



Seeking opportunities and finding solutions for the restoration of wildlife and habitat.

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Our Goal: To be the best at wildlife and habitat conservation within the context of energy development.

The Endangered Species Act

Considerations for the
Kentucky Oil and Gas Industry

Legislative History

- Federal laws of 1966 and 1969 initiated protection for species in danger of extinction.
- The Endangered Species Act of 1973 added management tools to save “vanishing species.”
- The 1973 Act was amended in 1976, 1978, 1979, 1982, and 1988.
- Remember the Snail Darter? Supreme Court test.

Interagency Consultations

- Enlists all federal agencies in conservation of threatened and endangered species
- **7(a)(1)** - Federal agencies must use their authorities to conserve endangered and threatened species.
- **7(a)(2)** - Agencies must ensure that **actions** they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or adversely modify critical habitat.
- Action = any discretionary action funded, authorized, or carried out by a Federal action agency that may affect a listed species.
- Agencies commonly consulted with include: USACE, USDA RUS, USDA RD, USFS, KY DSMRE, FERC, FHWA, and HUD.

Informal Consultation

Purpose -Determine potential effects of a proposed action on listed species – 3 types of effects: **Direct, indirect, and Cumulative**

-Allows Federal action agencies an opportunity to modify projects to avoid adverse effects to listed species and/or critical habitat

-Determine whether Formal Consultation is needed

Process -Coordination between the Service and Federal agency, representative, or an applicant

-May involve correspondence, meetings, site review, document review

Effects Determinations -No Effect

-May Affect - “not likely to adversely affect”

- Insignificant or beneficial
- Requires Service concurrence

-May Affect – likely to adversely affect

- Formal consultation required

Formal Consultation

Formal Consultation is required when an action is “likely to adversely affect” species or critical habitat

- * Service issues a Biological Opinion (BO)
- * Incidental take is anticipated and addressed
- * The Service would provide Reasonable and Prudent Measures
- * Could affect timing of project, scope and scale, project design, mitigation, or stoppage of project.

Prohibited Acts

Purpose:

- * Makes it illegal for any person, including private, State, and public entities to “take” individuals of a federally listed species.
- * Protect endangered species from threats of commercial trade, collection, or malicious destruction of Federal lands, and similar actions that violate State law
- * “Take” is defined in the ESA: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Harm is further defined to include significant habitat modifications or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is further defined as actions that create the likelihood of injury to listed species to such an extent to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering.
- * “Take” often occurs in the form of habitat loss or habitat degradation.

Threatened & Endangered Species within the State of Kentucky

Kentucky currently has 41 species listed as federally endangered or threatened (3 mammals, 1 bird, 5 fish, 21 mussels, 1 crustacean, 1 insect, and 9 plants), and an additional 11 candidates for listing

There is a chance we'll be getting as many as 40 more.



Consultation Issues - Indiana Bat is Problematic (add Northern long-eared bat)

- * **Wide ranging species – nearly half of eastern U.S.**
- * **Habitat is split – caves in winter, forests in summer**
- * **Small and mobile – difficult to find or track**
- * **Potential summer habitat – wide spread and readily available**
- * **Addressing project effects on the species can be costly and conflict with time schedules**
- * **Example – Surveys required between 6/1 and 8/15**

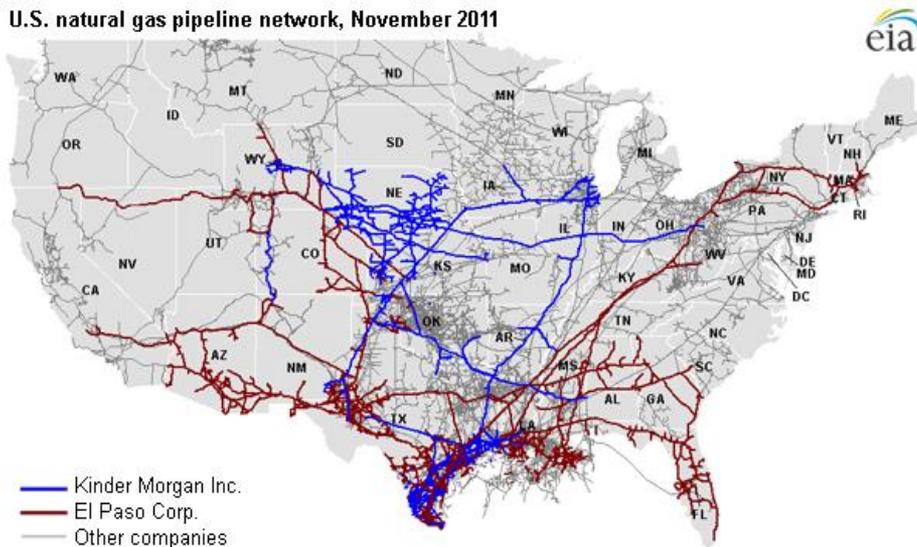
Kentucky Field Office Review/Analysis of Projects Potentially Affecting the Indiana Bat

- * Overlapping Habitat and Sensitive Areas – Avoidance, Formal Consultation, Conservation MOA (Account for all forested removal: **translation - mitigation**)
- * Known Maternity, Swarming, Non-Maternity Summer – Avoidance, Seasonal Clearing (requires complete indirect and cumulative analysis), Formal Consultation, Conservation MOA
- * Potential Habitat – Avoidance, Seasonal Clearing, Survey, Formal Consultation, Conservation MOA

Oil and Gas

- * Transmission Lines - These transmission lines are regulated by the FERC, thus the federal nexus. FERC also regulates gas storage facilities.

U.S. natural gas pipeline network, November 2011



Oil and Gas Drilling & Gathering Lines

- * These actions are not Federally regulated unless the actions are on Federally Managed Land (DBNF, Fort Knox etc.) or a permit from the U.S. Army Corps of Engineers is required.
- * Because most oil and gas drilling & gathering lines in Kentucky are on private land these actions are only State regulated. The Kentucky Division of Oil and Gas (KDOG) is the lead State agency. **This is changing!!**
- * Section 9 of the ESA applies to these actions. KYDOG does not require ESA consultation***. However, if you **take** a listed species, you can still be in trouble.

“No Effect” Actions

- * Wells, Gathering Lines, Tanks, Compressor Stations, located within previously disturbed areas typically would result in insignificant or no adverse effects to fish and wildlife resources within Kentucky.
- * To reduce paperwork and unnecessary review of such projects, the USFWS believes that a programmatic consultation would be the most efficient way for KDOG, the operator, and the USFWS to consult on these projects.



“May Adversely Affect Actions”

- * Actions that involve the removal of forested areas, in-channel and/or riparian disturbance to streams inhabited by federally listed aquatic species, or effect caves or karst areas have the potential to adversely affect federally listed species within Kentucky.





Oil and gas wells sometimes involve the removal of forested area (i.e.; potential of known Indiana bat summer habitat). Site preparation for a well often requires about 0.5 acres. Construction of associated access roads, gathering lines, battery tanks, and other infrastructure also may result in habitat loss. “Take” to Indiana bats could occur from such actions (direct, indirect, cumulative)