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Midwest Landscape Initiative Wind Working Group
Needs Assessment

Prepared by Kearns & West, Inc. under contract to DOI's Office of Collaborative Action and Dispute Resolution

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Executive Summary

The US Fish and Wildlife Service (USFWS) and Midwest Association of Fish and Wildlife Agencies (MAFWA) are coordinating the Midwest Landscape Initiative (MLI) - a landscape level conservation initiative across four USFWS regions in the Midwest and 13 states. More information about the Midwest Landscape Initiative is available at https://www.mafwa.org/?page_id=3391. The purpose of the Midwest Landscape Initiative (MLI) is to explore shared conservation priorities among the state and federal agencies in the MAFWA region with management responsibility for fish and wildlife, to make recommendations regarding identification of those shared priorities, and define how to best address them.

Among its efforts is the development of coordinated approaches to wind energy development in the Midwest United States. The MLI, with funding support from the USFWS, is convening a Wind Working Group (WWG) to develop coordinated approaches over the course of 2020. The WWG is intended to be a "safe space for government" – with working group participation limited to state and federal government partners, while subgroups may be convened including external stakeholders. In identifying the need for the WWG, the MLI Steering Committee identified initial goals to enhance coordination and collaboration to avoid, minimize, or offset the direct and indirect negative impacts of wind power generation on wildlife and the surrounding environment.

Through a contract managed by DOI's Office of Collaborative Action and Dispute Resolution (CADR), USFWS engaged Kearns & West, Inc. to conduct a needs assessment, convene and facilitate the WWG, and provide collaborative implementation support across WWG activities. Kearns & West conducted assessment interviews primarily with State and Federal stakeholders and secondarily with a very limited selection of industry, non-governmental organization, and science and technical stakeholders. The needs assessment focused on informing the WWG's Action Plan by gathering insights on (1) evolving needs and opportunities for short-, mid-, and long-term WWG tasks identified in the WWG Draft Charter (Appendix A), and (2) how the WWG can best organize to advance these tasks.

This report describes the methodology used to conduct the assessment, provides further background into the MLI and WWG, and presents a high-level synthesis of insights captured through the assessment. Interview content is not directly attributed to specific individuals, interest groups, agencies, or organizations. Recommendations are those of the assessment participants, not Kearns & West.

Background and Overview

Midwest Landscape Initiative Overview

The US Fish and Wildlife Service (USFWS) and Midwest Association of Fish and Wildlife Agencies (MAFWA) are coordinating the Midwest Landscape Initiative (MLI)- a landscape level conservation initiative across four USFWS regions in the Midwest and 13 states. More information about the Midwest Landscape Initiative is available at https://www.mafwa.org/?page_id=3391. The purpose of the Midwest Landscape Initiative (MLI) is to explore shared conservation priorities among the state and federal agencies in the MAFWA region with management responsibility for fish and wildlife, to make recommendations regarding identification of those shared priorities, and define how to best address them.

Midwest Landscape Initiative Framework

The MLI is comprised of a Steering Committee and a Technical Committee. Membership information is available on the MAFWA website at https://www.mafwa.org/?page_id=3391. The MLI has currently established three working groups including At-risk Species, Wind Energy, and Habitat Inventory and Assessment Tools. The Steering Committee is responsible for top-level prioritization, decision-making, and providing direction and guidance to any committees or working groups established. The Technical Committee is responsible for helping the MLI Steering Committee translate their vision into action through Technical Committee proceedings and providing direction and management of working group activities. The Working Groups are responsible for advancing exploration of MLI priorities by implementing their Action Plans to advance short-, mid-, and long-term tasks identified in their Charters. Working groups have external, impartial facilitation and Action Plan implementation support as needed.

Wind Working Group

The Wind Working Group (WWG) was convened in the fall of 2019 as directed by the MLI Steering Committee. USFWS is providing funding for external, impartial facilitation and Action Plan implementation support. The WWG is intended to be a "safe space for government" – with working group participation limited to state and federal government partners, while subgroups may be convened including external stakeholders. In identifying the need for the WWG, the MLI Steering Committee identified initial goals to enhance coordination and collaboration to avoid, minimize, or offset the direct and indirect negative impacts of wind power generation on wildlife and the surrounding environment.

The MLI Technical Committee prepared the *Draft* MLI WWG Charter, which outlines the initial thinking for the group's goals, objectives, and tasks. The Draft MLI Charter can be found in Appendix A.

Methodology

Through a contract managed by DOI's Office of Collaborative Action and Dispute Resolution (CADR), USFWS engaged Kearns & West, Inc to conduct interviews primarily with State and Federal stakeholders and secondarily with a very limited selection of industry and technical stakeholders. Interviews focused on exploring topics that could inform the Wind Working Group's (WWG) Action Plan by gathering insights on evolving needs and opportunities for short-, mid-, and long-term WWG tasks identified in the WWG Draft Charter (Appendix A), along with how the WWG can best organize to advance these activities.

