

**FINAL ENVIRONMENTAL ASSESSMENT FOR THE  
AMENDED  
OIL AND GAS INDUSTRY CONSERVATION PLAN FOR  
THE AMERICAN BURYING BEETLE IN OKLAHOMA**

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## **1.0 INTRODUCTION, NEED, AND PURPOSE**

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The U.S. Fish and Wildlife Service (Service) has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), and its implementing regulations in the Code of Federal Regulations (CFR) at 40 CFR §§ 1500, and section 10(a)(1)(B) of the Endangered Species Act (ESA) of 1973, as amended (16 USC § 1532). This EA has evaluated the impacts of, and alternatives to implementation of the proposed Amended Oil and Gas Industry Conservation Plan (ICP) that has been prepared to support incidental take permits for the federally listed American burying beetle (ABB) (*Nicrophorus americanus*) resulting from activities associated with geophysical exploration (seismic), development, extraction, transport, and/or distribution 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 (referred to as covered activities). In summary, this EA provides an evaluation of potential impacts on the human environment resulting from implementing the proposed amendment to 2014 ICP.

The ICP is a habitat conservation plan prepared by the Service for covered activities within the proposed Planning Area, in which federally listed or protected species are known, or are likely to occur. Should the proposed amendment to the 2014 ICP be approved, individual oil and gas companies would apply for an ESA section 10(a)(1)(B) permit for incidental take of the ABB supported by the conservation plan in the 2014 ICP as proposed in the amendment. In the 2014 ICP, the Service has defined incidental take in terms of the number of acres of occupied ABB habitat disturbed by covered activities. This proposed amendment does not change the incidental take as defined in the 2014 ICP.

The ICP Planning Area consists of the following 45 counties in Oklahoma: 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 (Figure 1-1). The Planning Area covers approximately 22,858,163 acres (9,250,370 hectares) or 35,716 square miles (92,504 square kilometers).

## **1.1 PURPOSE AND NEED**

This EA has been prepared to provide an assessment of potential impacts resulting from the proposed Federal action (approval of the final amended ICP and subsequent issuance of incidental take permits) on the human and natural environment.

### **1.1.1 Purpose for the Proposed Action**

The purpose of the proposed action is to continue to provide a means by which applicants and the Service can streamline the ESA compliance process for non-Federal projects with the potential to impact the federally listed ABB within a defined area. Expediting the process allows the Service to process incidental take permits in an expedited fashion, while meeting industry needs for an expedited ESA compliance and provide continued conservation for the ABB.

### **1.1.2 Need for the Proposed Action**

The Service's need for the amendment to the ICP is to continue to provide a mechanism under which we can issue permits to cover unavoidable take of ABB by a non-Federal entity engaging in otherwise lawful activities in an expedited fashion to reduce work load on Federal employees and meet industry scheduling requests. The current ICP will expire on May 21, 2016. Amending the ICP would eliminate the need for processing multiple, individual Habitat Conservation Plans (HCPs) and ensures consistent mitigation and minimization measures for the ABB related to oil and gas activities. Processing HCP requests requires review of each applicant's conservation plan in addition to review of avoidance, minimization, and mitigation measures for each individual project, preparation of appropriate NEPA documentation, analysis under an intra-Service consultation, and coordination through multiple Service offices.

The oil and gas industry's need for incidental take authorization occurs when the likelihood exists that the federally listed ABB could be taken, as that term is defined by the Endangered Species Act of 1973 (ESA), by an otherwise lawful activity. The process of securing incidental take authorization can impact project schedules and budgets through the need for field surveys, compliance coordination, and identification of appropriate mitigation. The 2014 ICP, and this proposed amendment, support a streamlined and expedited process for meeting the ESA compliance for industry applicants.

### **1.1.3 Decision to be Made**

The Service must decide whether to amend the 2014 ICP to extend the ICP sign-up period and ICP/permit expiration by 3 years. We also must decide whether to expand coverage to projects that are not fully contained within the ICP planning area.

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## **2.0 ALTERNATIVES**

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Regarding compliance with NEPA, the Council on Environmental Quality Regulations requires Federal agencies to consider a range of alternatives that provide different ways in which to address and respond to major public issues, management concerns, and resource opportunities associated with a Federal action. In assessing possible alternatives, the Service should also consider its statutory requirement pursuant to section 10(a)(1)(B) of the Act, whereby certain limitations are placed on the Service with respect to actions that may be undertaken.

