

**NATIONAL WIND COORDINATING COLLABORATIVE (NWCC)
WILDLIFE WORKGROUP MEETING**

October 30, 2008
Milwaukee, WI

MEETING SUMMARY

The NWCC Wildlife Workgroup Core Group and a number of observers met on Thursday, October 30th, 2008 to identify themes and next steps from *Wind Wildlife Research Meeting VII* and to discuss and agree on the workgroup's 2009 work plan.

Research meeting themes discussion

Participants from *Wind Wildlife Research Meeting VII* identified the following as themes from the meeting.

- Pre-construction methods should be thoroughly assessed
- There is a need for standardization of pre-construction methods, pre- and post-construction metrics.
- Cumulative impacts and habitat merit more attention, while less attention is needed for fatalities
- There is a need for more mitigation research and a suggestion to possibly redistribute funds currently going to fatality research
- Outreach to policymakers is needed
- There is a need to better utilize the following resources in understanding population effects: regional/local species experts, transmission experts familiar with impacts to wildlife, and ecologists outside of the energy field
- It is important to educate developers about the management implications of research
- Presentations at research meetings should include a statement of data limitations (e.g. study duration, seasonality, inter-year variation).
- There is a need for consensus on acceptable levels of fatalities and how to balance study goals and budgets
- There is a need for a data repository to assist agencies; however, these questions must be addressed: what data to include, who has access to it, how to protect developer privacy and business interests. Need to develop a protocol for sharing this information.

In addition, Wildlife Workgroup members recognized the following research needs articulated during the meeting:

- Research on methods for deterring birds & bats from fatalities, in addition to precautions taken during siting of wind facilities
- Standardization of certain siting precautions, such as habitat specific setbacks and buffers
- Standard meta-analyses – many include “old” studies with outdated metrics. As a first step, one might evaluate the studies included in older meta-analyses to understand what each was designed to do and whether its inclusion in a meta-analysis is appropriate
- Better understanding of bat ecology and genetics to provide the population-level context for bat fatalities
- A national map indicating wind resource areas and important wildlife areas
- Documentation of mitigation economics, including environmental and financial cost/benefit analysis (to include fatalities, habitat loss, behavioral changes, etc.)
 - There is a need to determine how to quantify habitat fragmentation/losses

- Without assuming curtailment will be required, calculations of curtailment economics:
 - Summarizing the state of the method and surrounding activities in addition to the financial and environmental economics.
 - Identifying precise duration and circumstances under which curtailments should take place to responsibly minimize loss to industry
 - Comparing variation of curtailment products vs. fine-tuning of curtailment

Possible activities recommended by the group included:

- Hosting a workshop or developing a paper on mitigation experiences by other industries. However, some felt that industries which are less competitive may not provide an accurate example.
- Develop a strategy to encourage power purchasers to even the playing field by including an environmental component in RFPs to enable responsible wind corporations who perform sufficient wildlife and environmental studies to compete fairly. One suggestion is to develop informational materials to assist policymakers in their decision making.

Meeting participants also provided logistical feedback on the research meeting. Attendees indicated that they enjoyed the breaks and opportunities to engage with others. In addition, The Core Group agreed to write a letter to We Energies, the meeting host, applauding the comfortable and attractive venue and the competent and helpful staff. It was also noted that industry representation at these meetings has grown significantly in recent years.

Participants provided a few suggestions for future meetings. One idea was to require that presenters summarize their conclusions prior to presenting methodologies. Other ideas were submitted in written form and have been included in the meeting survey results, which can be reviewed in [Appendix C](#) of this document.

Sector Updates

Meeting participants updated one another on their sector and organizational activities:

Al Manville, U.S. Fish & Wildlife Service (USFWS), announced that the U.S. Government Accountability Office (GAO) is conducting a follow-up investigation on USFWS implementation of 2005 GAO recommendations on working with state agencies and zoning commissions prior to permitting wind facilities. In addition, USFWS is currently updating “take” regulations within the Bald and Golden Eagle Protection Act. There will be an opportunity for public comment on any new policy recommendations.

USFWS partnered with Iberdrola Renewables to develop a company-wide Avian Protection Plan that was announced at the research meeting. Mr. Manville encouraged others to utilize the plan as a template. The signed plan can be viewed on Iberdrola’s website at: http://www.iberdrolarenewables.us/pdf/Signed_ABPP_10-28-08.pdf.