Participation

Kearns & West facilitated WWG discussions to collect WWG member recommendations for representative stakeholders that could be engaged through the interview process. Interview participants were primarily government stakeholders including State Natural Resource Agencies and US Fish and Wildlife Service representatives across the MAFWA geography. WWG members also requested that Kearns & West interview selected representative stakeholders from the wind industry, non-governmental organizations, and science and technical community. With direction from the USFWS and the WWG, Kearns & West conducted 20 individual interviews and a focus group with the eight USFWS Ecological Services Field Office Supervisors.

Needs Assessment Scope

Kearns & West facilitated WWG discussions to collect topics to explore with interview participants and guide conversations. Each interview was approached to be participant-led, with facilitation and guidance from the interview team to ensure representative perspectives were explored across all topic areas the WWG identified. Generally, discussions explored:

- Participant background and current role relative to wind and wildlife
- Perspectives on key Midwest wind and wildlife needs and opportunities (policies, coordination, science/technical, etc.)
- Ideas for Wind Wildlife Group participation, frequency, and stakeholder coordination opportunities
- Insights on path forward and potential challenges for short-, mid-, and long-term WWG tasks (identified in DRAFT charter document)

This interview summary includes generalized perspectives shared across the participant group. Themes reflected in this assessment report are focused on informing the WWG's Action Plan and potential revisions to the draft WWG Charter.

Themes

This assessment process captured insights to inform Wind Working Group Action Plan development and implementation. This information has been synthesized across conversations, oriented to the Wind Working Group membership to support advancement of the goals and objectives identified by the MLI Steering Committee. Across this body of knowledge, key themes emerged including:

- **Challenges and Opportunities**: Selected overarching take-aways elevated for WWG consideration to inform the Action Plan and to keep in mind across related activities.
- **Evaluation of Impacts and Mitigation Approaches:** The Wind Working Group expressed a need to explore across the mitigation hierarchy including avoidance, minimization, mitigation, and offsetting wildlife impacts from wind energy activities.
- **Regulatory Dynamics:** The regulatory landscape drives much of the WWG activities, along with opportunities for the working group to inform ongoing regulatory initiatives.
- **Variations in Approaches and Cultural Dynamics:** The WWG includes representative State and Federal stakeholders from the MAFWA geography, each with unique wind and natural resource histories and ongoing activities.
- **Wind Wildlife Science**: All conversations included discussion about the underlying wind and wildlife data and science supporting wind energy activities. Selected themes are included to highlight representative concerns and opportunities important for WWG exploration across members' work.

The information captured in this Assessment Report is not attributed to any individual stakeholder, and the themes identified below are presented alphabetically and are not prioritized.

The document includes certain terms to describe similar comments that were heard with varying degrees of frequency. Those terms are defined below.

Commonly, majority, many, most: Approximately half or more of assessment participants, internal and external, unless otherwise noted in the content.

Some: Less than half of assessment participants, internal and external, unless otherwise noted in the content.

Challenges and Opportunities

Avoiding redundant activities in a crowded space of wind and wildlife activities

Many shared that there are a lot of organizations, working groups, and other activities currently underway in the wind and wildlife space. Some expressed concern that the WWG is in addition to existing activities and stressed that it is important for this group to clearly define the WWG's charge if it is to be a productive contributor to wind and wildlife challenges. It will be important for the WWG to define how it differentiates its activities from other current activities and/or enhances the other current activities in the wind and wildlife space.

The challenging nature of wind projects

It was noted that the dynamic nature of wind energy projects is a challenge, especially the long duration of wind energy permitting processes and frequent changes to project scopes can cause strain in working relationships among parties.

Wind Energy Guidelines

Many inquired about how the current Wind Energy Guidelines (WEGs) will be used in this process. Some suggested that the WWG could review the current WEGs along with other tools and approaches used across the agencies. Participants shared that a lot of work went into developing the WEGs, and the WWG could use them as a foundation. If additional guidelines are sought, the WEGs reflect the most advanced collaborative effort to develop guidelines to date and both the product and process for that work should be heavily leveraged. It was noted that if the guidelines are to be revised, they could address the broader questions of "what is the impact of wind on wildlife" rather than their current focus on project information. It was noted that if the WWG identifies a need to revise the WEGs, it will be important to involve industry and other stakeholders to create guidelines that are supported by all parties. Some reflected that the WEGs are "too broad" and not helpful in considering coordinated conservation and industry activities. Others reflected that species-specific initiatives are underway, and have advanced with varying degrees of success.

WWG Purpose

Most participants noted an opportunity to better clarify and explicitly state that the purpose of the WWG is to provide a safe place for state and federal natural resource agencies to share information and gain a mutual understanding of their shared challenges and needs. Some shared sensitivity about language included in the WWG charter, expressing concerns that the language reflects emerging or ongoing conflict between agencies and industry, noting that there are significant and impactful agency and industry partnerships.