Given that the Service previously considered a range of project alternatives during its original HCP review, concluded in 2014, the current range of alternatives is limited primarily to approving or not approving the amendment.

### **2.1 NO-ACTION ALTERNATIVE**

The No Action alternative would be to not approve the proposed amendment to the ICP. When the current ICP expires, Industry would have to seek other methods to comply with the ESA. If their activities would result in take that could not be avoided and a Federal nexus exists (funded, authorized, or carried out by a Federal agency), an operator or individual may receive take coverage through consultation and a biological opinion issued by the Service to the Federal action agency. If no Federal involvement exists, 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 require independent evaluation under NEPA.

### **2.2 PROPOSED ALTERNATIVE: APPROVAL OF THE AMENDMENT TO THE ICP**

The proposed action is approval of the proposed amendment to the ICP, subsequent issuance of incidental take permits for covered species within the 25-year total term of the ICP, and implementation of the amended ICP as proposed. The changes to the original ICP proposed include extending each the ICP sign-up period and ICP/permit expiration by 3 years. ICP applications must be received by May 20, 2019, but may be approved after that date; applications for Individual Project Plans (IPP) must be received by May 20, 2022; and all construction related to IPPs must be completed by May 20, 2025. The amendment also includes providing date-certain deadlines, which will reduce confusion and simplify tracking for both permittees and the Service. In addition, we plan to delete language that limits coverage to projects that are fully contained within the ICP planning area (to participate in the 2014 ICP, no part of any of the

projects were allowed outside the 45-county planning area). We anticipate that this will expand the activities in the plan area to include additional pipelines coming into or leaving the covered area, but with the understanding that the ICP will not provide any ESA coverage or NEPA analysis for the portions of the projects that are outside the planning area.

All incidental take coverage provided by the ICP will end when the permit expires on May 20, 2039, regardless of when permits are issued or IPPs are approved.

For a complete description of the covered activities, see Section 2 of the final amended ICP on the Service's website at [www.fws.gov/southwest/es/oklahoma/ABBICP](http://www.fws.gov/southwest/es/oklahoma/ABBICP).

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### **3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

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NEPA analyses of the affected environment typically includes assessments of actions on such elements as: Geology, Soils, Water Resources, Water Quality, Air Quality, Vegetation, Wetlands, General Wildlife, Threatened and Endangered Species, Land Use, Aesthetics and Noise, Socioeconomics, Environmental Justice, Tribal jurisdiction, and Cultural Resources. Go to [www.fws.gov/southwest/es/oklahoma/ABBICP](http://www.fws.gov/southwest/es/oklahoma/ABBICP) to see full descriptions of the elements analyzed under the original Environmental Assessment (EA; Service 2014).

#### **3.1 GEOLOGY**

A description of Oklahoma's geology from the Oklahoma Geological Survey (2008) is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

#### **3.2 SOILS, INCLUDING PRIME AND UNIQUE FARMLAND**

Soil descriptions provided for the Planning Area based on regional soil types for Oklahoma is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

#### **3.3 WATER RESOURCES**

A description of the two major river systems in Oklahoma, the Arkansas River and Red River, as well as a tally of larger streams and tributaries, major reservoirs, and other water resources found throughout the Planning Area (Oklahoma Water Resources Board 2012) are described in EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

#### **3.4 WATER QUALITY**

A description of surface water quality throughout the Planning (Oklahoma Water Resources Board 2012) Oklahoma is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.5 AIR QUALITY**

A description of the air quality in the Planning Area, which is currently in attainment for all air quality criteria pollutants in all relevant counties (U.S. Environmental Protection Agency 2012), is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.6 VEGETATION**

Of the 12 Level III ecoregions described for Oklahoma, 10 occur within the Planning Area. They are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.7 WETLANDS/WATERS OF THE U.S.**

Wetlands and waters of the U.S. within the Planning area are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.8 GENERAL WILDLIFE**

The Planning Area contains at least a portion of four of the five biotic provinces within Oklahoma and there is a suite of species common to each. These species are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.9 THREATENED AND ENDANGERED SPECIES**

The sections below discuss the one covered species occurring in the ICP Planning Area and refers to the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference, for a description of other federally listed species, those species proposed for Federal listing, Federal candidate species, and one de-listed, but still protected species that also occur in the ICP Planning Area.

