

FINAL PERFORMANCE REPORT



Federal Aid Grant No. F15AF00426 (T-64-R-2)

**Implementation of a Program to Address Energy Related Wildlife
and Habitat Impacts**

Oklahoma Department of Wildlife Conservation

June 1, 2015 –June 30, 2018

Final Performance Report

State: Oklahoma

Grant Number: F15AF00426 (T-64-R-2)

Grant Program: State Wildlife Grant

Grant Name: Implementation of a Program to Address Energy Related Wildlife and Habitat Impacts

Grant Period: June 1, 2015- June 30, 2018

Grant Reporting Period: June 1, 2015 – June 30, 2018

Project Leader: Rich Fuller, Wildlife Biologist – Energy Emphasis / Russ Horton, Research Supervisor / Jeremiah Zurenda, Wildlife Biologist

A. OBJECTIVE:

Fund and staff a biologist level position to:

- (1) Evaluate the impacts of all activities associated with energy exploration and production on species of greatest conservation need identified in the Oklahoma Comprehensive Wildlife Conservation Strategy, and
- (2) Develop / maintain working relationships and work collaboratively with the energy industry to provide recommendations to avoid negative impacts to SGCN and their habitats, to minimize the effects of those impacts when avoidance is not possible, and to offset all negative impacts that occur as a result of energy related activities.

B. NEED:

It is established that the cumulative effects of human activities, including the development of natural energy resources, has a large impact on wildlife populations and their associated habitat.

Many of these developments are done without consideration of their impact on local wildlife and fisheries. Some species and projects however require review and comments for compliance with the National Environmental Policy Act (NEPA) or the Endangered Species Act (ESA). Therein lies the need for a biologist level position to become familiar with the inner workings of energy companies and the differing types of development they are pursuing (oil & gas well drilling, both large and small scale wind farms, establishment/repair of pipelines and flow lines, electrical lines, road construction, mining, solar energy generation facilities, etc.) and how these actions will effect varying species, particularly SGCN.

In Oklahoma, two species (one formerly federally listed as threatened, and one currently listed as endangered) have altered historical operations in oil & gas exploration. The Lesser Prairie Chicken (*Tympanuchus pallidicinctus*, hereafter LEPC) and the American Burying Beetle

(*Nicrophorus americanus*, hereafter ABB), have both seen significant regulatory changes over the past 5 years, and during this reporting period. These regulatory changes have been due to U.S. Fish & Wildlife Service (USFWS) actions and/or court decisions. On September 2, 2015 a Western District Court of Texas handed down a decision to vacate USFWS' designation of LEPC as a threatened species (May 2014). After the court decision, key Oklahoma Energy Industry members were sent information to clarify the Oklahoma Department of Wildlife Conservation (ODWC) reaction and anticipated direction of future LEPC management activities. This information included recommendations to industry operating within LEPC habitat to continue enrollment in the Range-wide Plan (RWP) for LEPC, and adherence to RWP protocols for acreage previously enrolled. These recommendations were endorsed by ODWC regardless of the court decision vacating listing of LEPC as a threatened species. By enrolling acreage under lease for oil & gas development into the RWP, operators agree to perform multiple conservation practices that avoid and/or minimize impacts to LEPC. The enrollment fees are then redistributed (as mitigation) to either ensure both short-term and perpetual conservation of high-quality LEPC habitats and/or for cooperating landowners to receive payments for performance of conservation practices to restore the species.

On March 8, 2016 the USFWS reauthorized and amended the Industry Conservation Plan (ICP) for ABB (originally issued March 2014) which, during the "active season" of ABB (typically beginning in March and ending in September or October), governs oil & gas development and corresponding mitigation protocols for ABB in the eastern half of Oklahoma. The amendment will extend by 3 years the period for ICP signup, submission of Individual Project Plans (IPP), and construction after IPP approval. All applications under the amended ICP must be received by May 20, 2019. By applying for an ABB incidental take permit through the ICP, oil & gas companies agree to comply with multiple conservation measures as well as offsetting impacts through purchasing credits from established ABB mitigation banks (Muddy Boggy Conservation Bank in Coal County, ABB Mitigation Bank in Pittsburgh County), or by establishing their own ABB mitigation bank (pursuant to USFWS rule/approval).