Evaluation of Impacts and Mitigation Approaches

Consideration of broader impacts to the landscape, beyond wind

Many noted that relative impacts - from wind and other energy and non-energy development – are important to consider when looking at overall impacts to wildlife. The overall impacts to wildlife/species need to be considered when evaluating wildlife impacts for a wind project. Decision-makers could consider the universe of impacts to species, beyond wind impacts, including assessing alternative impacts if the project doesn't advance. Participants reflected on the holistic wildlife environment, inclusive of wind, and some shared differing perspectives about the order of magnitude of wildlife impacts from wind as compared to other activities and approaches for consistently assessing impacts and values across permitting activities. Some industry participants shared perspectives on wildlife population trends that do not directly correlate to wind energy activities, noting that agencies focus on their overarching responsibility to protect wildlife. This posture can lead to an adversarial relationship between wildlife agencies who defend against any activities that could harm wildlife, and wind developers seeking to conduct business.

Direct and indirect impacts

Some noted that direct impacts are clearer and supported by ongoing research activities. In contrast, there are ongoing challenges with how to define the scope for indirect impacts to ground research and ensure applicability in wind energy activities. Direct impacts are regularly prioritized, but at a regional scale indirect impacts present a greater challenge and knowledge gap.

Getting to avoidance

Several noted that initiatives to advance shared wind and wildlife interests often jump to mitigation approaches. Participants shared perspectives that insufficient attention is paid to "avoidance" – the first step in the mitigation hierarchy. Some participants shared that siting is led by industry, and that discussions exploring sites *not* advanced (and therefore avoided) would not be productive given the volume of sites evaluated during initial internal developer site and resource reviews. One participant reflected that industry could improve their communications related to avoidance and site selection.

Land fragmentation

Some noted that land fragmentation due to development from wind, and other developments, is a concern for understanding and protecting species populations. States have different resource environments, with varying levels of agricultural and public lands. As more wind energy is developed, there will be more pressure to develop in unfragmented land, which will be felt by some states more than others.

Managing through a technology, conservation, and mitigation suite

Many reflected on the value that individual technologies, conservation approaches, and mitigation strategies bring to specific project and species discussions. Most reflected that discussions extending beyond a specific site or species require deploying a suite of technologies, conservation approaches, and mitigation strategies. This suite becomes increasingly complex at broader state or regional geographic scales. Some participants emphasized that this is not a "one-size-fits-all" solution, and that advancing a suite of options to consider with flexible guidance could provide an important framework for navigating between site, state, and regional lenses.

Meaningful assessment of cumulative impacts

Many noted that there is an interest in assessing the cumulative impacts of wind energy development, but there is currently no methodology for a cumulative impact assessment. Some suggested that the WWG develop a methodology that could be applied across the states. Others flagged concern for cumulative impact methodologies based on highly nuanced species and geographic differences.

Meaningful mitigation of impacts

Participants shared a range of experiences with mitigation approaches. Concerns were noted including complexities and legal mechanisms for funding and managing mitigation resources, regulatory authorities and permit terms and conditions, accountability and monitoring, overall mitigation value and species benefit of persevered or newly created habitat, and political implications.

Valuation of land and impacts

Several participants shared challenges in evaluating the value of wind energy impacts at a given site if an alternative use of the site will have a greater impact to the habitat. For example, private landowners often have a financial choice to either have a wind turbine developed on their property in an area of critical habitat – a scenario that allows the land to be kept in natural/critical habitat, albeit impacted habitat - or convert the land to row crops which creates a 100% loss of critical habitat. Some shared that it is worth considering whether the development of the turbine in critical habitat is an acceptable tradeoff if the alternative use of the land is 100% loss of critical habitat. Some participants shared their experience with agricultural landowners who want wind energy leases on their land, noting economic opportunities and overall environmental opportunities and tradeoffs.

Voluntary mitigation or offsets

Many shared concerns for how voluntary mitigation is generally advanced and supported for non-protected species or habitat. Some shared that a successful offset program includes avoidance measures and requirements to offset impacts that cannot be avoided. The wind energy guidelines provide an avenue to address voluntary mitigation for non-listed species. Some noted that more transparency in how the wind energy guidelines are implemented might be helpful.

Regulatory Dynamics

Coordinating and managing around incidental take permits for listed species

Some noted that while a take permit is intended to be protective of listed species, the option for developers to pursue a take permit has the unintended consequence of limiting the discussions around finding solutions to limit take of a species. It was noted that it would be helpful for state agencies and the USFWS to coordinate on this topic. It was suggested that agencies explore species trending towards ESA listing and identify what can be done now to protect species before they are listed. Several participants noted that species with federal protections are not always the species most adversely impacted by wind development. Significant time is spent on listed species, leaving limited resources to address unlisted or on-the-verge-of-listed species.