#### **3.9.1 Covered Species**

The only covered species included in the 2014 ICP and the proposed ICP amendment is the ABB. A full description of the ABB is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

#### **3.9.2 Noncovered Species**

Several other federally listed species (18), as well as two species proposed for Federal listing, two candidate species, and the de-listed bald eagle (*Haliaeetus leucocephalus*) also occur in the Planning Area and are discussed briefly in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference. While the bald eagle is no longer federally listed, it still receives protection under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

### **3.10 LAND USE**

Land use is described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.11 AESTHETICS AND NOISE**

#### **3.11.1 Aesthetics**

The term aesthetics refers to the subjective perception of natural beauty in the landscape and attempts to define and measure an area's scenic qualities. Esthetics within the Planning Area are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

#### **3.11.2 Noise**

Noise is defined as unwanted sound that disrupts or interferes with normal activities or that diminishes the quality of the environment. Noise within the Planning Area is described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.12 SOCIOECONOMICS**

The Planning Area encompasses 45 (58 percent) of the 77 counties in Oklahoma (Oklahoma Historical Society 2007). Socioeconomics within the Planning Area are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.13 ENVIRONMENTAL JUSTICE**

Federal agencies strive to ensure that their actions support environmental justice ideals by identifying and addressing disproportionately high and adverse human health or environmental effects of programs, policies, and activities on low-income and minority populations in the United States (59 *FR* 7629 1994 WL 43891 [Pres], Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) (U.S. Environmental Protection Agency 1994).

The U.S. Department of the Interior's environmental justice policy requires that U.S. Department of the Interior bureaus "consider the impacts of their actions and inactions on minority and low income populations and communities, as well as the equity of the distribution of benefits and risks of those decisions in NEPA documents. A description of the analysis of Environmental Justice

within the Planning Area is provided in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.14 TRIBAL JURISDICTION**

A significant portion of Oklahoma is under tribal jurisdiction; 37 are federally recognized tribes with boundaries in Oklahoma, 25 of which are located partially or wholly within the Planning Area. These include:

- Absentee Shawnee Tribe
- Alabama Quassarte Tribal Town
- Cherokee Nation
- Chickasaw Nation
- Choctaw Nation
- Citizen Potawatomi Tribe
- Eastern Shawnee
- Kialegee Tribal Town
- Kickapoo TribeMiami Nation

These tribal jurisdictions have their highest concentrations in the central portion of the state, and in the extreme northeastern portion of the state, but are scattered throughout. The only Indian Reservation located within the Planning Area, the Osage Indian Reservation, matches the boundaries of Osage County. This county is situated in the northwestern portion of the Planning Area, which is in the north-central part of Oklahoma, bordering Kansas. For more information, please see the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

### **3.15 CULTURAL RESOURCES**

The cultural resources within the Planning Area are described in the EA on the 2014 ICP (Service 2014), which is incorporated herein by reference.

## **4.0 ENVIRONMENTAL CONSEQUENCES**

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The impact analysis in this EA includes the No-Action Alternative, which provides a baseline condition to which the Proposed Alternative can be compared. The No-Action Alternative describes the future conditions that can be expected if the proposed amendment to the 2014 ICP is not approved, so that the oil and gas industry would need to coordinate with the Service on an as-needed, project-specific basis.

The Proposed Alternative is the proposed amendment to the 2014 ICP that extends the ICP sign-up period and ICP/permit expiration by 3 years and removes the requirement that projects must be fully contained within the Planning Area. We anticipate that allowing projects to participate

that may cross the Planning Area boundary will expand the activities in the plan area to include additional pipelines coming into or leaving the covered area, but with the understanding that the ICP will not provide any ESA coverage or NEPA analysis for the portions of the projects that are outside the planning area.

#### **4.1 GEOLOGY**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to geology within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to surface geology would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on geologic resources are not considered necessary.

#### **4.2 SOILS, INCLUDING PRIME AND UNIQUE FARMLAND**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to soils within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to soils, including prime and unique farmlands, would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on soils are not considered necessary.

#### **4.3 WATER RESOURCES**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to water resources within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to water resources would be temporary, and not expected to be significant. There may be some slight benefit to water resources by spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on water resources are not considered necessary.