Patrick Gilman, U.S. Department of Energy (US DOE) reported that DOE released its 20% Wind Energy by 2030 report in July. In October, DOE held a roadmapping workshop on implementing the priority items that appear in the report. A roadmap for addressing environmental impacts associated with the 20% vision is expected in early 2009. The group suggested that the Wildlife Workgroup might consider hosting a webcast on the environmental roadmap when it is released.

Dennis Krusac, U.S. Forest Service (USFS), announced that the USFS is currently developing guidelines for the siting of wind energy facilities on USFS land. There was some discussion about whether the USFWS Federal Advisory Committee (FAC) on Wind Turbine Siting Guidelines might be able to inform the USFS process. The group agreed that NWCC members who participate on the advisory committee will consult on whether to request that Dave Stout, Chairman of the USFWS FAC, speak to contacts within USFS to determine where such input might be most appropriate. These members will either speak to Mr. Stout about this possible approach or bring their deliberations back to the larger Wildlife Workgroup.

Chris Keefe, Bureau of Land Management (BLM), announced that BLM is planning a Programmatic Environmental Impact Statement in Wyoming, which has 1.5 million acres currently proposed for wind energy development. Mr. Keefe indicated that the proposed development occurs mostly along corridors where transmission currently exists.

Mr. Keefe also suggested that the Wildlife Workgroup seek to engage participation from BLM and USFS. While the NWCC has sought participation from these groups in the past, Core Group members suggested that field representatives might participate more regularly than those in headquarters.

A member commented that lack of involvement by USFS and BLM illustrates a difficulty the NWCC has experienced in targeting specific messages to key audiences. The Core Group agreed that the NWCC should consider how to work with individual members to make participation and information dissemination easier within each sector.

Deb Hahn, Association of Fish & Wildlife Agencies (AFWA), explained that AFWA has a number of committees, one of which focuses on wind energy. At that committee's September meeting, the group discussed implications of wind production tax credits and the degree of AFWA's interest. The committee has additionally expanded discussions about transmission. Finally, the group is seeking a method for regularly updating the 2007 summary of state wind and wildlife guidelines. Ms. Hahn explained that Celia Greenman, Colorado Department of Natural Resources, typically represents AFWA in NWCC work.

Aimee Delach and Caroline Kennedy, Defenders of Wildlife, indicated that Defenders continues to be involved in the USFWS FAC and participated in the early October 20% meeting at DOE.

John Rogers, Union of Concerned Scientists (UCS) indicated that UCS intends to increase its attention to transmission issues over the next year. Mr. Rogers also notified the group that UCS has been actively participating in the formulation of the American Wind Wildlife Institute (AWWI). UCS intends to continue its work on public education, including putting wind energy in a context that includes other energy sectors. One such activity will be the production of a factsheet series providing community-level decisionmakers with condensed explanations of a variety of wind-related topics.

Michael Fry, American Bird Conservancy (ABC), announced that ABC is working with variety of joint ventures such as Playa Lakes and Intermountain West to get Geographic Information System (GIS) information on Important Bird Areas (IBAs) with an aim toward developing a national wind and wildlife map, as well as a regional map of the northeast.

Jay Pruett, The Nature Conservancy (TNC), indicated that TNC continues its work mapping sensitive habitat areas and is coordinating with others to complete maps of the central US region in 2008. TNC will convene a meeting of its state chapters in early 2009 to share experiences

and update each other on chapter activities. Mr. Pruett indicates that he intends to speak about his involvement in NWCC activities, educating states on wind energy issues as they relate to conservation.

Heather Whitlaw, Texas Parks and Wildlife Department (TPWD), shared that the Lesser Prairie Chicken Working Group has completed its 5-state work plan. Ms. Whitlaw believes this work plan is the best synthesis of currently available literature on the subject; interested parties are welcome to request the document by email at: Heather.Whitlaw@tpwd.state.tx.us. NWCC participants indicated interest in receiving a briefing on this workplan, perhaps to the Grassland Shrub Steppe Species Collaborative, a subgroup of the Wildlife Workgroup.