Dynamics of Federal Regulatory Authority

It was noted that the USFWS often has more engagement with sensitive projects due to federal authorities for federal land easements, refuge protections, and the Endangered Species Act (ESA). Projects in geographies with a regulatory nexus triggering Section 7 consultations under ESA require engagement. Several shared that state wildlife agencies struggle when Federal engagement increases, noting different levels of State wildlife agency involvement in developer-USFWS discussions. Several participants expressed concerns that projects without a federal regulatory nexus have limited opportunities to include wildlife agency perspectives.

Engaging Public Utility and Service Commissions

Many reflected that some state resource agencies have closer communication with wind energy permitting entities – the public utility and service commissions – providing the resource agencies with clearer channels and different levels of confidence in how their input factors into decision-making. Many suggested that state agencies might benefit from peer-to-peer dialogue that could crosswalk engagement in permitting processes with project, species, and science concerns.

Limits of State Regulatory Authority

Many shared that state natural resource agencies are frustrated by their lack of authority, or lack of a "hammer," to implement and enforce their recommendations regarding protection of wildlife in wind permitting processes. This creates uncertainty for state agencies in their ability to protect the natural resources they are charged to protect.

Regulatory authority dynamics between state and federal agencies

It was noted that wind companies do not have a reason to work with natural resource agencies unless they are required or mandated to do so. This inherently pits state natural resource agencies and the USFWS against one another, with one party having more or different regulatory authority than the other in some cases. Some shared that it would be helpful if this process could provide a way for USFWS and states to improve collaboration, noting different authorities and species protection requirements that could enhance or restrict these efforts.

Regulatory Priorities and Resources

Several participants emphasized that as regulatory priorities evolve, focus and resources should shift to activities that directly help adversely impacted species. Some shared concern for regulatory process "churn" that does not directly support projects or species.

Variations in Approaches and Cultural Dynamics

Differing approaches and cultures of state natural resource agencies

Many shared that state natural resource agencies have different approaches, guidance, and tools for engaging with wind developers and permitting entities such as public utility commissions or public service commissions. These differences among states can sometimes lead to confusion with the USFWS, industry, and other stakeholders. Many shared an interest in the WWG identifying common state needs and developing approaches, guidance, and tools that are applicable and relevant across states and the MAFWA geography, while acknowledging different geographical, biological, and political imperatives within each state.

Differing approaches and cultures of USFWS Ecological Services Field Offices

Several shared that USFWS ecological services field offices tend to have different cultures with varying regulatory risk tolerance. For example, offices will vary in what each considers the minimum necessary action to stop the decline of a species, and the level and type of monitoring or mitigation required can vary by office. There have been efforts to standardize approaches and reduce inconsistencies, but offices still use these tools differently.

Differing approaches and cultures within the wind industry

Many shared that some wind energy developers will engage more proactively and earlier in the permitting process than others. Those that choose to engage early often resolve potential issues outside of the formal permitting process, which often provides for more certainty and a smoother permitting process. Those who do not engage early often run into more challenges throughout the permitting process.

Early engagement, which demonstrates an interest in being thorough and responsive, provides a foundation for building trust and stronger relationships among agencies and the developer, which often is crucial for working through project challenges. Some noted that developer-operator applicants demonstrate more proactive engagement in the permitting process than developers who intend to sell the wind farm once it is developed, because developer-owners have an interest in maintaining relationships with agencies over the long term.

Wind and Wildlife Science

Need for shared research priorities

Many shared examples of agency, industry, and NGO research prioritization and advancement activities, noting inconsistency in the priorities informing activities. Some noted that the wind industry is currently setting and pursuing its own research priorities through a joint industry-established research fund, regardless of state and federal participation and/or input. Others noted that industry-funded studies have focused on post-construction mortality, and that more focus on pre-construction habitat and behavior studies are needed.

Participants also shared that agencies have varying priorities and needs for studies to inform their decision making. Some added that funding limitations result in reliance on study data subject to underlying trust concerns. One participant expanded that the WWG presents states and federal agencies an opportunity to develop shared government research priorities connected to different government decision-making benchmarks. Participants shared different perspectives for how industry and NGO stakeholders can engage in advancing consensus on research priorities, and emphasized that industry may be less willing to advance research priorities identified in a government-only dialog without industry and NGO consultation.

Need for a shared understanding on the state of wind and wildlife science

Participants shared a range of perspectives on the degree of consensus about availability, applicability, and reliability of wind wildlife science. There is a need for wind and wildlife communities to communicate wind wildlife science status. A related need is to expand the circle of stakeholders engaged in characterizing the state of wind wildlife science and increase shared understanding of information available to make decisions.

Many shared differing opinions on the quality, availability, and degree of needs for additional wind and wildlife studies. Participants offered conflicting perspectives on the value of existing resources aggregating wind wildlife science. Some shared that there isn't a lack of wind and wildlife information, but rather a lack of understanding of the breadth of information that is available. Some suggested that the WWG evaluate the state of wind and wildlife science by looking across studies, exploring the differences in the studies, and developing an aligned understanding of the best available science and needed studies.