#### **4.4 WATER QUALITY**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to water quality within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to water quality would be temporary, and not expected to be significant. There may be some slight benefit to water quality by

spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on water quality are not considered necessary.

#### **4.5 AIR QUALITY**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to air quality within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to air quality would be temporary, and not expected to be significant. There may be some slight benefit to air quality by spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on air quality are not considered necessary.

#### **4.6 VEGETATION**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to vegetation within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to vegetation would be temporary, and not expected to be significant. There may be some slight benefit to vegetation by spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on vegetation are not considered necessary.

#### **4.7 WETLANDS/WATERS OF THE U.S.**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to wetlands or waters of the U.S. within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to wetlands or waters of the U.S. would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on wetlands or waters of the U.S. are not considered necessary.

#### **4.8 GENERAL WILDLIFE**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to general wildlife within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to general wildlife would be temporary, and not expected to be significant. There may be some slight benefit to general wildlife by spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on general wildlife are not considered necessary.

## **4.9 THREATENED AND ENDANGERED SPECIES**

The sections below discuss the one covered species occurring in the final amended ICP Planning Area as well as other federally listed species, those species proposed for Federal listing, Federal candidate species, and one de-listed, but still protected species that also occur in the ICP Planning Area.

### **4.9.1 Covered Species**

The only covered species included in the ICP is the ABB. The ABB was federally listed as endangered on July 13, 1989 (54 FR 29652) without Critical Habitat. The ABB Recovery Plan was finalized in 1991 and a 5-year Review was completed in 2008 that recommended the ABB's status remain as endangered (USFWS 1991, 2008). It is not anticipated that amendment of the existing ICP will impact the ABB within the covered area beyond those impacts described and fully analyzed in the original EA (Service 2014). There may be some slight benefit to the ABB resulting from the extended timeframes proposed in the ICP amendment by spreading the impacts over a longer period of time, but those impacts would also be insignificant. Further analysis of the effects of the alternatives on the ABB are not considered necessary.

For a more-detailed description of the ABB, its life history, habitat, range, reasons for decline, and threats, see Section 3.1 of the final amended ICP.

### **4.9.2 Non-covered Species**

Several other federally listed species (18), as well as one species proposed for Federal listing, two candidate species, and the de-listed bald eagle (*Haliaeetus leucocephalus*) also occur in the Planning Area. While the bald eagle is no longer federally listed, it still receives protection under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

The northern long-eared bat (NLEB; *Myotis septentrionalis*) was proposed as endangered when the original ICP was completed, but was listed as threatened with a 4(d) rule on April 2, 2015. Avoidance measures for NLEB are in development and will be posted on our website as soon as they are complete.

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to non-covered species within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on these non-covered species are not considered necessary.

#### **4.10 LAND USE**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to land use within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to land use would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on land use are not considered necessary.

#### **4.11 AESTHETICS AND NOISE**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to aesthetics and noise within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to aesthetics and noise would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on aesthetics and noise are not considered necessary.

#### **4.12 SOCIOECONOMICS**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to socioeconomics within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to socioeconomics would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on socioeconomics are not considered necessary.

#### **4.13 ENVIRONMENTAL JUSTICE**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to environmental justice within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to environmental justice would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on environmental justice are not considered necessary.

#### **4.14 TRIBAL JURISDICTION**

There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to tribal jurisdiction within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to tribal jurisdiction would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on tribal jurisdiction are not considered necessary..

## **4.15 CULTURAL RESOURCES**

Cultural resources are prehistoric and historic archeological sites, districts, structures, or locations considered significant to a culture, a subculture, or a community for scientific, traditional, religious, or other reasons. There is no difference between covered activities in the 2014 ICP and this proposed amendment. Therefore, we do not anticipate any impacts to cultural resources within the covered area beyond those described and fully analyzed in the original EA (Service 2014). Most impacts to cultural resources would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on cultural resources are not considered necessary.

## **5.0 CUMULATIVE IMPACTS**

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The Council on Environmental Quality, which implements NEPA, requires the assessment of cumulative impacts in the decision-making process for projects including a Federal action. Cumulative impacts are the incremental impact of activities associated with implementing the Proposed Alternative when added to other past, present, and reasonably foreseeable future activities regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively noteworthy actions taking place over a period of time. Cumulative impacts are most likely to arise when a relationship exists between a proposed alternative and other actions that have occurred or are expected to occur in a similar location or time period, or that involve similar actions. Projects in close proximity to the Proposed Alternative would be expected to have more potential for cumulative impacts than those more geographically separated.