Accordingly, there are many stakeholders within the respective habitats of both LEPC and ABB that continue to seek guidance on evolving regulatory protocols established when the USFWS issued these recent decisions for ABB and LEPC respectively. Energy companies, landowners, public utilities, local governments, tribes and other state agencies continue to alter practices to comply with USFWS rules pertaining to ESA listed species and to perform conservation measures stipulated within various enrolled agreements (e.g. ABB-ICP, Agricultural Candidate Conservation Agreement with Assurances (CCAA) for LEPC in Oklahoma, RWP, LEPC Oil & Gas CCAA, or NRCS's Lesser Prairie Chicken Initiative (LPCI)).

In order to consult with and assist the various stakeholders on not only complex regulatory compliance, but also voluntary BMP that will benefit ABB, LEPC and other SGCN, the ODWC's Wildlife Biologist – Energy Emphasis position requires:

- a knowledge and distribution of the ecologies and habitats of species of concern,

- sufficient knowledge of the proposed activities so that potential impacts to the species and their habitats can be anticipated, and
- sufficient knowledge of alternative land management practices or permitting to make recommendations for eliminating or minimizing the impacts to species of special concern.

In short, the need exists to ensure that as energy exploration and development continue and expand in scope and geographic area, the needs of all federally-listed species and SGCN, and their habitats, are given due and diligent consideration, conservation, and management.

An example of how rapidly the scope of energy development is occurring and changing in Oklahoma can be found in Oklahoma's booming wind power industry. During the reporting period, Oklahoma was one of the fastest growing states in the entire U.S. for construction of utility-scale wind energy projects according to the American Wind Energy Association. At the end of 2015, Oklahoma was ranked 4th nationally in installed wind power (5,453 Mw and 2,915 total turbines), but by February 2018, had surpassed both California and Iowa, and has a current installed capacity of 7495 Mw (3713 turbines) with another 1366Mw of capacity under construction (<https://www.chooseenergy.com/news/article/best-worst-ranked-states-wind-power/>). This leaves Oklahoma behind only Texas (22,637 Mw / 12,494 turbines) at the end of February 2018. Additionally, construction began during the reporting period on at least six (6) new utility-scale solar energy projects, representing an emerging source for renewable electricity generation via photo-voltaic (PV) arrays sent to the Southwest Power Pool (SPP). The SPP region lies within the Eastern Interconnection, in the central Southern United States, serving electric power to all of Oklahoma and Kansas, and portions of New Mexico, Texas, Arkansas, Louisiana, Missouri, Mississippi and Nebraska.

C. METHODS:

- Continuous evaluation and monitoring of energy industry methodologies with respect to effects on environment and wildlife; with particular emphasis in areas that support LEPC and ABB
- Continuous evaluation of regulatory tenets of the ESA, LEPC-RWP, Bald & Golden Eagle Protection Act, Migratory Bird Treaty Act and other similar regulatory documents for listed and/or candidate species; and the monitoring of any changes to those conservation protocols.
- Additionally, continue to develop and amend Best Management Practices (BMP) for a wide multitude of energy-related projects to avoid, minimize or in some instances mitigate for adverse impacts to species of greatest conservation need (but not necessarily listed or designated as a candidate species).

D. RESULTS

Duties include responding to requests for information from the Oklahoma Department of Wildlife Conservation (ODWC) about any species of concern near a potential energy-related

development throughout the state. During this reporting period, the following major tasks were completed:

- Prepared more than 90 environmental review response letters for projects throughout the state. In addition to providing consultation direction on federally-listed species found within proposed project areas, provided information of how to design, build and/or restore project areas to avoid, minimize and/or mitigate for impacts to wildlife and wildlife habitat; with emphasis given to Oklahoma's Species of Greatest Conservation Need (SGCN). Projects included the following:
 - 28 electrical transmission line and/or substation projects
 - 26 wind energy developments
 - 8 solar energy developments
 - 12 oil or natural gas pipelines
 - 6 public works developments (i.e. misc. municipal or tribal construction projects)
 - 9 coal mining projects (new/amended permits, abandoned mine reclamation, etc.)
 - 1 Landfill permit renewal
- Performed 54 personal consultations with wind energy and/or environmental consultants working on behalf of wind energy companies to discuss wildlife impacts and siting issues for 46 different proposed wind energy projects or projects under construction (30 personal meetings at the USFWS Tulsa Ecological Field Office, seventeen (17) conference call meetings, one personal meeting at the Arcadia Conservation Education Building, and one personnel meeting at ODWC headquarters).
- One meeting was attended with Oil and Gas developers to evaluate and discuss wildlife and habitat impacts from upcoming activities in western Oklahoma.
- Provided comments to Association of Fish and Wildlife Agencies (AFWA) pursuant to state authorized or prohibited "take" of state-listed wildlife species.
- Attended quarterly meetings of the Oklahoma Agency/Industry Working Group (including hosting the summer meetings (2015-2017) at ODWC's Arcadia Conservation Education Area) to keep abreast of current and evolving issues with energy exploration and environmental regulation. Presented on the WAFWA Range-wide Plan for Lesser Prairie Chickens and the APP Species Status assessment at the Fall 2017 meeting.
- Attended the Oklahoma Natural Resources conference sponsored by a number of Oklahoma Conservation Entities, to learn about current and emerging wildlife issues, conservation measures, and to network with wildlife professionals from across Oklahoma and neighboring states.
- Developed and periodically the list of BMP to submit to developers of utility-scale solar energy facilities

- Represented ODWC at the Oklahoma Oil and Gas Expo, the Oklahoma Oil and Gas Institute, sponsored by the Oklahoma Corporation Commission, and the Oklahoma Energy conference, hosted by Oklahoma City University.
- Met with officials from the USFWS and American Energy Partners (AEP) to provide comments at the public scoping meeting for AEP proposed generation and transmission projects in eastern Oklahoma.
- Presented on BMP and wildlife avoidance and minimization measures to a group of industry professionals at the Chisolm View wind energy facility.
- Participated in two webinars:
 - Increasing Citizen Engagement and Participation in Citizen Science Efforts, and
 - West /EDF webinar on surveys and monitoring at wind energy facilities
- Attended a pre-restoration site visit for a mine in Craig and Nowata counties to evaluate habitat for restoration recommendations.
- Reviewed and provided feedback to Western Farmers Electrical Cooperative for a comprehensive long range plan of infrastructure replacement and growth, including inclusion of solar generation in portfolio.
- Assisted planning and coordination of an Endangered/Petitioned Species workshop held for more than 35 participants from other Oklahoma state agencies and non-governmental organizations.
- Submitted proposals for land acquisition to Williams Companies (major mid-stream company based in Tulsa, OK) for a \$50K donation.
- Provided comments to Assoc. of Fish & Wildlife Agencies pursuant to state authorized or prohibited “take” of state-listed wildlife species.
- Reviewed and conducted internal vetting of route amendments to the Plains & Eastern Cleanline high voltage-direct current (HVDC) project that originates within Texas County Oklahoma and exits the state in Sequoyah County.
- Submitted correspondence to key energy industry partners regarding ODWC’s official comment letter regarding the 90-day status of the petitioned Alligator Snapping Turtle.
- Submitted correspondence to key energy industry partners regarding ODWC’s future management activities regarding the LEPC after a court decision vacated the LEPC’s status as a threatened species.
- Submitted correspondence to key energy industry partners regarding a USFWS 90-day finding on a list of 25 petitioned species.

- Attended an Electrical Transmission 101 workshop sponsored by the Association of Fish & Wildlife Agencies (AFWA) to learn about wildlife avoidance and minimization measures used by electric transmission companies.
- Attended a Water, Wetlands, Soil and Dam Regulations workshop to address state and federal regulations/authorities. Workshop was sponsored by Sustaining Oklahoma's Energy Resources (SOER).
- Represented ODWC at the Governor's Energy Conference.
- Reviewed and vetted Department of Energy (DOE) Final Environmental Impact Statement (EIS) for the Plains & Eastern Cleanline HVDC project and provided a summary to ODWC administration.
- Submitted correspondence and ODWC's official comment letter to key energy industry members pursuant to USFWS Advanced Notice of Review for proposed revisions to the species petitioning process for Endangered Species Act designations.
- Met with ODWC staff to review/correct/delete outdated and/or erroneous information on ODWC website pertaining to Lesser Prairie Chicken.
- Attended North American Wildlife and Natural Resources Conference and provided feedback to Energy & Wildlife Policy Committee.
- Met with officials from The Nature Conservancy (TNC) to discuss their "smart siting" tools for utility-scale wind energy facilities.
- Provided feedback at the request of USFWS Tulsa Ecological Services Office personnel with regard to siting of wind energy facilities near Salt Plains NWR.
- Notified ODWC administration and other key energy industry members of DOE Record of Decision (ROD) for the Plains & Eastern Cleanline Project.
- Provided feedback to AFWA for State Wind Power Siting and Wildlife permitting and/or siting regulations.
- Coordinated a tour of Canadian Valley Technology Center and their wind energy technician program, and then toured a local wind energy facility with ODWC Wildlife Diversity Personnel.
- Attended a pre-mining site visit at a proposed coal mine site in Latimer County.
- Reviewed amendments to USFWS' Industry Conservation Plan for American Burying Beetle, and circulated interpretations to key energy industry partners.