Need for a shared understanding of preferred study design and quality data

Opinions differed on the quality of available studies. Some suggested that the WWG should evaluate study designs to gain a shared understanding of the best approaches for future wind and wildlife studies. Some shared that it will be important that WWG has a technical understanding of how scientific studies are done and how to identify levels of study confidence. Participants emphasized

that exploring this topic would require group participation including academia, science, and technical expertise outside of government.

Need for trust that the best available science is being shared

Many shared that there is a power dynamic between the states' and industry's access to data and information, and that there is skepticism from states and feds that they have the best available science. Many shared their belief that industry has more data than is being shared with state and federal agencies or other stakeholders. Others shared perspectives that there is abundant availability of wind and wildlife data through academic and consultant resources.

Sharing studies and data

Some attributed very low value to science and data made available to the general public. Participants shared perspectives that data cleaning or adjustments to the level of detail that underlying study data provide results in unreliable and less applicable study results. This causes frustration within and among agencies that work hard to compile existing data, aggregating resources with inconsistent levels of detail and therefore inconsistent application in decision-making.

There were diverse perspectives regarding transparency of the data that developers collect and share with natural resource agencies and permitting partners. Some shared that data are readily available upon request. Others indicated that even with non-disclosure agreements data sharing isn't meeting agency needs.

Quantifying impacts

Some participants reflected that while there is a high volume of existing, applicable research there is still significant uncertainty and disagreement related to quantifying wildlife impacts from wind energy. There is an ongoing feedback loop that spirals without quantified impacts – for example, determining appropriate mitigation or offsets should map against impacts these activities address, however stakeholders often find themselves managing against an unclear and moving target.

Feedback on the Draft WWG Charter

Participants reviewed the Draft WWG Charter (provided in Appendix A), and shared feedback on the goals, objectives, and tasks. The following is a synthesis of specific suggestions for revising the charter and key themes the WWG may consider in developing their Action Plan. Items in this section of the report are captured with an aim towards including all participant feedback.

Language and Phrasing

Some participants shared feedback about language and phrasing used in the charter document:

- The charter could be framed more positively, focusing on finding solutions. The current language is framed around what isn't working or what is going wrong.
- The draft charter be revised with consistent use of the terms avoidance, mitigation, and minimization.
- The final charter should acknowledge and build upon the previously developed wind energy guidelines. The draft charter discusses developing acceptable guidelines, which could be revised to discuss improving and consistently applying guidelines across the region.

- The charter framing also include broader context about the role of wind energy in meeting societal challenges.

Goals

Goal 1: *Identify and avoid or minimize the direct and indirect negative impacts of wind power generation on wildlife and the surrounding environment.*

- This goal focusses on *negative* impacts, and that some stakeholders feel that there are also positive impacts of wind power generation on wildlife which should be acknowledged in the WWG's efforts as well.

Goal 2: *Offset remaining unavoidable direct and indirect impacts of wind power generation on wildlife and the surrounding environment.*

- It is hard for industry to make a business case to offset impacts for unlisted species.
- The location and proximity of the offset site to the project site are important considerations.
- This goal is important, but that the emphasis should be on identifying and avoiding impacts first (i.e. Goal 1.)
- The WWG could identify where on the landscape to recoup or offset impacts. A comprehensive landscape vision could be developed. There is a policy component to this approach that will impact the options. The WWG does not have the authority to make policy.

Goal 3: *Ensure those offsets last as long as the project impacts last.*

- The WWG could build a shared understanding of how offsets operate to support advancing Goal 3 based on a shared understanding of the science.
- Trust between the developer and agencies is important in order to have an effective and lasting offset program.
- The WWG does not have the authority to make policy. The WWG could work towards this goal by exploring the scientific foundation required to inform assessing the value and quality of offsets and related decision-making.
- To advance this goal, the WWG could review and analyze offset tools to develop a framework for evaluating offset options.

Goal 4: *Establish a consistent mitigation or offset approach across the region.*

- A region-wide offset approach might be difficult due to the site-specific nature of defining mitigation or offsets. Caution was expressed due to the potential for "watered down" mitigation that exists in some areas.
- Conservation and mitigation plans should be tailored and done together on a project-by-project basis.
- The WWG could explore mitigation banks or agreements with other agents as mechanisms for states to voluntarily accept mitigation money for conservation.
- Goal 4 may not be achievable and could potentially limit important flexibility to tailor mitigation to a specific project's needs.

