## Montana Audubon Wind Energy Policy Guidance Document Adopted by Montana Audubon Board January 12, 2008

Montana Audubon supports the development of alternative renewable energy sources including wind energy. However, we have concerns about wind energy projects on a site-specific basis because of the potential impact of wind turbines on birds and other wildlife. The problem with wind farms is straightforward: if wind farms are located in areas heavily used by birds, such as in a migration flyway or nesting area for a species of conservation concern, there is the potential for significant numbers of birds and/or rare birds to be unnecessarily killed each year.

- **1. Pre-siting Studies**: It is important in all wind projects to ensure that adequate bird and bat survey information is collected and used <u>before</u> wind farms are sited. For this purpose, Montana Audubon considers 'adequate bird and bat surveys' to mean:
  - ➤ Bird and bat surveys are conducted during the breeding season, as well as during the fall and spring migration season (many birds migrate along different routes in different seasons);
  - > Surveys are conducted during the above-described seasons for at least one year, but preferably for two years;
  - > Surveys examine day and night migration (many songbirds and bats migrate at night); and
  - > Surveys follow accepted peer-reviewed research protocol.
- **2. Avoiding Impacts to Wildlife**: Wind farm sites that are more suitable from a wildlife perspective are sites that:
  - > Do not provide prime habitat for threatened or endangered species protected under the federal Endangered Species Act;
  - Are located away from water bodies (wetlands, streams, rivers, lakes), that attract larger numbers of birds and other wildlife;
  - Are not located in an identified migratory corridor:
  - Do not fragment large tracts of intact habitat, especially those tracts identified as significant for wildlife species of conservation concern according to Montana Natural Heritage Program data or other survey data. Note that habitat is fragmented by roads, transmission lines, and other infrastructure development;
  - > Do not fragment or degrade significant landscapes with special management status for wildlife or wilderness qualities;
  - ➤ Do not have significant prairie dog populations located in the project area or a 5-mile radius of the area, which will attract fewer raptors;
  - Do not have significant ground squirrel use of the area, which will also attract fewer raptors to the site; and
  - Have comparatively low diversity and abundance of resident birds (e.g. preference should be given to cropland areas).
- **3. Land Areas to Avoid:** Specifically, in Montana wind farms should not be located within two miles of:
  - ➤ National Wildlife Refuges;
  - > State Wildlife Management Areas;
  - ➤ National or State Parks;
  - Designated Wilderness Areas and Wilderness Study Areas;
  - Designated Wild and Scenic Rivers;
  - > Audubon-designated Important Bird Areas;
  - Large tracts of intact habitat, where roads and transmission lines are generally absent;
  - Areas with extensive hardwood draws:
  - Areas where species of conservation concern are concentrated, such as in prairie-dog towns and near Greater Sage-Grouse leks (NOTE: Greater Sage-Grouse leks may need a 5-mile buffer);

- **4. Siting Mitigation Standards**: Project requirements should specifically include mitigation measures to address bird and bat-related issues, including:
  - Using wind turbines with no place for birds to perch or nest;
  - Placing all electrical lines between turbines underground and using unguyed meterological towers to avoid places where birds can perch and/or collide;
  - Minimizing the length of:
    - Overhead transmission lines (these lines can impact birds by providing perches for them (attracting them to the site), which increases the likelihood of electrocutions and collisions with wires);
    - Roads that cause fragmentation of habitat;
  - Where overhead transmission lines are used, committing to using power pole and power line configurations that prevent raptor electrocutions or installing insulators (or other proven technology) on all power poles that are designed to prevent raptor electrocutions;
  - > Using appropriate lighting that won't attract night migrants (bats and birds), to the substation;
  - Using appropriate paint, tape, or other markings to ensure that night migrants can see hazards associated with wind farms;
  - Requiring that adequate post-construction bird and bat surveys be completed; these results should then be compared to pre-construction/predicted bird and bat mortality rates. For this purpose, 'adequate bird and bat surveys' means that surveys:
    - Are conducted during the breeding season, as well as during the fall and spring migration season (many birds migrate along different routes during different seasons);
    - Are conducted during the above-described seasons for at least one year, but preferably for two years;
    - o Examine day and night migration (bats and many songbirds migrate at night); and
    - o Follow accepted peer-reviewed research protocol.
  - Forming a Technical Advisory Committee (TAC) for the purpose of reviewing post-construction surveys and making recommendations if changes are needed. If post-construction surveys reveal significant impacts, the TAC should be invited to recommend management changes to the wind farm (e.g. the wind farm could be shut down during the height of migration (which is a matter of weeks in the course of a year)).
  - Establishing a step-by-step protocol for unforeseen bird and bat impacts; and
  - Where mortality to birds and impacts to habitat are expected to be significant, wind turbines should not be used. Newer technology with less likelihood of wildlife mortality such as vertical spiral vane generators must be considered as an acceptable alternative for generating wind power.