Abby Arnold, Kearns and West, updated the group that AWWI is seeking to hire a research director and executive director. AWWI's next board meeting is scheduled for January. Ms. Arnold reminded participants that the Wildlife Workgroup developed a memorandum of understanding with AWWI articulating the roles of each organization to prevent redundancy. The current understanding is that the Wildlife Workgroup will articulate and prioritize research needs. AWWI will filter these suggestions through an independent technical committee to determine which projects to fund.

Laurie Jodziewicz, American Wind Energy Association (AWEA), indicated that AWEA has planned its 5th siting workshop for February 24-25, 2009, in Seattle, Washington. The AWEA Siting Handbook, a technical resource document on regulatory framework issues including wildlife, is currently available on the AWEA website and will be updated in early 2009. AWEA is currently focusing on educational outreach to agencies within the new Presidential administration, stressing the importance of policies such as the production tax credit (PTC). Ms. Jodziewicz shared AWEA's forecast that 2008 will prove a record year for wind energy development, but 2009 will see a drop due to the late passing of the PTC.

Jim Lindsay, FPL, announced that the Spring Avian Power Line Interaction Committee (APLIC) meeting has been scheduled for March 30-31, 2009 in Fulton, Texas. Mr. Lindsay indicated that the semi-annual business meetings are typically two days, with one being open to the public. During these meetings, APLIC generally seeks to work with utilities and co-ops on mitigation issues.

Ms. Arnold reminded the group that the NWCC Steering Committee has sought coordination between the Transmission Workgroup and Wildlife Workgroup but has struggled to determine the right people for that interaction. She suggested the APLIC meeting might be an appropriate time to coordinate the two.

Terry Yonker, Great Lakes Wind Collaborative (GLWC), announced that GLWC is now a bi-national collaboration with energy/environmental representatives from each of Great Lakes states, as well as Ontario and Quebec. In addition, it includes representatives from industry and NGOs. Mr. Yonker indicated that the GLWC's siting and environmental regulation committee has been quite active. Its current mapping project has been challenged by a lack of good information about bird migration across large bodies of water like the Great Lakes. GLWC participated in the 20% DOE roadmapping meeting and believes that the Great Lakes can contribute to the 20% goal.

Updates on NWCC Activities

Studying Wind Energy/Bird Interactions: A Guidance Document (aka *Methods & Metrics*)

Karin Sinclair, National Renewable Energy Laboratory (NREL), provided an update on NREL's current support of updates to key NWCC documents. NREL hosted a September 15th workshop to help develop a tiered decisionmaking framework to be included in an updated *Methods & Metrics* document. The framework will seek to provide guidance on when siting and mitigation methods should be applied. The oversight committee met with the contractor performing the updates, WEST, to review three basic decisionmaking models – adaptive management, structured decisionmaking, and ecological risk assessment (ERA), ultimately deciding on a framework based on ERA. The group agreed that the adaptive management model will also have a role, especially with post-construction monitoring and mitigation.

The first draft of the framework will be due to the oversight committee in mid-December, and the first draft of the larger document is expected in mid-February.

Wind Turbine Interactions with Birds and Bats: A Summary of Research Results and Remaining Questions (aka *Birds & Bats Factsheet*)

NREL is also partnering with the NWCC to update the Birds & Bats Factsheet. Pandion Systems has been contracted to perform the updates. The first draft of the factsheet was provided to the oversight committee, who was expected to provide feedback to Pandion in November.

Grassland Shrub Steppe Species Collaborative (GS3C)

The GS3C has continued to sponsor research on greater prairie chickens at Kansas State University (KSU). Researchers have completed a third year of pre-construction assessment in the before-after-control-impact (BACI) study. The study features replication at 3 paired sites (units); however, only one unit is moving forward with development. Post-construction monitoring will proceed at that site, but the altered construction plans for the other two raise the question of whether to alter the study design to utilize resources more effectively. GS3C members suggested the group consider using funds originally intended to be spent at units where development will not continue and divert it to an additional year or two of post-construction monitoring at the developed site.

The GS3C agreed to move forward in considering this suggestion. KSU researchers reported that the remaining budget may not cover the modifications to the research plan and agreed to provide a revised proposed budget for consideration by the group.

At the GS3C meeting, attendees also heard an overview on sage grouse research from *Christian Hagen, Oregon Department of Fish & Wildlife*. While there are a number of activities going on across the country regarding sage grouse, there is a sense that the NWCC could contribute in a substantive way. Mr. Hagen indicated that the GS3C model has proven effective and could be replicated in studying concerns about wind and sage grouse. The GS3C agreed that NWCC staff should work with Mr. Hagen to develop a summary of the problem and begin identifying stakeholders who should be involved in any future activities.