The Federal action, approval of the ICP and subsequent issuance of section 10(a)(1)(B) incidental take permits, does not include the actual construction, operation, and/or maintenance activities proposed to be covered by the permit (covered activities). However, implementation of the ICP by oil and gas applicants would result in the covered activities and have been considered in the impact evaluation in Section 4 of the original EA (Service 2014). The following subsections identify past, current, and reasonably foreseeable future projects and programs related to the undertaking being analyzed (the Proposed Alternative) and provides an evaluation of their combined (cumulative) effects on the environment.

### **5.1 PAST AND PRESENT ACTIONS WITHIN THE PLANNING AREA**

As described in the original EA (Service 2014), portions of the Planning Area have undergone extensive urban or industrial development, while other portions are primarily agricultural and

have experienced little development. Major developments have included conversion of native vegetation to agricultural crops or grazing land, urban or rural development, transportation projects, rights-of-way clearing for utilities, and development of industrial facilities, such as oil and gas pipelines, well pads, and associated facilities. The result is a variety of past and present actions within the Planning Area that have resulted in the existing conditions described in the original EA. Although not all past and present actions within the planning are identified herein, the discussion below details a recent major action with potential to affect the ABB.

The TransCanada Gulf Coast Pipeline Project is an approximately 487-mile (784-kilometer), 36-inch (0.9-meter) crude oil pipeline beginning in Cushing, Oklahoma, and extending south to Nederland, Texas. Approximately 155 miles (249 kilometers) of the pipeline is sited in Oklahoma, with the remainder in Texas (TransCanada 2014).

Anticipated impacts from this project to ABB habitat and individuals in the Planning Area were identified in the Keystone XL Project Final Environmental Impact Statement for the Gulf Coast Segment (U.S. Department of State 2011), and subsequently revised in the Keystone Gulf Coast Pipeline Project Final Environmental Assessment (Exp Energy Services 2012) and concurrent HCP (Enercon Services 2012). Both temporary and permanent impacts to habitat and individuals were identified. Anticipated effects include temporary impact to up to 435 acres (176 hectares) and permanent impact to 17 acres (6.9 hectares) of potential ABB habitat by construction, impact to approximately 33 acres (13.4 hectares) of potential ABB habitat by fragmentation due to the permanent alteration of existing cover type (from forest to grassland) in areas that are not already fragmented, and 65 acres (26.3 hectares) of impacts to ABB habitat during operations and maintenance of the project (in addition to the 485 acres [196 hectares] of impacts described above).

The HCP developed for the Gulf Coast Pipeline Project establishes minimization and conservation measures as well as mitigation requirements to minimize and offset adverse impacts to the ABB. Based on the Biological Opinion and incidental take permit (TE-80492A) issued pursuant to 10(a)(1)(B) of the ESA by the Service, incidental take under this project may occur within a maximum of 550 acres (223 hectares) of the Gulf Coast Pipeline Project action area in the form of harm, harassment, and/or mortality over the 50-year permit duration. Mitigation for these impacts, as well as a conservation bank on an associated 735 acres (297 hectares), designed to provide for future potential ABB species credits needs of various entities (USFWS 2012), have resulted in a 1,600-acre (647-hectare) preserve for the ABB.

Additionally, Enbridge, Inc. has completed the construction stage of the Flanagan South Pipeline Project. This project includes a nearly 600-mile (966-kilometer), 36-inch (0.9-meter) diameter interstate crude oil pipeline that originated in Pontiac, Illinois, and terminates in Cushing,

Oklahoma, mostly along Enbridge's Spearhead Pipeline. Counties within the Planning Area intersected by the Flanagan South Pipeline include Osage, Pawnee, Payne, and Washington counties in Oklahoma. The Flanagan South Pipeline Project modified 205.5 acres (83.2 hectares) of ABB habitat: 115.5 acres (46.7 hectares) of occupied ABB habitat was disturbed during construction, and 90 acres (36.4 hectares) of habitat in the ABB range will be disturbed during operation and maintenance activities over the next 50 years. However, most effects to the ABB are expected to be infrequent, of short duration, and reversible, with expected recolonization of almost all of this area and adverse impacts offset through mitigation. Consequently, the Service determined that this project would have a negative effect on the ABB, but would not appreciably reduce its survival and recovery, and as such, would not jeopardize the continued existence of the species (USFWS 2013).

