

**Association of Fish and Wildlife Agencies
Energy and Wildlife Policy Committee
State Wind-Wildlife Assessment Working Group**

State Mechanisms for Supporting Low-Impact Wind Siting and Operation

Background

In 2019, the Association of Fish and Wildlife Agencies' Energy and Wildlife Policy Committee conducted a survey of state fish and wildlife agencies (SFWA) related to wind siting and wildlife issues. In September 2019, the survey results were compiled into a publicly available final report with recommendations.¹ One of the recommendations was to identify and share state policy mechanisms that may support low-impact wind development.

The purpose of this paper is to follow through on this recommendation. It is a compilation of state policies that either require, allow for, or encourage consultation with state wildlife agencies during decision-making related to wind projects. It draws from responses to the 2019 survey, as well as other examples identified through independent research. Additional research was completed in the Fall of 2023 to reflect new or updated policies. All the information provided in this document is publicly available.

This paper is not a comprehensive assessment of the policies that currently exist in all 50 states, nor does it purport to evaluate the effectiveness of existing policies in supporting low-impact wind siting. This document does **not replace the need to confer with state agencies**, including SFWAs, to determine a state's required or recommended consultation processes. Please refer to the [ACP/AFWA Communications Framework for Wind Project Proponents and State Fish and Wildlife Agencies](#) for suggested protocols for communication.

The mechanisms outlined in this document are organized into the following categories:

- Direct regulatory authority: Regulatory requirement for wind facility developers to secure approval for facility siting or operation from a SFWA.
- Indirect requirement to consult: Requirement for wind facility developers to secure approval for facility siting or operation from an agency **other than the SFWA** (e.g., state board of public utilities, state facilities siting board) **and a requirement** for that agency to seek input from the SFWA.
- Indirect authority to consult: Requirement for wind facility developers to secure approval for facility siting or operation from an agency **other than the SFWA** (e.g., state board of public utilities, state facilities siting board) **and the authority** for that agency to seek input from the SFWA.
- SFWA input on local siting standards.
- Voluntary siting or operational guidelines.
- Gubernatorial directives.
- Voluntary siting decision-support tools.

The 2019 survey gathered information about which states have open records policies or other mechanisms that give the wildlife agency the ability to shield proprietary and confidential business information from public disclosure. It has been noted that having such policies in place may affect the likelihood that a developer will share project and location details with agencies early in the development process. This document does not, however, include information about these policies.

Many state wildlife agencies have developed best management practices for wind siting and operation. While this document provides information on siting guidelines that have been developed or are under development by SFWAs, it does not summarize the best management practices that may be available in individual states.

An Appendix is included, which provides links to general resources on state wind energy siting policy. The Appendix is not a definitive resource list, but rather a source of information for SFWAs on where they can find additional information on approaches used in other states.

This document has been prepared solely for general informational purposes, does not include an exhaustive or comprehensive compilation of state statutes, regulations, policy, or guidance, and is not intended to serve as a substitute for any form of agency consultation required by law. The information presented is not legal advice, is not to be relied upon as such, may become outdated, and is subject to updating without notice.

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Direct Regulatory Authority: Approval for Siting or Operation

None identified.

Indirect Requirement to Consult

California –A 2022 California law gives the California Energy Commission the authority to approve renewable energy facilities 50KW or greater and creates an expedited process that bypasses local regulations and supersedes most other state regulations. The CEC is required to consult with the Fish and Wildlife Agency as it develops its rules and “the commission shall also consult with the Department of Fish and Wildlife with respect to any proposed commission findings and actions regarding potential impacts to fish, wildlife, and plant resources and the habitats upon which they depend.”ⁱ

Section 25545.5 plans to ensure timely and effective consultation between the commission and other departments and states, “(a)Within 90 days of the effective date of this chapter, the commission shall, in coordination with the Department of Fish and Wildlife, develop a plan that ensures timely and effective consultation between the commission and the Department of Fish and Wildlife with respect to any proposed commission findings and actions to authorize the take of endangered, threatened, and candidate species pursuant to the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code) or impacts to fish and wildlife resources pursuant to Section 1602 of the Fish and Game Code. The commission shall also consult with the Department of Fish and Wildlife with respect to any proposed commission findings and actions regarding potential impacts to fish, wildlife, and plant resources and the habitats upon which they depend. The plan shall include a process to ensure that all such take and impacts are consistent with Chapter 6 (commencing with Section 1600) of Division 2 of, and Chapter 1.5 (commencing with Section 2050) of Division 3 of, the Fish and Game Code.”

