

# Basic Learning Points: Land-based Wind Energy Guidelines, Tiered Approach



- 1) The Guidelines are voluntary!
- 2) Communication between the Service and the developer or operator should occur **early** and **often**.
- 3) The Guidelines are intended to:
  - a. promote compliance with relevant wildlife laws and regulations;
  - b. encourage scientifically rigorous survey, monitoring, assessment, and research designs proportionate to the risk to species of concern;
  - c. produce potentially comparable data across the Nation;
  - d. mitigate, including avoid, minimize, and compensate for potential adverse effects on species of concern and their habitats; and,
  - e. improve the ability to predict and resolve effects locally, regionally, and nationally.
- 4) Developers and/or operators are responsible for maintaining internal records sufficient to demonstrate adherence to the Guidelines and communication with the Service. The **Communications Protocol** (Guidelines, pg 5) describes the types of records that may be maintained.
- 5) The Tiered Approach embodies adaptive management by collecting increasingly detailed information used to make decisions about project design, siting, construction, and operations as the developer progresses through the tiers.

- 6) Tiers 1 -3 are pre-construction. Studies can be used to identify presence of species of concern, evaluate their behavior and use of the site, and to evaluate risk.
- 7) The project developer/operator determines whether to continue with the project, conduct more studies, or move to the next tier. Decisions are made based on information collected, including technical assistance provided by the Service.
- 8) The Service will notify a developer if species of habitat fragmentation concern are in the project area. The developer can use the General Framework for Evaluating Habitat Fragmentation at a Project Site if such species are present.
- 9) Discussions about mitigation should begin in Tier 2 and into Tier 3.
- 10) Tier 4 is post-construction and assesses the accuracy of the predictions of fatality risk and direct/indirect impacts to habitats.
- 11) Tier 5 studies will not be necessary for most wind energy projects. Tier 5 studies are intended to:
  - a. analyze factors associated with impacts in those cases in which Tier 4 analyses indicate they are potentially significant;
  - b. identify why mitigation measures implemented for a project were not adequate; and
  - c. assess demographic effects on the local populations of species of concern when demographic information is important, including species of habitat fragmentation concern.