Wildlife Workgroup Outreach Survey:

In Fall 2008, the Wildlife Workgroup surveyed its members to evaluate and improve workgroup outreach. Taylor Kennedy, *RESOLVE*, summarized the responses to that survey. Additional detail is included in [Appendix C](#) of this document.

Overall, those who responded to the Outreach Survey value the cross-sector relationships developed through the NWCC as well as the information provided through updates and

publications. However, participants feel that *policymakers and utilities* are missing from the discussion.

Respondents identified potential opportunities for the group to increase its outreach through member resources. More than half of the respondents' organizations distribute a monthly or quarterly newsletter. In the past, workgroup members have suggested seeking to publish an article in such newsletters. Other suggestions from respondents included: hosting more webcasts, attending meetings that would attract target sectors, and distributing more press releases.

Based on the feedback received, meeting attendees discussed where outreach might be improved and whether the Wildlife Workgroup should begin targeted outreach to specific sectors. One member asked whether Public Utility Commissions (PUCs) were involved in the survey. Ms. Arnold indicated that the Wildlife Workgroup has had difficulty securing regular participation from commissioners or their staffs. However, NWCC participants from the National Association of Regulatory Utility Commissions have indicated that commissioners do attend meetings about issues their commissions need to address. NWCC might directly target commission staff by hosting an event in conjunction with a NARUC meeting. A member also suggested holding webcasts or developing print resources specifically targeted at PUCs. The group expressed particular interest in educating PUCs on the economic values associated with displacing fossil fuels, as this information would assist in development of PUC cost recovery plans.

Members also discussed a need to educate power purchasers on wind and wildlife issues in order to even the playing field for developers. If power purchasers would require wildlife monitoring and impact mitigation in their RFPs, developers who seek to be environmentally responsible would not be punished for proposals that include such monitoring in their costs. Members felt that a meeting to discuss this issue, as well as cost-recovery mechanisms for inclusion of such requirements, would be useful.

Members indicated that outreach to their constituencies would be aided by short factsheets speaking to specific interests. Participants felt that there is a short-term need to develop a factsheet on the monetary value of wildlife that could be used to help develop a business case to industry executives for proactive wildlife policies. Members agreed that the NWCC will produce a two-page factsheet summarizing the most recent economic data on the value of wildlife, focusing on species affected by wind energy development. The factsheet will seek to provide objective, easy to read information for use by management. Aimee Delach (*Defenders of Wildlife*), Al Manville (*US Fish & Wildlife Service*), Noel Cutright (*We Energies*), Jay Pruett (*The Nature Conservancy*), and Rob Fergus (*National Audubon Society*) agreed to assist in this project.

NWCC Updates:

Ms. Arnold notified the group that the NWCC Steering Committee has requested that the NWCC conduct activities related to siting wind facilities. The Wildlife Workgroup will be kept intact.

In 2008, the Steering Committee directed the NWCC to address the environmental benefits and costs of wind energy. A Subgroup was formed to host a forum evaluating models that assess the environmental benefits and impacts of various energy generation technologies. The primary goal was to determine how wind energy fits into those models. At present, it is unclear whether the group will continue and in what capacity. However, the subgroup did express interest in informing the National Academy of Sciences' study investigating comparative impacts of energy technologies which is expected to be finished by next June.

2009 Workgroup Blueprint

Ms. Arnold reminded the group that the Wildlife Workgroup develops and approves a workplan, or “blueprint,” each year. NWCC staff is then accountable to the Wildlife Workgroup, the NWCC Steering Committee and U.S. DOE to ensure continued movement on each task. The approved blueprint is included as in [Appendix B](#) of this document.

A few blueprint items were discussed in detail. The Habitat subgroup was formed last year in response to a perceived need. However, AWWI has begun addressing habitat concerns to a large extent; therefore NWCC staff propose that AWWI take the lead on this issue and that NWCC complement AWWI’s initiative by sharing research information received during Wind Wildlife Research Meeting VII.