Objectives

Objective 1: *Identify what wildlife resources are most critical to avoid and minimize impacts to (e.g., bat hibernacula and maternity colonies, bat and bird migration pathways, high wetland or grassland densities) for the Midwest.*

- It would be helpful to have more information on bat migration pathways to better inform placement of turbines and operation/curtailment schemes.
- State landscape-level maps, not site-specific maps, are good tools.
- The WWG could explore how advancing projects could inform ongoing research and testing of best management practices.
- The WWG could agree on definitions for valuable species habitat.
- The group could identify a set of research priorities and request the resources/funding necessary from science-based groups that fund this type of work.
- The state natural resource agencies, working with the USFWS, could review the state of the science on key species and identify what unique things can be addressed for areas in the Midwest.
- There is no need to create new maps.
- The WWG could investigate opportunities to improve methods for assessing impacts.
- "Boots on the ground" review of wildlife and site maps is a critical component of any project process. Publication of map resources isn't independently sufficient to make project-specific decisions.

Objective 2: *Synthesize and share existing best practices across the region and with other regions.*

- Best management practices (BMPs) are more prescriptive than the wind energy guidelines. BMPs are more specific and depend on the context by species.
- Underlying science is needed to develop best practices.
- The WWG could consider how they can support an update of the methods and metrics document (posted on the Department of Energy website), perhaps in conjunction with the U.S. Geologic Survey and the National Wind Coordinating Collaborative (NWCC).
- Best practices have improved immensely over the last several years and haven't been cataloged. There are resources that companies, states, and federal agencies have been using. There is not consensus on current best practices.
- It would be good for states to share their best practices for wind energy projects.
- Sharing best practices is a high priority because states operate within political boundaries without addressing the shared ecological needs that cross political boundaries. States effectively have a "shared ecological landscape" that needs to be managed jointly.
- States seem to be concerned about the development of a patchwork of wind projects across the landscape and are therefore using the precautionary principle for wind energy, which may or may not be the appropriate application.

Objective 3: *Identify the literature, studies and information that are relevant to wildlife and natural resource impacts resulting from wind development and the measures that can offset those impacts.*

- The WWG could embark on a joint study to address direct impacts – reaching consensus on the study design among companies and decision makers. The study could evaluate multiple sites across multiple companies to provide broad and randomized representation of sites and a holistic approach to studying impacts and changes to the landscape.

- Create an easy way to share data across states.
- There are organizations, such as the American Wild Wildlife Institute (AWWI), which have identified, compiled, and continue to track current literature, studies, and information relevant to wildlife and natural resource impacts resulting from wind development.
- There is room for improvement for future studies.
- Current wind and wildlife studies are fundamentally sound and applicable.
- The current science does not have enough information to make a defensible recommendation regarding wind turbine buffers.

Objective 4: *Generate a synergy of mitigation strategies used by states across the region.*

- A resource outlining what each state is doing for mitigation would be useful.

Objective 5: *Maintain working relationships with wind companies so that as science and understanding of impacts improve, we can have continued engagement to lessen or offset impacts to natural resources.*

- There is a need for state and federal agencies to have space independent of other stakeholders to discuss and gain an understanding their shared needs. There is an interest in the WWG being a "safe space" for government to enhance coordination and collaboration, exchange knowledge, increase awareness of evolving challenges, and, where appropriate, advance solutions for wind and wildlife issues across the Midwest.
- Many, if not all, shared support for this objective.
- It will be important to have members of the WWG participate in other wind and wildlife workgroups to share and bring back information to ensure the WWG's efforts are well informed.

Tasks

The following is a synthesis of feedback regarding the tasks for the WWG, which can be found in the WWG Draft Charter in Attachment A.

- Short-term task 3: This task could be supported by a database or website to disseminate information and provide an accessible information repository. There are organizations that currently do this well, and the WWG should explore teaming with these organizations.
- Short-term task 1: Any map developed would have to be at a scale that is useful; maps need to be specific, not too broad. It was noted that it will be key to define the intent of the map and how it should be used.
- Short-term tasks 1 and 2: These tasks are very ambitious and controversial because the conversations historically have fallen apart.
- Long term task 1: To have productive discussions and relationship building with wind companies it will be important to understand how wind companies consider risk and how risk influences their decisions to consider sites.
- Short-term task 2: BMPs are not helpful until there is more science and known risk to species in some regions.
- Short-term task 4: creating a mitigation approach repository would be helpful.

Structure of the WWG

WWG charge

Some shared that the WWG needs to define a charge. It was noted that this charge needs to be fully supported by the MLI Steering Committee so that the WWG members have full approval to represent their agencies effectively.

WWG participants

State natural resource agencies across the region and USFWS interviewees shared that there is a strong interest among most agencies across the MAFWA region in continuing to talk about wind and wildlife topics. Many noted that the state natural resource agencies currently communicate and coordinate via MAFWA, and that MAFWA has a good structure of continuing collaborative efforts over the long term, allowing for communication at higher leadership levels across agencies. It was noted that if there is some level of agreement among the agencies within the MLI on an issue, MAFWA could take a stance on the issue.

It was noted that it will be important to explain in the WWG charter (or elsewhere) how and why the WWG members were selected. Participants also suggested that the charter explicitly describe mechanisms for industry engagement (i.e., in subgroup activities).