Colorado: All electrical generating facilities in Colorado must secure a certificate of public convenience and necessity from the Public Utilities Commission (PUC).² For eligible energy resources larger than two MW that are not net-metered or any wind turbine structures over 50 feet in height must submit a “bid package” that includes “written documentation that consultation occurred with appropriate governmental agencies (for example, the Colorado Division of Wildlife or the U.S. Fish and Wildlife Service) responsible for reviewing potential project development impacts to state and federally listed wildlife species, as well as species, habitats, and ecosystems of concern.”³

Prior to commencing operation, all wind projects with turbines over 50 feet in height must certify that that they have done the following:

- “performed site specific wildlife surveys (referred to herein as the Environmental Surveys) which are conducted on the facility’s site prior to construction;”
- “with good faith effort, used the results of the Environmental Surveys and available monitoring in developing the design, construction plans, and management plans of the facilities to **avoid, minimize, and/or mitigate any adverse environmental impacts to**

state and federally listed species, to species of special concern, to sites shown to be local bird migration pathways, to critical habitat, to important ecosystems, and to areas where birds or other wildlife are highly concentrated and are considered at risk;

- shared the results of the pre-construction Environmental Surveys with the Colorado Division of Wildlife (CDOW) prior to project construction; and
- made a summary report of these results available to CDOW at the time the project achieves commercial operation.⁴

Illinois –A 2023 law requires County decisionmakers to use the Illinois DNR Ecological Compliance Assessment Tool (EcoCat) and consult with the Natural Resources Agencies and comply with the agency’s concerns before a permit can be issued.ⁱⁱ Note that the new law sets baseline standards for wind and solar setbacks and solar facility fencing that the County’s must follow.

Kansas - Wind power projects are statutorily subject to KDWP regulatory purview if they are publicly funded, state or federally assisted, or require a permit from another state or federal government agency (including Construction Stormwater Permits issued by Kansas Department of Health and Environment) to protect species listed as threatened or endangered as designated by the Kansas Nongame and Endangered Species Conservation Act of 1975ⁱⁱⁱ. Kansas statutes and regulations require the issuance of special action permits from KDWP for activities that affect listed species before such activities may proceed.

North Dakota: In North Dakota, utilities must secure certificates from the Public Service Commission for the construction of generation facilities and transmission corridors.⁵ When considering issuance of certificates, the Commission is directed to consider effects from the project’s location, construction, and operation on “**natural resources, and the environment,**” “[a]dverse direct and indirect environmental effects that cannot be avoided,” and effects from project siting on “**areas unique because of biological wealth or because the areas are habitats for rare and endangered species.**”⁶ Certification issuance must also consider “Problems raised by federal agencies, other state agencies, and local entities.”⁷

The North Dakota Commission has reviewed, and in some cases, rejected projects that were deemed to be sited poorly due to their wildlife and habitat impacts.⁸

The legislation also directs the PSC to develop criteria for “identifying **exclusion and avoidance areas.**”⁹ Rules subsequently adopted by the PSC outline wind siting criteria, including “exclusion areas” and “avoidance areas.”

Exclusion areas are “geographical areas” that “must be excluded in the consideration of a site for an energy conversion facility.” They include:

- “Designated or registered national: parks,” defined as “memorial parks; historic sites and landmarks; natural landmarks; historic districts; monuments; **wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.**”
- “Designated or registered state: parks,” defined as “forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; **grasslands; wild,**

scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.”