A member suggested that the NWCC could play an important role in encouraging state agencies and others who have wind and wildlife data to work collaboratively. Jay Pruett (The Nature Conservancy) agreed to work with NWCC staff to provide suggestions for activities on this matter.

The Workgroup encountered difficulties in updating the [NWCC Mitigation Toolbox](#), as voluntary updates were sparse and much of the information has become outdated. Additionally, much of the information is duplicated in other publications that may be more regularly updated. NWCC staff is currently looking into alternative methods for coordinating with other parties to ensure that the document is regularly updated to include or link to the most recent techniques, case studies, and guidelines. One suggested format is a web-based database. The group also agreed to reconsider using the term “mitigation” in the title of the document as the term can be interpreted in different ways.

The workgroup considered 2009 webcast topics and developed some suggestions for consideration. These are included in [Appendix A](#) of this document.

After approving the 2009 blueprint, the NWCC Wildlife Workgroup adjourned.

Next steps stemming from this meeting are included in [Appendix A](#) of this document.

Appendix A: Next Steps from 2008 Wildlife Workgroup Meeting

NATIONAL WIND COORDINATING COLLABORATIVE (NWCC) WILDLIFE WORKGROUP MEETING

NEXT STEPS

October 30, 2008
Milwaukee, WI

BACKGROUND

On October 30, 2008, members of the Wildlife Workgroup convened in Milwaukee, WI, to discuss priorities illuminated by *Wind Wildlife Research Meeting VII*, and to confirm 2009 workgroup activities. A meeting summary is under development and will be circulated to the workgroup when it is available. A 2009 Wildlife Workgroup blueprint incorporating feedback from the meeting is attached, along with a schedule for 2009 NWCC conference calls.

NEXT STEPS FROM WILDLIFE WORKGROUP MEETING

General: Interested parties should email Heather Whitlaw, Texas Parks & Wildlife Department, at heather.whitlaw@tpwd.state.tx.us for a copy of the Lesser Prairie Chicken Working Group's recently published work plan.

GS3C Oversight Committee members will consider potential resources for additional KSU funding.

Noel Cutright (We Energies), **Aimee Delach** (Defenders of Wildlife), **Rob Fergus** (National Audubon), **Al Manville** (U.S. Fish & Wildlife Service), **and Jay Pruett** (The Nature Conservancy) will coordinate with **NWCC staff** and member communications departments to produce a two-page factsheet summarizing the most recent economic data on the economic value of wildlife

Jay Pruett will suggest specific approaches for encouraging state agencies and others possessing wind and wildlife data to work collaboratively.

Members of US FWS Federal Advisory Committee (FAC) will discuss how to approach Bureau of Land Management (BLM) about opportunities for the FAC process to inform BLM wind turbine siting guidelines.

NWCC staff will:

- Draft a letter from Planning Committee thanking We Energies for hosting and staffing Wind Wildlife Research Meeting VII [*complete*]
- Provide Jay Pruett (The Nature Conservancy) with information on the NWCC to share at TNC meeting [*in progress*]
- Work with sage grouse experts to develop a problem statement on wind development and sage grouse for review and consideration by the GS3C [*complete*]
- Develop a proposal to modify current outreach strategy based on feedback from Wildlife Workgroup.
- Develop a proposal for collaboratively updating the Mitigation Toolbox [*in progress*]

In 2009, the Wildlife Workgroup will:

- Consider convening a workshop or developing a white paper on mitigation experiences by other industries. This activity should recognize that the degree of competition varies across industries.
- Consider how the workgroup might encourage power purchasers to include environmental considerations and mitigation activities in RFPs, which could even the playing field for conscientious developers.
- Host informational webcasts, possibly on topics like:
 - Environmental roadmap component of DOE's 20% Wind Vision
 - Environmental portion of AWEA Siting Handbook
 - Federal Advisory Committee recommendations
 - Logistics of and lessons learned from implementation of Avian and Bat Protection Plans (late 2009 or 2010)
- Seek engagement from BLM and U.S. Forest Service in Wildlife Workgroup activities.
- Consider how staff might work with individual members to improve information dissemination within specific sectors.
- Determine future activities for workgroup interaction on transmission and wildlife issues.
- Investigate participant desire for NWCC to address offshore wind energy issues.
- Consider hosting a workshop on the statistics used in study models.