Including external stakeholders

Several noted that it will be important to include other stakeholders, especially industry, in the discussion at key stages of the WWG's efforts. Industry and other stakeholders may need to be engaged in scoping and implementation phases of WWG.

Decision making

Many shared that the WWG should not be involved in decision making, and instead should strive for consensus in developing information and recommendations WWG products can be sent to the MLI Technical Committee for consideration, these can in turn be passed to the MLI Steering Committee for decision-making, as appropriate. When formulating recommendations the group should strive for consensus, with the ability to have dissenting opinions or caveats noted. Any technical recommendations should be supported by data. It was noted that a well-documented process for decision making as well as documenting actual decision-making activities is key to a successful WWG.

Meeting frequency, type, timing, locations

In general, it was shared that the WWG should meet via conference call every two to four weeks, with in-person meetings as frequently as quarterly (four times annually) and at a minimum of once a year, as practicable. Many shared that meeting frequency should be tied to the amount of activity and work needed to achieve defined goals and deliverables. Meeting frequency should also consider the capacity of the participants to engage.

Need for a WWG

Many shared that the WWG is needed and that the following should be considered as the group gets established:

- Some shared that it will be important to define the purpose and charge for the WWG so it is clear that the WWG's efforts don't overlap with other existing wind and wildlife working groups.
- Some shared that the WWG has the potential to address the "shared ecological landscape" concerns across the MAFWA geography, independent of political boundaries. The group has the ability to address questions at the landscape level.
- Some shared that the WWG should consider shifts in projections for multiple types of energy development (e.g. wind, solar, oil and gas, other) across the landscape and how this could impact their decisions for wind specifically.

Vision for a successful WWG

Some shared a vision of what a successful WWG would look like:

- A successful WWG would include state and federal agencies creating a consistent message that would improve communication and working relationships with industry.
- Success includes getting databases and resource libraries established with the ability to measure use.
- The WWG will be successful if a broadly supported regional siting guideline can be developed within a five-year timeframe, approximately. The WWG should be ready to begin developing the siting guideline after about a year.
- A successful WWG will create a three- to five-page document that walks state agencies through the process of how to approach wind development projects in terms of how to avoid, minimize, and offset impacts. This document should apply to the entire geography and could include regional guidance.
- A successful WWG will have a defined work plan in a year, with subgroups established and making good progress towards the goals in the work plan. It was noted that there is a lot of "forming, storming, and norming" that this group has to go through in order to being making progress on the work plan.
- In a year, the WWG should have clearly defined goals and objectives, and a structure for achieving the goals and objectives.

Appendices

Appendix A: MLI WWG Charter

MLI Wind Working Group

Charter

IMPACTS TO WILDLIFE FROM WIND ENERGY DEVELOPMENT

Purpose

To identify what impacts to avoid or minimize, identify ways to avoid or minimize impacts, and develop acceptable guidelines for siting and operations to avoid or minimize negative impacts.

Context

Wind energy development continues to expand across the Midwest region providing both economic and environmental benefits, but also environmental concern when projects are located in certain high value wildlife areas. Negative impacts of wind energy development to migratory and non-migratory birds, bats, other species of concern, and wildlife habitat continue to be documented. There is an inconsistent patchwork of local, state, and federal regulations for wind turbine siting and operations across the Midwest region. Inconsistency in regulatory frameworks, project consultation processes, pre-/post-construction monitoring guidelines, and other efforts may exacerbate unintended consequences for wildlife and priority habitats at site, state, and/or regional scales. Therefore, many natural resources agencies see value in improving collaboration and guidance to support lessening impacts to sensitive species and important wildlife areas from wind development.

Efforts to identify and offset impacts to fish and wildlife resources from project developments have a long history in the United States. In the 1970's, the National Environmental Policy Act was enacted along with other statutes, that provided for the identification of impacts to fish and wildlife resources from various project development along with measures to offset identified impacts. This typically involved a hierarchal approach whereby efforts are undertaken to: 1. **Avoid** the impact altogether, 2. **Minimize** the impact, 3. **Rectify** the impact, 4**. Reduce** or eliminate the impact over time, or 5. **Compensate** for the impact by replacing or providing substitute resources. These mitigation concepts are relied upon in various mitigation policies including the U.S. Fish and Wildlife Services' Mitigation Policy of 1981 up through more recent direction provided by the Western Governors Association Policy on Compensatory Mitigation passed in December of 2018. These two examples are located here:

https://www.fws.gov/policy/46FR7656.pdf

https://westgov.org/resolutions/article/policy-resolution-2019-03-compensatory-mitigation

Importantly, many state and federal mitigation policies stress the value of coordination between agencies and the value of working cooperatively with wind energy and permitting entities to achieve the best outcome for offsetting unavoidable impacts to natural resources. In the case of wind development, many components of the mitigation hierarchy are voluntary in nature, which can lead to wide discrepancies in whether mitigation occurs, and to what level. Engaging in collaborative approaches between natural resource agencies and wind development companies and permitting entities provides value in identification of impacts to wildlife resources and can help facilitate companies' initiative to provide offsets for impacts.