- **“Areas critical to the life stages of threatened or endangered animal or plant species.”**
- “Areas where **animal or plant species that are unique or rare** to this state would be irreversibly damaged.”¹⁰The regulations also include criteria for “avoidance areas,” which are “geographical areas” that “may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative.” Avoidance areas include:
 - “Areas within known floodplains as defined by the geographical boundaries of the hundred-year flood.”
 - “Woodlands and wetlands.”
 - “Areas of recreational significance which are not designated as exclusion areas.”¹¹

Ohio: In Ohio, the Power Siting Board makes decisions about whether to approve, deny or approve with conditions wind facilities over five megawatts (MW).. Applicants are required to submit information including a summary of any studies that have been undertaken on the environmental impact of the facility.¹² In making its decision about whether to approve a project, the board finds and determines the “nature of the probable environmental impact;” and that the project “represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations.”¹³

The statute also directs the siting board to, among other things, “Adopt rules establishing criteria for evaluating the effects on environmental values of proposed and alternative sites.”¹⁴

The Power Siting Board has 13 members, including four non-voting members and two members representing the local community. A 2021 law increased local input in the siting of wind projects, adding representatives from the boards of county commissioners and township trustees located in the proposed project area. The county commissioners may restrict an area from wind development, and county citizens may vote on the restriction through referendum.^{iv} The state statute establishing the commission mandates that the directors of the Ohio Department of Natural Resources (which includes the wildlife agency is housed) and Ohio Environmental Protection Agency serve on the board.¹⁵

Oregon: Wind facilities 50 MW or greater must obtain a site certificate from the Oregon Energy Facility Siting Council.¹⁶ The Council must ensure that facilities comply with a Fish and Wildlife Habitat Siting Standard¹⁷ and the state’s Fish and Wildlife Habitat Mitigation Policy.¹⁸

Maryland: Onshore wind facilities greater than 70 MW must secure a Certificate of Public Convenience and Necessity from the Maryland Public Service Commission (PSC). The PSC must give notice to the Department of Natural Resources and may invite input from the SFWA.¹⁹

Nevada: When energy developers file applications with federal agencies, the state Public Utilities Commission, or any county for a lease, right-of-way, permit, or other application

relating to construction of an energy development project, they are also required to file a notice of the energy development project with the Department of Wildlife. The Department of Wildlife is then required to undertake a wildlife resource and impacts review. The results of the review must be posted on the website of the department. The Department of Wildlife has wide latitude on the types of information it requests of the developer.²⁰Wyoming: Under the Wyoming Industrial Development Information and Siting Act,²¹ all wind facilities with 20 or more turbines must receive a permit from the Industrial Siting Council (ISC).²²

Permit applications must include, among other things: “a copy of any studies which may have been made of the environmental impact of the facility”;²³ an evaluation of potential impacts;²⁴ measures to avoid endangering animal life, wildlife, or plants;²⁵ and plans to alleviate environmental impacts from the proposed facility, including impacts to terrestrial and aquatic wildlife, and threatened, endangered and rare species and other species of concern identified in the Wyoming Game and Fish Department’s State Wildlife Action Plan.²⁶

Once the Industrial Siting Division of the Department of Environmental Quality (DEQ) receives an application for a permit, it must seek review and recommendations from state agencies with expertise on the resources that are expected to be impacted, including the game and fish department, department of environmental quality, and department of state parks and cultural resources, among others.²⁷ These agencies have 60 days to provide the Division with “opinions as to the advisability of granting or denying the permit,” the reasons for their determination, and recommendations for “appropriate conditions to include in a permit” within the agencies’ area of expertise.²⁸ Agencies with regulatory authority over the proposed facility must provide the council with a statement “of the agency’s capability to address cumulative impacts of the facility in conjunction with other facilities.”²⁹

In making its determination, “the council may consider direct or cumulative impacts not within the area of jurisdiction of another regulatory agency in this state.”³⁰ The council must grant a permit – either as proposed or as modified by the council – if it determines that the proposed facility “will not pose a threat of serious injury to the environment nor to the social and economic condition or inhabitants or expected inhabitants in the affected area.”³¹

As a condition of permit, the ISC generally requires that prior to the initiation of construction activities, the proponent submit a finalized and signed Monitoring Plan to the ISC. This is a document that has been developed in conjunction with private landowners and the Wyoming Game and Fish Department that summarizes the wildlife and habitat resources at the site, all pre- and post-construction monitoring that has or will occur, all avoidance and minimization measures incorporated into the project’s development and operations, and any commitments to adaptive management that may occur as a result of monitoring. The nature of the Monitoring Plan encourages project proponents to collaborate closely with the WGFD before, during, and after the permitting process.