NEXT WORKGROUP CALL:

The next Wildlife Workgroup call is scheduled for **Wednesday, February 4th, 2009, at 2:30pm Eastern** (1:30pm Central, 12:30pm Mountain, 11:30am Pacific).

NWCC SITING WORKGROUP BLUEPRINT Proposed Products and Activities – 2009 and Beyond

BACKGROUND:

In May 2008, the NWCC Steering Committee requested that the NWCC resurrect the NWCC *Siting Workgroup*¹, expanding dialogue to include environmental considerations as well as wildlife impacts from transmission development. The Steering Committee envisions the Wildlife Workgroup being annexed to the Siting Workgroup, as is reflected in this work plan.

DRAFT MISSION (TO BE APPROVED BY WORKGROUP)

The Mission of the NWCC Siting Committee is to identify, define, discuss, and through collaboration address issues and concerns relating to the siting of wind energy facilities. It will focus primarily on environmental siting considerations and impacts to wildlife from wind facilities and transmission.

Projects & Activities, 2009 & Beyond

COMMITTEE START-UP

Task	Expected Completion
▪ Complete recruitment of Members.	First quarter 2009
▪ Finalize Committee scope of work.	Second quarter 2009

WIND FACILITY AND INFRASTRUCTURE SITING

▪ TBD based on Siting Committee direction.	Third and Fourth quarter 2009
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TRANSMISSION/WILDLIFE SITING ISSUES

<ul style="list-style-type: none"> ▪ Investigate and conduct forums to address wildlife and transmission activities, particularly relating to regional and renewable transmission planning. ▪ Other activities as requested. 	First – Fourth quarter 2009
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WILDLIFE WORKGROUP

▪ Continue activities detailed in Wildlife Workgroup work plan below.	Ongoing
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WILDLIFE WORKGROUP MISSION

The Mission of the NWCC Wildlife Workgroup is to identify, define, discuss, and through collaboration address wind-wildlife and wind-habitat interaction issues by seeking broad stakeholder involvement on scientific and public policy questions.

¹ The NWCC Siting Subcommittee was in operation for over three years, conducted workshops on non-wildlife siting issues, produced a siting handbook that was reprinted twice, due to its popularity, and contracted for a study on siting case studies (available on the NWCC web site at [http://www.nationalwind.org/publications/siting/Wind Power Facility Siting Case Studies.pdf](http://www.nationalwind.org/publications/siting/Wind_Power_Facility_Siting_Case_Studies.pdf))

Subgroup Projects & Activities, 2008 & Beyond

GRASSLAND & SHRUB STEPPE SPECIES COLLABORATIVE (GS3C)

The GS3C is a voluntary cooperative endeavor to identify the impacts, if any, wind energy has on grassland and shrub steppe avian species. Established in 2005 as the National Wind Coordinating Collaborative (NWCC) Wildlife Grassland/Shrub Steppe Species Collaborative, the GS3C includes representatives from state and federal agencies, academic institutions, non-governmental organizations, and the wind industry. Its recent products have included: a protocol for siting wind turbines in songbird habitat and a literature review of wind energy development's impacts on grassland birds.

Task/remaining considerations	Expected Completion
<ul style="list-style-type: none"> ▪ Pursue next steps to study/address wind development impacts on sage grouse. <i>Stakeholders have agreed that sage grouse are extremely sensitive to development, possibly including wind development. The GS3C has begun to discuss with experts whether it is feasible to conduct a credible study examining wind energy's impacts on sage grouse. NWCC staff will work with experts to develop a scope of need for distribution to GS3C members. (If the GS3C pursues a project on sage grouse, it will need to coordinate with other sage-grouse institutions. The GS3C may need to reach out to additional experts and stakeholders.)</i> 	TBD; expected to begin first quarter 2009
<ul style="list-style-type: none"> ▪ Provide guidance to and track progress on prairie chicken and wind energy research at Kansas State University. Assist researchers in ensuring adequate funds are in place. Plan for public viewing of information, as appropriate. <i>Researchers presented a proposal to restructure the current study in response to altered development plans on the research sites (At the Oct 27 meeting, the GS3C decided to modify the study design to focus on one site. The Researchers will submit a revised budget to address modification in late November).</i> 	Ongoing
<ul style="list-style-type: none"> ▪ Investigate additional funding possibilities to support KSU research, should additional study years be desired. 	
<ul style="list-style-type: none"> ▪ Continue facilitation and overall support for GS3C 	Ongoing

HABITAT

The Habitat subgroup was formed at the request of the Steering Committee in order to address the emerging question of whether/how wind development impacts the suitability of important wildlife habitat and to begin evaluation of the resulting cumulative impacts. This subgroup assisted in crafting a ½ day session on habitat impacts at Wind Wildlife Research Meeting VII, a biennial convention featuring recent studies by the leading researchers in the field.