Enbridge, in partnership with Enterprise, is also constructing the Seaway Twinning Pipeline, a 30-inch (0.8-meter) diameter pipeline that parallels the already completed and operational Seaway crude oil pipeline, an approximately 512-mile (824-kilometer), 30-inch (0.8-meter) pipeline between Cushing, Oklahoma, and the Freeport, Texas area, and a terminal and distribution crude oil network originating in Texas City, Texas. This pipeline is under construction and anticipated to be operational in mid-2014. The pipeline would intersect the following Planning Area counties in Oklahoma: Bryan, Johnston, Pontotoc, Pottawatomie, and Seminole (Seaway Crude Pipeline Company 2013). At the time this EA was published, no publicly available environmental documentation was available for review.

The proposed Clean Lines Project would traverse 336.3 km (209 miles) through six counties in the ABB's current range in Oklahoma (Payne, Lincoln, Creek, Okmulgee, Muskogee, and Sequoyah) and three counties (Franklin, Crawford, and Johnson) in Arkansas. The proposed Project also traverses Conservation Priority Areas (CPA) identified by the Service in Muskogee and Sequoyah counties, Oklahoma. Conservation Priority Areas are defined as "areas where conservation efforts should be focused and where higher ratios of mitigation for impacts to ABBs should occur" (Service 2015). About 62.7 km (39 miles) of the proposed transmission line route lies within the identified CPA. Only 14.5 km (9 miles) of the route are composed entirely of unfavorable habitat (100% unfavorable).

The total area within this corridor, subtracting out the length that was 100 percent unsuitable (9 miles), is 11,772.7 hectares (29,091 acres). Thus, the Service estimates that 5,886.4 hectares (14,545.5 acres) of suitable/favorable ABB habitat would be impacted by the proposed Project.

Because of reduced industry activity and impacts resulting from current market conditions, we have issued less take than anticipated under the 2014 ICP when it was approved. As of January 11, 2016, we have issued 21 permits under the ICP and approved impacts to 395 acres of the

32,234 acres allowed. To date, we have issued 21 permits under the ICP and approved impacts to 402 acres of ABB habitat. Mitigation through purchase of conservation bank credits is being implemented to fully offset those impacts.

## **5.2 REASONABLY FORESEEABLE ACTIONS WITHIN THE PLANNING AREA**

As previously noted, a comprehensive and quantifiable, project-specific evaluation of all reasonably foreseeable actions within the 45-county Planning Area was not completed in the assessment of cumulative impacts due to uncertainties caused by the broad spatial extent of the Planning Area and the multi-decadal duration of the Permit. However, major reasonably foreseeable projects were identified in the Planning Area and include oil and gas development, transportation projects, and urban growth. Foreseeable oil and gas operations within the Planning Area include several major pipelines, in addition to the continued development of well pads, smaller pipelines, and associated facilities (Paul 2012). The Tallgrass Energy Pony Express Pipeline Project involves the conversion of a portion of an existing 500-mile (805-kilometer) natural gas pipeline and new construction of a 260-mile (418-kilometer), 24-inch (61-centimeter) extension from Lincoln County, Kansas to Payne County, Oklahoma. The nearly 700-mile (1,126-kilometer) pipeline, once completed, will transport from 230,000 to 320,000 barrels per day of light sweet crude oil from the Bakken production area of North Dakota and eastern Montana. Approximately 80 percent of the route will be collocated with existing energy infrastructure. The pipeline route originates in Guernsey, Wyoming, continues southeast through the corners of northeast Colorado and southwest Nebraska, turns south at Lincoln, Kansas, and terminates at an existing petroleum facility in Cushing, Oklahoma. Counties intersected within the Planning Area include Kaye, Noble, and Payne. The Northeast Colorado Lateral (NECL), is a 70-mile extension built in 2014-2015 that interconnects with the Pony Mainline near Sterling, Colo., and provides transportation service from the Niobrara Shale in Northeastern Colorado and Southeastern Wyoming. We refer to the first two portions collectively as the Pony Mainline. The Pony Mainline and NECL were placed in service in October 2014 and April 2015 respectively. (Tallgrass Energy 2014). At the time this EA was published, no publicly available environmental documentation on this project was available for review.