Indirect Authority to Consult

Connecticut: The Connecticut Siting Council reviews all proposed power generating facilities and transmission lines and issues certificates of environmental compatibility and public need.

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The Council is charged with balancing the provision of public utility services at the lowest reasonable cost to consumers with “the need to protect the environment and ecology of the state” and “to provide environmental quality standards and criteria for the location, design, construction and operation of facilities...”³² In determining whether to issue a certificate, the Council is required to consult with and solicit written comments from a number of state agencies, including the Department of Energy and Environmental Protection.³³ The Council has the authority to deny certificates for facilities that have “finds a substantial adverse environmental effect...”³⁴

The Siting Council was directed to develop regulations to govern wind siting and to do so in consultation with the Department of Energy and Environmental Protection. The regulations must address a range of issues, including impacts on natural resources.³⁵

Iowa: In Iowa, developers must secure a “certificate of public convenience, use and necessity” from the Iowa Utilities Board for the construction, maintenance, and operation of electric power generating plants and associated transmission. The Board considers economics and reliability but must also demonstrate that the project “will be consistent with **reasonable land use and environmental policies** and consonant with reasonable utilization of air, **land, and water resources**, considering available technology and the economics of available alternatives.”³⁶

Kentucky: The Kentucky Public Utilities Commission (PUC) issues certificates of convenience and necessity and all facilities capable of generating more than 10 MW must first submit a site assessment report and obtain a site suitability certificate from the commission.³⁷ The site assessment report must outline mitigating measures to be implemented by the applicant to minimize or avoid adverse effects identified in the site assessment report³⁸ and the PUC may require “reasonable mitigation measures.”³⁹

Minnesota: The Public Utilities Commission is responsible for issuing permits for electric power plants greater than 50 MW, electric transmission lines greater than 100 kilovolts, storage facilities, solar energy generating systems,⁴⁰ and wind farms greater than 5 MW.⁴¹

The PUC is directed to locate large electric power facilities “in an orderly manner compatible with **environmental preservation** and the efficient use of resources” and “choose locations that **minimize adverse human and environmental impact** while insuring continuing electric power system reliability and integrity and insuring [sic] that electric energy needs are met and fulfilled in an orderly and timely fashion.”⁴²

In their applications, developers must identify the effects of proposed projects on “**wildlife**” and “**rare and unique natural resources**.”⁴³

When evaluating whether to issue a site permit or approving a route selection, the commission “must be guided by the state's goals to **conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts**, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission

infrastructure.”⁴⁴ The PUC should be guided by consideration of research and studies that have been undertaken on the effects of generation facilities and transmission on “**land, water, and air resources,**”⁴⁵ “**vegetation, animals,**”⁴⁶ and methods for minimizing adverse environment effects.⁴⁷ The Commission must also consider “**adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted**”⁴⁸ and, “**where appropriate, consideration of problems raised by other state and federal agencies and local entities.**”⁴⁹

The PUC’s procedures for review of proposed large energy facilities aligns with the Minnesota Environmental Policy Act and provides for broad public participation, including timely public notice, and multiple opportunities for public comment.⁵⁰

New Hampshire: In New Hampshire, the state legislature directed the Site Evaluation Committee to establish criteria to ensure that the benefits of wind projects “are appropriately considered and unreasonable adverse effects avoided through a comprehensive, transparent, and predictable process.”⁵¹ The Committee must also consider, among other things, “Cumulative impacts to natural, scenic, recreational, and cultural resources,” “Impacts to the environment, air and water quality, plants, animals and natural communities,” and “practical measures to avoid, minimize, or mitigate adverse effects.”⁵²

New Jersey: In New Jersey, the Department of Environmental Protection’s Division of Land Use Regulation oversees wind development in the coastal zone.⁵³

South Dakota: The South Dakota Public Utility Commission (PUC) issues permits for wind energy facilities, which are defined as those over 100 MW.⁵⁴ The PUC has the authority to approve, deny, condition, or modify aspects of a facility’s construction, operation, or maintenance.⁵⁵ In issuing permits, the PUC must ensure that the “location, construction, and operation of facilities will produce minimal adverse effects on the environment.”⁵⁶ Permits must also be secured for the development of trans-state transmission line and for these the PUC must ensure that the proposed line will “not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or anticipated inhabitants in the siting area.”⁵⁷