We believe it is appropriate for wind developers to continue identifying impacts to fish and wildlife resources from wind development using existing literature and other available resources. After identification and quantification of unavoidable impacts, developers should propose mitigation or offset plans to compensate for unavoidable impacts.

Some wind developers are willing to propose mitigation, but their experience with creating habitat or mitigation banks is limited and their preference in many cases is to provide funding to other agencies or groups to fulfill the mitigation plans. Many state and federal agencies are not well equipped to coordinate wind and wildlife issues alone or accept external funds to accomplish mitigation on behalf of companies. Therefore, establishment of mitigation banks or agreements with other groups to accomplish the mitigation can be a key component as to whether on the ground mitigation or offsets actually occur.

Finally, we recognize it is early in the process of fully understanding the impacts of wind development on wildlife resources and that ongoing or future research are important components to advance our understanding of wind development impacts. Many wind developments seek authorization for periods of 30 or more years, and we anticipate that as our understanding of impacts improve, it will be valuable to work with companies to incorporate new information into existing operations of turbines.

MLI WWG Goal

1. Identify and avoid or minimize the direct and indirect negative impacts of wind power generation on wildlife and the surrounding environment.
2. Offset remaining unavoidable direct and indirect impacts of wind power generation on wildlife and the surrounding environment.
3. Ensure those offsets last as long as the project impacts last.
4. Establish a consistent mitigation or offset approach across the region.

MLI WWG Objectives

1. Identify what wildlife resources are most critical to avoid and minimize impacts to (e.g., bat hibernacula and maternity colonies, bat and bird migration pathways, high wetland or grassland densities) for the Midwest.
2. Synthesize and share existing best practices across the region and with other regions.
3. Identify the literature, studies, and information that are relevant to wildlife and natural resource impacts resulting from wind development and the measures that can offset those impacts.
4. Generate a synergy of mitigation strategies used by states across the region.
5. Maintain working relationships with wind companies and permitting entities so that as science and understanding of impacts improve, we can have continued engagement to lessen or offset impacts to natural resources.

Short-term Tasks (year 1)

1. Identify and utilize maps that identify areas of high wildlife value that wind companies can avoid or at least understand the potential high cost of mitigation if such areas are not avoided.
2. Define shared research priorities among agency, industry, and NGOs.
3. Research and compile existing wind energy best management practices (BMPs) from within the region and other regions.
4. Identify and compile the different mitigation approaches used within the region to determine similarities and differences.
5. Develop shared approaches, guidance, and tools for engaging with wind developers and permitting entities.

Mid-term Tasks (year 1-3)

1. Create a simplified method/process for wind developers to continue offsetting their unavoidable impacts to wildlife resources from wind development.
2. Develop shared approaches, guidance, and tools for engaging with wind developers and permitting entities. Share best practices for when wind energy developers should engage with natural resource agencies in the permitting process.
3. Explore the existing and potential mitigation "suite" to consider opportunities for more consistent and impactful mitigation approaches, while providing for individual state flexibility.

Long-term Tasks (year 3-5)

The WWG will reprioritize activities for the planning horizon of 3-5 years based on accomplishments and outcomes from short-term and near-term priorities. The WWG anticipates reviewing and calibrating this Action Plan annually.

1. Continue to collaboratively incorporate the mitigation hierarchy into planning and management processes.

Charge

The purpose of the Midwest Landscape Initiative (MLI) Wind Working Group (WWG) is to explore shared conservation priorities among the states of the Midwest Association of Fish and Wildlife Agencies (MAFWA) and the US Fish and Wildlife Service (FWS). The WWG is a government-only "safe space" for these state and federal agencies with management responsibility for fish and wildlife. The WWG is charged to advance the objectives identified by the MLI Steering Committee including exploring actions

and recommendations to continue identifying shared priorities and defining approaches to address them.

Sub-teams

We anticipate there will be small teams that focus on state by state basis to identify important wildlife areas in that state, what BMP's if any are currently used in that state along with the existing literature that may be relied by natural resource agencies when making recommendations on wind development projects.

Appendix A: Membership

Chairs:

- Federal Chair: Scott Larson, USFWS Interior Regions 5 and 7
- State Chair: Hilary Morey

Members:

- Dave Azure, USFWS Interior Region 5
- Tom Kirschenmann, South Dakota
- Mona Khalil, USGS
- Chris Berens, Kansas
- Zac Eddy, Kansas
- Erin Hazelton, Ohio
- Hilary Morey, South Dakota

Facilitation & Leadership Team:

- Kelley Myers, USFWS
- Brad Potter, USFWS
- Claire Beck, MAFWA
- Jason Gershowitz, Kearns & West
- Rebecca Beauregard, Kearns & West
- Zach Barr, Kearns & West