

**Energy and wildlife policy Committee**

**Chair: Paul Johansen (WV)**

**Vice-Chair: Keith Sexson (KS)**

**Thursday, March 9, 2017**

**1:00-5:00pm**

**82nd North American Wildlife and Natural Resources Conference**

**The Davenport Grand Hotel**

**Spokane, WA**

1. Minutes from September 2016 meeting approved by committee.
2. Wind, Solar, and Transmission Subcommittee Report: The leadership of this committee and AFWA looked at general participation, demand, and frequently overlapping agendas and have decided to stand the subcommittee down. Wind, Solar, and Transmission are now main stream energy topics that can be handled by the full committee. If at any time we feel like there are topics that need special attention and it would be necessary to initiate subcommittee again, we can do that at any time.
3. Review and Revise Committee Workplan
	1. Kevin – One thing that we might add is structured interaction with relevant committees with other committees like T&E or invasives or Fisheries and hydropower.
	2. Steve B. – Used to have a lot of energy industry folks in the room as wildlife folks. It would be great to keep having them in the room. Use this forum as a way to work directly with representatives with energy industry on the issue. API, AWEA, regional trade associations. Inviting them to come. Pick topics on which we can have somewhat in depth conversations.
	3. Justin A. – As related to laws and regulations. I struggle to interpret policies and how they might influence demand in his state. Could use help to translate how polices and reg impact authority but also the potential demand in new generation and transmission.
	4. Terry Riley – Early on we tried to figure out how to get states more involved with permit issuance. A lot of states weren’t engaged. BLM was trying to figure out how to legally bring FW agencies in to the fold outside of public input. Is BLM really looking at FW agencies as partners now? Big shock that state thought they were engaged but they were not engaged.. Finding avenues to work with BLM and industry.
		1. Steve – John Bachman did a detailed effort on that. Try to get it to the new members.
		2. Practical issue is going to be capacity for states and feds. Hiring freeze issues. NM DGF handling oil gas, renewable, coal, and hard rock mining. Impossible task for one person to handle. Budgetary problem that AFWA can’t solve, but lobbying to rehire is needed.
	5. AFWA could potentially serve as a clearinghouse for approaches and processes being employed across the country to engage with energy companies on wildlife issues. –
	6. Website with previous agenda and materials.
	7. Considering a survey to ask about relevant questions. Reach people What are the needs? Needs Assessment survey.
		1. Keith – We can use help from everyone on collaborating with industry. Can we identify the organizations that represent the industry in the various sectors. Get a list together. Ask a question on the survey about who the major players or industry associations might be.
	8. Frequent participants in this conferences is Wildlife Habitat Council. Exxon Mobil is a key member of WHC. The industry supports webinars for the USFS, we might consider partnering.
	9. BLM– technologies are evolving constantly. Keeping on top of those changes could also definitely affect mitigation planning. Gotta find good folks in industry to help. There may be some practical problems with biologists’ ideas.
	10. Brian (TWS) – This might be where TWS can assist. Been 4 or 5 years since Renewable Energy working group. Have had a workshop at conference. Drafting a book. TWS partner on workshops and issues. –Share book with this group when complete.

ACTION ITEM: Update and improve committee charge and work plan by the end of the month. Be responsive to needs.

ACTION ITEM: E-mail Steve B for notes related to engaging with BLM from John Bachman.