For projects greater than 5 MW, developers must give the Commission notice prior to commencing project construction, but no permit is required.⁵⁸

In issuing permits, the PUC must consider information provided by state agencies and local governments related to projects’ “environmental, social, and economic conditions.”⁵⁹

Vermont: Wind facilities⁶⁰ must secure a Certificate of Public Good from the Vermont Public Service Board (PSB) prior to initiating site preparation or constructing a new energy generation facility.⁶¹ When issuing a certificate, the PSB must ensure that the project will not have an “undue adverse effect” on a variety of resources, including the natural environment.⁶² The PSB must also give consideration to a range of fish and wildlife considerations.⁶³ The Vermont Agency of Natural Resources, in which the Fish and Wildlife Department resides, must be a

party to any proceedings and must provide evidence and recommendations concerning environmental considerations outlined in the statute.⁶⁴

Virginia:- In 2022, Virginia passed a new statute to require renewable energy projects (solar or wind projects under 150 MW, hydro under 100 MW, and biomass under 20MW) to secure a permit. The DEQ rules create a “permit by rule” which requires wildlife studies and natural resource analyses, using the Virginia Fish and Wildlife Information Service web-based tool as well as the Wildlife Environmental Review Map Service and by field studies. If the department determines significant adverse impacts upon listed species, then the application must include a mitigation plan which includes avoidance and minimization if possible, and/or compensation for unavoidable impacts.^v

In Virginia, larger projects or those that are selling to customers, must receive a “certificate of convenience and necessity” from the Virginia State Corporation Commission for the construction and operation of electrical generating facilities. While the Commission primarily considers the effects of such projects on rates and reliability, the agency is also directed to give consideration to the environment.⁶⁵

West Virginia: The West Virginia Public Service Commission (PSC) issues siting certificates to wind energy companies. Developers address the effects on rare, threatened, and endangered species and their habitats (including bird and bat risk assessments), wetlands, and streams within the application. The PSC has stated that siting certificates are contingent upon applicants meeting the requirements of the WV Division of Natural Resources (WVDNR) and U.S. Fish and Wildlife Service. In addition to the siting certificate, developers must obtain a Stream Activity Authorization permit from the WVDNR – Office of Land and Streams prior to stream impacts. The Office of Land and Streams coordinates with the Wildlife Resources Section of the WVDNR.

Wisconsin: The Wisconsin Public Service Commission (PSC) has siting jurisdiction over wind energy facilities 100 MW or greater.⁶⁶ The legislature also created a Wind Siting Council to advise the PSC during its wind siting rulemakings.⁶⁷ The council was directed to study state and national regulatory developments regarding the siting of wind energy systems and every 5 years to submit a report to the legislature a summary of these developments.⁶⁸

Washington – Presently, there are two permitting routes a project may choose to take: The Energy Facility Site Evaluation Council (EFSEC) and county permitting. Both authorities accept recommendations from WDFW regarding wildlife and habitat avoidance, minimization, and mitigation to support local and state policies, but are not mandated to. The Department of Fish and Wildlife is also a voting member on the EFSEC Council. The 2023 legislation established a third permitting route, an Interagency Clean Energy Siting Coordinating Council. One of the objectives of this legislation is to improve siting and permitting of clean energy projects. The new legislation includes creating a fully coordinated permit process for clean energy projects deemed to have statewide significance and improving processes for review under the state environmental policy act. The Department of Fish and Wildlife is a member of this council that is coordinated and overseen by the Department of Commerce and the Department of Ecology. All permitting routes

include consultation with the Fish and Wildlife Agency to determine possible impacts and whether those adverse environmental impacts can be mitigated.^{vi}

State Input on Local Siting Standards

Maine: The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviews proposed development sites and projects, identifies important species and habitats of concern, and provides recommendations to avoid, minimize, and mitigate reasonable, unavoidable impacts pursuant to the regulatory programs of the Maine Department of Environmental Protection (<https://www.maine.gov/dep/>) (Organized Municipalities) and the Maine Land Use Planning Commission (<https://www.maine.gov/dacf/lupc/index.shtml>) (Unorganized Territories). MDIFW works with potential applicants, environmental consultants, and other resource and regulatory agencies. MDIFW concerns typically relate to State Rare, Threatened, and Endangered species and habitats; Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other Protected Natural Resource concerns. Maine State Planning Office. January 13, 2016. "Model Wind Energy Facility Ordinance."⁶⁹

