) of ABB habitat. Actions covered under the ICP may result in take of Covered Species associated with activities including, but not limited to exploration, development, extraction and transport and/or distribution of crude oil, natural gas, and other petroleum products.

IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS

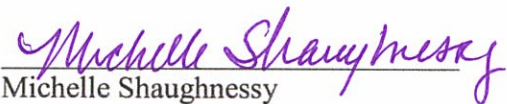
The Service has no evidence that the ICP should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b)-(c). If an Applicant meets the criteria for the issuance of a permit and does not have any disqualifying factors that would prevent a permit from being issued under current regulations, the Service may issue a permit under the ICP following public notice in the *Federal Register*. Permittees will be required to submit IPPs for Service approval prior to the initiation of Covered Activities within occupied ABB habitat.

V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, approval of the ICP as a mechanism to authorize incidental taking of ABB is recommended.

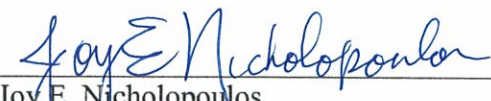

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Concurrence:


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