- Held consultation meetings with Oklahoma Department of Environmental Quality (DEQ) personnel to discuss federally-listed species protocols as well as Oklahoma's Species of Greatest Conservation Need.
- Reviewed, researched, and vetted several USFWS Federal Register Announcements, including revisions to CCAA, revised rules for incidental take of eagle, and eagle nests under the Bald & Golden Eagle Protection Act (BGEPA), and revisions to the process for petitioning new species for ESA protections.
- Assisted an Oklahoma landowner with a complaint pursuant to pollution within a neighborhood pond.
- Reviewed and provided feedback to Western Farmers Electrical Cooperative for a comprehensive long range plan of infrastructure replacement and growth.
- Met with the lead environmental staff for Cimarex Oil and then gave a PowerPoint presentation at their headquarters in Tulsa at a regional training workshop for all of their regional staff that are involved in environmental and safety compliance. The presentation provided background information about ODWC and explained ODWC roles in the conservation of at-risk species to preclude federal listing and the recovery of federally listed species.
- Worked (from April 2017 through November 2017) to backfill the vacated energy biologist position (position request, job announcement, candidate review and selection, interview prep and interviews, request to hire, training, etc.)
- Assisted with a special bat watch opportunity provided for APEX (a wind power company) personnel and consultants at the Selman Bat Cave WMA to raise awareness of bat issues related to wind power.
- Examined known bat cave locations and species composition near the Selman Bat Cave in relation to a proposed wind power project east of the Selman Bat Cave complex.
- An internal meeting to discuss the environmental review requests that ODWC receives for a variety of projects including energy developments was organized, and attended by appropriate staff.
- An ongoing wind power project was toured in western OK to observe the repowering of existing turbine heads to incorporate more efficient technology to the wind power project
- The Federal protocol for coal mining was reviewed
- Energy projects were observed in 4 counties.

E. DISCUSSION:

The energy emphasis biologist position has led to more efficient consulting and information dissemination between wildlife agencies, energy corporations and the ODWC. This has resulted in the energy industry becoming more informed on wildlife and fisheries as well as natural resource issues while still remaining a robust industry in Oklahoma. This was accomplished via a multitude of interactions such as meetings, conference calls, and written correspondence with industry leaders. Because of ODWC's expertise and guidance on compliance with federal protocols (e.g. various rules/practices for LEPC and ABB), the ODWC has become a trusted resource for industry professionals to consult, and from whom to solicit feedback pertaining to future operations and impacts to wildlife.


Additionally, many responses to inquiries for information from the ODWC about other sensitive habitat and species throughout Oklahoma were provided. Furthermore, this position has also provided support to other ODWC employees in a variety of roles including but not limited to: review/ranking of proposals for State Wildlife Grants, and surveys and inventories of Species of Greatest Conservation need on state Wildlife Management Areas.

F. SIGNIFICANT DEVIATIONS:

Rich Fuller, ODWC Energy Emphasis Biologist, and Project Leader for this project, terminated employment with ODWC effective 15 March 2017. That position remained vacant through 27 November 2017, with most of the duties formerly assumed by the Energy Emphasis biologist being assumed by Wildlife Diversity Staff, and Wildlife Research Supervisor Russ Horton. The position was refilled November 27, 2017 by Jeremiah Zurenda, ODWC Energy Emphasis Biologist and new project leader for this project.

G. DATE: August 2, 2018

H. PREPARED BY: Jeremiah Zurenda, Wildlife Biologist
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