Oregon: Wind energy facilities less than 50 MW are permitted by the counties where they are located and are required to meet wildlife standards consistent with the Oregon Wildlife Policy and its associated administrative rules including the ODFW Fish and Wildlife Habitat Mitigation Policy.⁷⁰

Wyoming: The Large Scale Solar and Wind Energy Facilities Act requires that all wind facilities over 0.5 MW of capacity secure a permit from the county or counties where it will be located.⁷¹ Facilities with 20 or more turbines, must receive a permit from both the county and the state Industrial Siting Council.⁷²

The Act outlines some of the requirements for these projects, including minimum setback distances from property lines and occupied structures.⁷³ So while local governments approve projects, the state legislature has dictated some of the requirements. Individual counties permit wind energy facilities and have the authority to seek input from the Department.⁷⁴

Voluntary Wind Siting & Operational Guidelines

Please see [The State Fish and Wildlife Agency Energy Resources Link Repository](#) for direct links to state Wind BMPs and other tools.

Arizona:

- Arizona Game and Fish Department. October 15, 2012. "Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona."⁷⁵

California:

- California Energy Commission and California Department of Fish and Game. 2007. "California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development."⁷⁶

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Colorado:

- Colorado Parks and Wildlife. 2013. "Colorado Parks and Wildlife's Best Management Practices for Wind Farm Development."⁷⁷

Connecticut:

- Siting guideline are under development for offshore wind as of December 2020.

Kansas:

- Kansas Renewable Energy Working Group. January 12, 2003. "Siting Guidelines for Windpower Projects in Kansas."⁷⁸
- Kansas Department of Wildlife, Parks and Tourism. November 2017. "Position Statement on Wind Energy and Wildlife Issues in Kansas."⁷⁹

Maine:

- Maine Department of Inland Fisheries and Wildlife. March 5, 2018. "Maine Wind Power Preconstruction Recommendations and Turbine Curtailment Recommendations to Avoid/Minimize Bat Mortality ([link](#))"
- Maine Department of Inland Fisheries and Wildlife. March 5, 2018. Avian Resources in Maine's Coastal Plan ([link](#))"

Minnesota:

- Minnesota Department of Natural Resources. October 1, 2011; Updated July 2018. "Guidance for Commercial Wind Energy Projects."⁸⁰
- Minnesota Department of Natural Resources and the Minnesota Department of Commerce. June 2014. "Avian and Bat Survey Protocols for Large Wind Energy Conversion Systems in Minnesota."⁸¹

Montana:

- Siting guidelines are under development as of December 2020.

Nebraska:

- Nebraska Wind and Wildlife Working Group. March 2016. "Guidelines for Avoiding, Minimizing, and Mitigating Impacts of Wind Energy on Biodiversity in Nebraska."⁸²

New Jersey:

- New Jersey Department of Environmental Protection. September 7, 2010. "Technical Manual for Evaluating Wildlife Impacts of Wind Turbines Requiring Coastal Permits."⁸³

New Mexico: New Mexico Department of Game & Fish. 2012. "Recommendations to Minimize Adverse Impacts of Wind Energy Development on Wildlife."⁸⁴

North Dakota:

- North Dakota Wind and Wildlife Collaboration. DRAFT April 10, 2018. "North Dakota

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Native Wildlife Resources: Guidelines for Reducing Impacts from Wind Energy Development.”⁸⁵

- North Dakota Game and Fish Department. June 2021. “Wind Energy Development in North Dakota Best Management Practices.”⁸⁶

New York:

- New York Department of Environmental Conservation. June 2016. “Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects.”⁸⁷

Ohio:

Ohio Department of Natural Resources. “Terrestrial Wind Energy Voluntary Cooperation Agreement.”⁸⁸ Includes:

- “ODNR Recommendations on Wildlife Surveys for Proposed Wind Energy Facilities.” March 29, 2011.⁸⁹
- “Addendum: On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio.” May 4, 2009.
- “Exhibit A: Amendment to the On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio.”