Another reasonably foreseeable pipeline project within the Planning Area is the Diamond Pipeline Project, which is being developed through collaboration between Valero Energy Corporation and Plains All American Pipeline Company. The proposed project would construct approximately 424 miles (682 kilometers) of 20-inch (51-centimeter) pipeline between Cushing, Oklahoma, and Memphis, Tennessee to transport crude oil produced from the Permian Basin, Bakken Shale, and Mid-continent oil regions. The proposed project anticipates of construction in 2016. Planning Area counties currently crossed by the proposed route, from west to east, include

Lincoln, Creek, Okmulgee, Muskogee, McIntosh, Haskell, and Le Flore (Peacock 2014). At the time this EA was published, no publicly available environmental documentation on this project was available for review. In addition to present and foreseeable major pipeline projects, smaller oil and gas operations would continue and expand, as would other unforeseeable major pipeline projects over the Permit duration.

Major highway projects throughout the Planning Area include construction of new highways and upgrades to existing highways. Additionally, of the four U.S. Congress-designated National High Priority Corridors located within Oklahoma, two major corridors currently under study are located within the Planning Area. These corridors are the north-south Interstate Highway 35 corridor between Texas and Kansas, as well as the east-west U.S. Highway 412 corridor that runs from Tulsa, Oklahoma, to Memphis, Tennessee (Oklahoma Department of Transportation 2013).

The Planning Area encompasses all or portions of 9 of the 11 State Planning Regions in Oklahoma. The Census Bureau information shows that between 2000 and 2010 a majority of the counties in Planning Area grew in population by an average of approximately 7.93 percent, ranging from a population decline of -4.05 in Ottawa County, Oklahoma, to an increase of 27.12 percent in Wagoner County, Oklahoma (U.S. Census Bureau 2010).

The majority of the counties in the Planning Area are projected to grow in population between 2010 and 2040. Overall the Planning Area counties are projected to grow at an average of 20.43 percent. The area with the lowest growth is expected to be Seminole County, Oklahoma, with a decline of -11.3 percent and the highest growth rate of 47.5 percent is expected in Cleveland County, Oklahoma (Oklahoma Department of Commerce 2012).

Other conservation plans have been, or are being, developed to address the incidental take of federally listed species from future activities not covered under the proposed ICP. A group of 19 wind energy companies, the Wind Energy Whooping Crane Action Group (WEWAG), in coordination with the Service and nine state wildlife agencies, is developing an HCP to address the potential impacts of wind energy development on several threatened and endangered or candidate species in the central US. Species currently included are the whooping crane, the lesser prairie-chicken, the interior least tern, and the piping plover. The proposed WEWAG plan area includes the approximately 200-mile (322-kilometer)-wide whooping crane migration corridor, which overlaps numerous Planning Area counties in Oklahoma. These projects would result in the incidental take and mitigation for federally listed species, as well as additional resource impacts.

### **5.3 CLIMATE CHANGE AND CUMULATIVE EFFECTS**

Climate change, both the effects of implementing the ICP and the effects of climate change on the covered activities were discussed in the original EA (Service 2014). Because the only proposed changes in the amendment to the 2014 ICP are temporal (changes to timelines) and will allow projects to cross the planning area boundary, we do not anticipate climate change impacts within the covered area beyond those described in the original EA.

### **6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

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The NEPA regulations at 40 CFR 1502.16 require that the discussion of environmental consequences include “any irreversible or irretrievable commitments of resources which would be involved with the proposal should it be implemented.” Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that this use could have on future generations. Irreversible effects primarily result from the use or destruction of specific resources that cannot be replaced within a reasonable time frame, such as energy or minerals. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action, such as extinction of a threatened or endangered species or the disturbance of a cultural resource.

The issuance of incidental take permits under the Proposed Alternative for covered species during oil and gas exploration or construction, operation, maintenance and/or decommissioning of pipelines, or well field infrastructure would require little to no commitment of irreversible or irretrievable resources. The covered activities of the Proposed Alternative would result in the loss of covered species’ preferred habitat within the Planning Area. However, the ICP’s prescribed avoidance and minimization measures, as well as mitigation, would help preserve habitat for the ABB; thus, the ABB’s viability would not be adversely affected.

