

Wind energy is an abundant source of electricity with low greenhouse gas emissions that is expected to grow significantly across the Prairie Pothole Region and Northern Great Plains. However, wind infrastructure has measurable effects on birds and is an additional stressor to grassland and wetland habitat loss. Given the projected growth of wind energy, collaboration is needed among industry, State Fish & Wildlife Agencies (SFWA), and permitting sectors to minimize conflicts with birds and their habitats and achieve ideal outcomes for all wind energy projects and stakeholders.

The Prairie Pothole Joint Venture (PPJV) identified the following guiding principles that are shared among the partnership. They are intended to support responsible wind energy development that minimizes effects on priority birds and to help facilitate collaboration between stakeholders.

# EARLY ENGAGEMENT \_\_

Consultation with SFWAs as early as possible in wind energy projects can help minimize unintended effects on birds and habitats. SFWAs have access to a wealth of information about wildlife populations and can convey bird and habitat concerns near a project siting area. Early engagement with SFWAs increases the potential that projects will not encounter wildlife related project delays or cost overruns.

### VARIABLE EFFECTS \_\_\_\_

Wind infrastructure has direct and indirect effects on birds and concerns for species and their habitats will vary by locality and seasonally. Sensitivity to wind development among bird species and habitats varies considerably. Birds experience not only direct mortality from collisions but also indirect negative effects due to their avoidance of wind facilities and reduced habitat quality.

#### PRIORITY BIRDS & HABITATS

Consider priority bird species and their habitats, which will vary by locality, when siting wind projects and designing offsets. Many species affected by energy development are already experiencing population declines from other stressors. Beyond those that are federally listed, SFWAs may prioritize additional species that should be considered in the exploration of wind energy projects and offsets.

### LOW EFFECT ON BIRDS -

**Encourage wind energy development in areas with relatively low biological effect.** Wind energy has many environmental benefits but does have measurable effects on birds. Strategies are desired that encourage wind energy development in areas where effects are likely to be relatively low, and SFWAs can assist with interpreting these effects and locations.

# AGENCY-LED APPROACHES -

Collaborative approaches led by SFWAs for siting wind projects and designing offsets can help achieve optimal project outcomes. Inconsistent guidelines and regulations for wind projects exacerbates unintended effects on birds. A collaborative approach between SFWAs, wind industry, contractors, permitting entities, and other stakeholders is likely to yield the best outcomes.

### HABITAT OFFSETS

**Design offsets for wind infrastructure effects based on biologically equivalent habitat values for birds.** When effects are unavoidable, a biological currency for offsets is needed to ensure they provide equivalent values to those of affected areas. A biological equivalency framework helps avoid arbitrary values and ensures that projects address the effects on birds and habitats.

# SCIENCE TOOLS \_\_\_\_

The PPJV is committed to using regional species-habitat models and decision-support tools that provide a scientific basis for minimizing effects of wind energy infrastructure on birds. These models and tools are used by the partnership to inform conservation programs and can also be used to inform wind energy stakeholders through coordination with SFWAs. The PPJV will continue to support science investments and decision-support tools that incorporate the best available science.

Continual coordination with local natural resource agencies is the greatest opportunity to minimize effects on birds and achieve responsible renewable energy.

Learn more by reading the full Guiding Principles: https://bit.ly/WindGuidingPrinciples