Oregon:

- Siting guidelines are under exploration as of December 2020.
- State and Federal Collaborative. September 29, 2008. “Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines.”⁹⁰

Pennsylvania:

- Pennsylvania Game Commission. July 26, 2013. “Wind Energy Voluntary Cooperation Agreement.” Amendment.⁹¹

Rhode Island:

- Rhode Island Department of Administration, Division of Planning. June 2012. “Renewable Energy Siting Guidelines – Part 1: Interim Siting Factors for Terrestrial Wind Energy Systems.”⁹²

South Dakota:

- South Dakota Bat Working Group. “Siting Guidelines for Wind Power Projects in South Dakota.”⁹³

Vermont: Agency of Natural Resources. April 20, 2006. “DRAFT Guidelines for the Review and Evaluation of Potential Natural Resource Impacts from Utility-Scale Wind Energy Facilities in Vermont.”⁹⁴

- Agency of Natural Resources, Fish and Wildlife Department. September 2016. “Bat-Wind Guidelines.”⁹⁵

Washington:

- Washington Department of Fish and Wildlife. April 2009. “Wind Power Guidelines.”⁹⁶. *

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Note, WDFW is updating these guidelines with an anticipated publication date late 2024.

Wisconsin:

- Wisconsin Department of Natural Resources. "Guidance for Minimizing Impacts to Natural Resources from Terrestrial Commercial Wind Energy Development."⁹⁷

Wyoming:

- Wyoming Game and Fish Department. January 2021. "Guidelines for Wind and Solar Energy Development."⁹⁸

Gubernatorial Directives

Kansas:

- Governor Laura Kelly. 2020. Proclamation: Continued Moratorium on the development of wind power infrastructure to be observed in the previously established Tallgrass Heartland.⁹⁹
- Governor Sam Brownback. 2011. Moratorium on wind development in the Tallgrass Heartland.
- Governor Kathleen Sebelius. 2004. Moratorium on wind development in areas of the Flint Hills."

Wyoming:

- State of Wyoming. August 21, 2019. "Greater Sage-Grouse Core Area Protection." Executive Order 2019-3.¹⁰⁰

Voluntary Siting Decision-Support Tools

Please see [The State Fish and Wildlife Agency Energy Resources Link Repository](#) for additional information and tools.

Kansas:

- Kansas Natural Resource Planner. <https://biosurvey.ku.edu/research/natural-resource-planner>.

New Mexico:

- New Mexico Environmental Review Tool. https://nhnm.unm.edu/data/nm_ert.

New York:

- New York State Department of Environmental Conservation. Environmental Resource Mapper. <https://gisservices.dec.ny.gov/gis/erm/>.
- New York State Department of Environmental Conservation. Nature Explorer. <http://www.dec.ny.gov/natureexplorer/app/>.

Oregon:

- Oregon Department of Fish and Wildlife. 2016. COMPASS. compass.dfw.state.or.us.
- Oregon Explorer. 2017. Oregon Sage Grouse Development Siting Tool

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<https://oregonexplorer.info/content/sage-grouse-development-siting-tool?topic&ptopic>.

South Dakota

- South Dakota Game, Fish & Parks. South Dakota Environmental Review Tool (ERT). <https://ert.gfp.sd.gov/>.

Wyoming:

- Wyoming Natural Resource and Energy Explorer. <https://nrex.wyo.gov/>.

Appendix: General Resources on State Renewable Energy Siting Policy

Association of Fish and Wildlife Agencies and U.S. Fish & Wildlife Service. October 2007. "Wind Power Siting, Incentives, and Wildlife Guidelines in The United States."

<https://www.fws.gov/habitatconservation/windpower/AFWA%20Wind%20Power%20Final%20Report.pdf>

Center for the New Energy Economy and The Nature Conservancy. "State Policy Opportunity Tracker (SPOT)." <https://spotforcleanenergy.org/>

Environmental Law Institute. 2001. "State Enabling Legislation for Commercial-Scale Wind Power Siting and The Local Government Role." <https://www.eli.org/sites/default/files/eli-pubs/d21-02.pdf>.

North Carolina Clean Energy Technology Center. "Database of State Incentives for Renewables & Efficiency." <https://www.dsireusa.org/>

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