Wind Energy Development in Montana: Guidance for Effective Agency Involvement to Minimize Wildlife Impacts

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Montana is one of the top five states for wind energy potential but ranks 19th for installed wind energy, with 691 megawatts of capacity built. Nationwide, wind energy development is on track to provide 20% of the country's electricity by 2030 and wind turbine technician is the fastest growing job in the nation. Wildlife managers in Montana will see more wind development projects come across their desks but may have limited experience with review. We present an overview of existing and potential wind farms in Montana and the typical process for project permitting and development. Wind has great potential as a source for green energy but improperly sited wind projects pose threats to wildlife including potential risk of bird and bat collisions; displacement of nesting raptors, songbirds, and prairie grouse at leks; and habitat fragmentation. In 2015, Montana Fish, Wildlife and Parks began wildlife monitoring at a wind farm near Geyser, giving the department direct experience designing and implementing fatality monitoring. The key to wildlife friendly wind development is early consultation with state and federal agencies and open discussion of survey results. To assist developers, USFWS has produced the Wind Energy Guidelines (WEG) and Eagle Conservation Plan Guidance (ECP). These are voluntary guidelines, but both aim to walk developers through the process of identifying, avoiding, and minimizing impacts to wildlife and key habitats. To assist biologists, we will summarize impacts to wildlife, give a short-course on the WEG and ECP, identify opportunities for agency involvement at each stage of development and offer a framework for effective consultations.