Task	Expected Completion
<ul style="list-style-type: none"> ▪ Following <i>Wind Wildlife Research Meeting VII</i>, coordinate with American Wind Wildlife Institute and others to identify key habitat research needs and identify avenues for accomplishing that research. 	First, Second, and Third quarters, 2009
<ul style="list-style-type: none"> ▪ Encourage cooperation between states on regional approaches to information sharing and modeling of landscape habitat issues. 	First and Second quarters, 2009

UPDATES TO METHODS AND METRICS DOCUMENT AND BIRDS & BATS FACTSHEET

The NWCC published [Studying Wind Energy/Bird Interactions: A Guidance Document](#) (aka “Methods & Metrics Document”) in 1999 and it quickly became known as THE standard for conducting bird impact assessments at proposed wind energy facilities. A companion document was published in 2007 pertaining to bats and nocturnal birds.

In 2004, the NWCC published [Wind Turbine Interactions with Birds and Bats: A Summary of Research Results and Remaining Questions](#) (aka “Birds & Bats Factsheet”), with the goal of providing accessible information to the public on what is known about birds, bats, and wind energy.

The originals are currently undergoing an extensive updating process to include the substantial knowledge that has been gained in the past decade.

Task/remaining considerations	Expected Completion
<ul style="list-style-type: none"> ▪ Oversee task completion by subcontractors; perform technical edit and publish both documents; seek expert review to methods & metrics document; seek publication in a refereed scientific journal. 	Second, Third, and Fourth quarter 2009

“MITIGATION TOOLBOX”

The Mitigation Toolbox describes various mitigation measures or tools that can be used in the decision-making process. To help guide future decision making, this toolbox provides information about existing mitigation policies and guidelines, as well as on whether strategies are based on sound scientific research. It indicates the effectiveness of various methods of avoiding, minimizing, or compensating for direct and indirect impacts on wildlife caused by wind power facilities.

Task	Expected Completion
<ul style="list-style-type: none"> ▪ Consider renaming the document to refrain from using ‘mitigation’ which was originally intended to follow the US Fish & Wildlife Service definition of “avoid, minimize and compensate” 	
<ul style="list-style-type: none"> ▪ Investigate opportunities to collaborate with Association of Fish & Wildlife Agencies (AFWA) and others to provide updates to the Mitigation Toolbox. Coordinate to develop a process for regular updates which include state policies and guidelines, references for wildlife mitigation research, case studies, research priorities, and other recommendations. Focus on siting guidelines and on-the-ground activities. Incorporate research meeting results. 	First quarter 2009
<ul style="list-style-type: none"> ▪ Explore opportunities to update Mitigation Toolbox as a living document or an online database. 	
<ul style="list-style-type: none"> ▪ Solicit new information for Mitigation Toolbox and incorporate updates 	Third quarter 2009

Other Wildlife Projects & Activities, 2009 & Beyond

Task	Expected Completion
<ul style="list-style-type: none"> ▪ Hold quarterly (or more frequent) webcasts. Possible topics include: habitat needs/use of GIS mapping tools; Texas Parks & Wildlife Department’s Lesser Prairie Chicken work plan; considerations involved in a cumulative impacts discussion/study; Iberdrola’s Avian 	Quarterly

Bat Protection Plan implementation; the environmental component of 20% roadmap; the environmental portion of AWEA's siting handbook, or Federal Advisory Committee recommendations; Horizon conservation agreement with TNC and Kansas Ranchland Trust,	
▪ Consider holding workshop on statistics applied to wind/wildlife interaction (pre- and post- construction).	Third Quarter, 2009
▪ Monitor the wildlife and wind power subject area and make adjustments to the workgroup blueprint as needed.	Ongoing
▪ Recognizing that competition varies between technologies, consider hosting a workshop or developing a white paper investigating mitigation experiences in other industries.	Third or Fourth Quarter, 2009