The commitment and funding by each applicant for acquisition and permanent management of mitigation properties would be irreversible. The commitment and funding of mitigation and monitoring activities for the duration of the permit would also be irretrievable.

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## **7.0 SHORT-TERM USE OF THE ENVIRONMENT VERSUS LONG-TERM PRODUCTIVITY**

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This section supports 40 CFR 1502.16 and provides a discussion of the long-term effects of the ICP by evaluating the relationship between the short-term uses of the environment and the maintenance and enhancement of long-term productivity.

The objectives of the ICP involve the need to conserve biological resources in an organized and effective manner with the anticipated construction, operation and/or maintenance activities expected to occur within the Planning Area. Thus, long-term environmental productivity would be maintained through minimization and avoidance measures, and mitigation. Short-term uses of the environment, such as maintenance of facilities and clearing activities associated with new construction, would be accommodated in a manner least likely to result in permanent damage to the Planning Area's natural resources. The long-term result would be an increase in ecological productivity through preservation, management, and maintenance of habitat. Ecological productivity would also be enhanced through the recovery of potentially imperiled species through mitigation for incidental take under the Proposed Alternative.

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## **8.0 LIST OF PREPARERS**

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U.S. Fish and Wildlife Service

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## **9.0 CONSULTATION AND COORDINATION**

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### **FEDERAL AND STATE AGENCIES**

Bureau of Indian Affairs – Eastern Oklahoma Regional Office  
Oklahoma Department of Wildlife Conservation – Main Office

### **TRIBES**

Governor George Blanchard, Absentee-Shawnee Tribe  
Chief Tarpie Yargee, Alabama-Quassarte Tribal Town  
Chairman Donnie Cabanis, Jr., Apache Tribe of Oklahoma  
Chairman Brenda Edwards, Caddo Nation of Oklahoma  
Principal Chief Bill John Baker, Cherokee Nation  
Governor Janice Boswell, Cheyenne-Arapaho Tribes  
Governor Bill Anoatubby, The Chickasaw Nation

Chief Gregory E. Pyle, The Choctaw Nation of Oklahoma  
Chairman John A. Barrett, Citizen Potawatomi Nation  
Chairman Wallace Coffey, Comanche Nation of Oklahoma  
Chief Paula Pechonick, Delaware Tribe of Indians  
Acting President Cleanan Watkins, Delaware Nation  
Chief Glenna J. Wallace, Eastern Shawnee Tribe of Oklahoma  
Chairman Jeffrey Haozous, Fort Sill Apache Tribe  
Acting Chairperson Bobby Walkup, Iowa Tribe of Oklahoma  
Chairman Guy Gene Munroe, Kaw Nation  
Town King Jeremeiah Hobia, Kialegee Tribal Town  
Chairman Gilbert Salazar, Kickapoo Tribe of Oklahoma  
Acting Chairperson Amber Toppah, Kiowa Tribe of Oklahoma  
Chief Douglas G. Lankford, Miami Tribe of Oklahoma  
Chief Bill Gene Follis, The Modoc Tribe of Oklahoma  
Principal Chief George Tiger, The Muscogee (Creek) Nation  
Principal Chief John D. RedEagle, The Osage Nation of Oklahoma  
Chairman John R. Shotton, Otoe-Missouria Tribe  
Chief Ethel E. Cook, Ottawa Tribe of Oklahoma  
President Marshall Gover, Pawnee Nation  
Chief John P. Froman, Peoria Tribe of Indians of Oklahoma  
Chairman Earl S. Howe, III, Ponca Tribe of Indians of Oklahoma  
Chairman John Berrey, The Quapaw Tribe of Oklahoma  
Principal Chief George Thurman, Sac and Fox  
Principal Chief Leonard M. Harjo, The Seminole Nation of Oklahoma  
Chief William L. Fisher, Seneca-Cayuga Tribe of Oklahoma  
Chief Ron Sparkman, Shawnee Tribe  
Town King George Scott, Thlopthlocco Tribal Town  
President Donald Patterson, Tonkawa Tribe of Oklahoma  
Chief George Wickliffe, United Keetoowah Band of Cherokee Indians  
President Terri Parton, Wichita and Affiliated Tribes  
Chief Billy Friend, Wyandotte Nation  
Tribal Council Member, Euchee (Yuchi) Tribe

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