Outreach

Task	Expected Completion
▪ Continue to periodically review outreach strategies for key NWCC products. Consider how to work with individual members to assist sector-specific information dissemination, including developing a factsheet summarizing the economic value of wildlife.	First quarter 2009
• Seek engagement from Bureau of Land Management and U.S. Forest Service	First quarter 2009
• Utilize NWCC blog to provide updates on recent publications, research and activities in the field, as well as information for participation in workgroup activities	Ongoing
• Continue to respond to inquiries and conduct outreach to parties interested in getting more information about wind and wildlife issues	Ongoing
▪ Conduct regularly scheduled conference calls (at a minimum every 6-8 weeks) and 2 in-person meetings to keep Core Group, Associate Members, and other interested parties updated on relevant issues and activities and to offer the Core Group an opportunity to guide various initiatives.	Bi-monthly
▪ Maintain a web based "event table" summarizing NWCC Wildlife Workgroup and other wind/wildlife initiatives	Monthly
▪ Track state and Federal policy guidelines and make them available on the NWCC website	Quarterly

Appendix C: Wildlife Workgroup Outreach Survey Results

WILDLIFE WORKGROUP OUTREACH SURVEY RESULTS

Survey purpose: To identify and leverage the outreach tools of Wildlife Workgroup members

Survey questions related to:

- Degree of involvement
- Primary value of NWCC
- Evaluation of NWCC's current outreach
- Ideas for future outreach activities and audiences
- Sector identification

Overall, those who responded to the Outreach Survey (24 responses):

- Are *highly involved*
- In effect, equally value the *cross-sector relationships* developed through the NWCC (37%), *information provided* through updates and publications (33%), and *NWCC meetings* (25%)
- Find the NWCC newsletter and call summaries to be helpful and informative; most share these items with colleagues 6-8 times per year
- Feel that *policymakers* are missing from the discussion, with *utilities* in second place (this is somewhat reflected in poll participation as well)

Poll participation and responses by sector:

- **The eight environmental(4) & wildlife(4) advocates** who responded are *moderately involved*, value the *cross-sector relationships*, and feel that *policymakers* are missing from the dialogue
- **The seven industry** representatives who responded are *moderately-highly involved*, most value the *cross-sector relationships*, and feel that *policymakers* are missing from the conversation (wildlife advocates are second behind policymakers)
- **The one policymaker** who responded is *moderately involved*, finds the *meetings* most useful, and feels that *utilities* are missing from the dialogue
- **The three regional & federal agency representatives** who responded are *highly involved*, find the *meetings* most useful, and feel that *environmental advocates, utilities, and state/local agencies* are equally missing from the conversation.
- **The four state & local agency representatives** who responded are *moderately involved*, find the *cross-sector relationships* most useful, and feel that *environmental advocates, wildlife advocates, utilities and state & local agencies* are equally missing from the dialogue.
- **The one utility representative** who responded is highly involved, most values *NWCC publications and information*, and feels that *state & local agencies* are most missing from the dialogue.

Opportunities identified:

- More than half of the respondents' organizations distribute a monthly or quarterly newsletter. *In the past, workgroup members have suggested seeking to publish an article in member newsletters.*
- Suggestions from respondents:
 - Host more webcasts, welcoming wide public participation
 - Potential topics include: GIS mapping, considerations involved in a cumulative impacts discussion/study, current research activities, other?

- Formally recognize consultants as stakeholders in the NWCC
- Investigate activities relating to offshore wind
- As a condition of participation, seek a commitment to distribute information about NWCC members to internal staff and external colleagues
- Utilize DOE/NREL listservs
- Attend meetings that would attract target sectors
- Circulate updates and materials on e-advocates listserv
- Distribute more press releases
- Outreach tools utilized by respondents' organizations include:
 - Newsletters
 - Scientific publications
 - Informational webcasts/conference calls
 - Blogs
 - Topical meetings
 - Press releases
 - Website
 - Magazine
 - Action alerts
 - Public affairs professionals
 - Topical papers
 - Translation of scientific publications into less technical language

Questions for consideration:

- Which of the above activities should the Wildlife Workgroup consider?
- Based on feedback received, should the Wildlife Workgroup begin targeted outreach to specific sectors?
- How can the Wildlife Workgroup best utilize its members to increase efficacy of outreach?