1. State Roundtable –
	1. Paul (WV) – Dealing in unprecedented time with interstate gas transmission line. 5 major projects. Some are 42 inch pipelines. Very much bigger than previous issues. Dealt with FERC before but not with gas transmission. Dealing with agency in new capacity. Public vs Private lands. Attempting to reach out to FWS as it relates to migratory birds. What role FWS wants to take. Major USFS ownerships. Keeping environmental coordination staff busy.
	2. Keith (KS) – defers to Chris Berens (section head for ecological services) – Wind farms going up in Kansas, multiple popping up across the state. Lesser Prairie Chicken Issues. There is also a moratorium on Flint Hills region. Industry is trying to get close to the edge. Solar is new for us. Seems to be coming up more and more often. Very busy with potential solar arrays.
	3. Justin (WA) – New crude oil export and community scale solar. Wants to focus on large scale transmission that we’ve been working on for 8 years with BLM FWS and Pacific Power. Goes through the priority area for Sage Grouse. Two areas occupied by Sage Grouse. Interesting process where we worked as cooperating agency with BLM, FWS, and the company to identify direct impacts and indirect effects. Connectivity, predation, other issues. Learned what we could ask for, but hard to deal with. There is a 30000 acre mitigation obligation. Now developing compensatory mitigation plan. Taking up a lot of time. Becoming a precedent.
	4. Florida – Variety of energy projects oil & gas pipelines to nuclear, lots of solar coming on. Siting act in FL that requires agencies to work together. We’ve been working through that process somewhat successfully for some time. Made a concerted effort to work with energy companies more proactively. Starting to see some benefit from that. They are coming to FWC a year in advance to inquire about parcels they’ve acquired, which gives us the ability to address issues way in advance.
	5. Jessie (North Dakota) – Bakken Oil Shale and Wind. Talked to Julie yesterday about how Texas has engaged with industry. Several individuals in ND trying to engage, but it is hard to get over to that point of agencies coming to them. Huge impacts to grasslands, trying to provide proactive feedback to improve our concerns.
	6. Pat (Colorado) – We’ve got wind, solar, and fluid minerals. Prices have dropped on fluids. Energy transmission lines are our biggest issues. Especially those through Gunnison Sage Grouse habitat.
	7. Ashley (UT) - Quiet down of oil and gas for the last 2 or 3 years. Two biggest projects are energy transmission that span the state. Planning with project proponents to address infrastructure issues. Wind and Solar is popping up. Little projects, but gaining momentum.
	8. Julia (TX) – Texas has everything. The most pressing is for a new shale play in west Texas around a big dessert oasis spring with a few endangered fish. Ground water in TX is lightly regulated, if at all. DAPL builder CEO is on TXPW commission.
	9. Scott (WY) – Finalized a greater sage grouse compensatory MOU with many partners. Operating under core area strategy to manage sage grouse and habitat. MOU establishes framework for working with federal partners. Creates opportunity for state and land managers to work on sage grouse together. Had our first large scale solar proposal. Working on that.
	10. Justin S. (AR) Starting to see transmission lines cutting across AR from wind farms in OK. Working with Plains and Eastern Clean Line. Have a DC corridor going across state. Weren’t going to have a converter in the state. Ended up siting a small converter station in the Ozark region. Working on 4 or 5 FERC unpowered dams to add 5-10 MW to them. Trying to get mitigation for American Shad and Eel. Alt. energy isn’t developing but it is coming across the state through transmission/
		1. FERC had an expedited processes for dams, do yours apply?
			1. There was a public notice that the company asked for the permits, but they don’t seem to be being fast tracked.
	11. Barry (BC Canada) – A lot of activity: wind, pipeline, O&G, mining proposals. In environmental assessment, we are incredibly busy. Big species we’re concerned about is caribou. We have projects that have been reviewed federally and provincially that are at risk of not proceeding because of the declining state of the herds. We aren’t sure what we can do to mitigate. In one EA we conclude that the cumulative effects on first nations people heightens scrutiny. Rare that conclusion finds a cumulative effect, especially on aboriginal rites and title. We will have to get consent and somehow accommodate first nation’s rights.
	12. Jim Ozier (GA Power) – Recent RFP for solar development. Private developers were responsible for Environmental Assessments which frequently found impacts on Gopher Tortoise Assessment. Put EA process in our next RFP to discourage use of Gopher Tortoise habitat.
	13. Missouri (virtual update) Wind power projects in Missouri are a relatively new form of development, with the first project in operation in 2007. As of 3/8/2017, there are 8 wind projects in operation, 1 project in construction, and 7 in planning or development. Missouri does not have a state siting board, the topic is relatively new to county zoning boards as well, and citizens have concerns about how their interests are represented. To minimize impacts to fish, forest, and wildlife resources, Missouri recommends setbacks from conservation areas, which are managed for a variety of habitat and public uses, of 1-3 miles to wind power installations. Even with the recommendations, situations occur that may increase impacts, including an example in northwest Missouri where available siting locations were limited by a local zoning moratorium and litigation regarding zoning by private individuals, and the available locations remaining were planned within 1/4 mile of a conservation area. Post-construction mortality reports are an important piece of understanding wildlife impacts which we do not currently have, and our public seems to be organizing on this topic. Also, we find some companies seen reluctant to pursue Incidental Take permits (eagles) with the U.S. Fish and Wildlife Service perhaps due to NEPA and public comment, although this transparency would likely help with public confidence in the process. I welcome contacts from any on the committee regarding wind power, hydropower, transmission lines, and pipelines.
2. Update from USFWS on Revised Mitigation Policy
	1. Two policies finalized at the end of last year. Now in a position that new administration will review by DOI policy folks.
	2. Had an 1981 policy USFWS Mitigation Policy which was updated and we’ve added a new policy specific to ESA.
	3. Both policies only controlling upon FWS. Only for FWS staff and to give certainty to proponents. Limited circumstances under which FWS has authority to require mitigation. Most common role is as advisor to other agencies. Trying to provide consistency and reliability. Reflect goals for FW and habitat. Federal agencies to whom we give advice have to act within their own framework.
	4. Why did they update? A lot has changed in the science and practice of the conservation community. Mitigation measures that we talk about today were not all that common in 1981. Policy was focused on Services role under coordination act. Specifically excluded any service role for ESA.
	5. Changes:
		1. Explicitly applies to all Service programs, including ESA.
		2. Reaffirms mitigation hierarchy in CEQ regulations, while acknowledging situations where deviations may produce better outcomes. For example, does allow for deviation such as allowing tiny isolated habitat loss with mitigation in a more influential area.
		3. Set mitigation goal as net conservation gain when consistent with agency authorities or at a minimum no net loss.
		4. Encourages landscape focus when planning and recommending mitigation.
		5. Establishes equivalent standards for all forms of compensatory mitigation, to ensure effectiveness and durability.
	6. Response to AFWA’s Comments on draft revisions
		1. Policy should be rooted in existing authority - Added additional discussion in final policy to emphasize. Clarified where authority comes from and where it relates to requirements and recommendations.
		2. Unclear regarding ability to recommend vs require mitigation. Tried to be more explicit in final policy
		3. Policy goal: Net gain/ no net loss. - This is the goal of giving advice, but it must be compatible with the authority of the agency that they are advising.
		4. Collaboration/Coordination is critical: We agree.
		5. Defer to state-prepared plans and respect state plans and processes: We agree that alignment w/ local efforts mutually benefit all. Formally recognizes responsibility of state, local, tribal authorities and seeks common goals
	7. Add citation: 43 CFR Part 24: Achieved.
3. Update from USFWS on ESA Compensatory Mitigation Policy
	1. Umbrella policy guides everything within service.
	2. Where ESA species are involved, we want to ensure impacts from development are mitigated. Encourage private investment. Encourage all to work at the landscape level.
	3. Expands upon 2003 Conservation Banking Guidance and 2008 Recovery Crediting Guidance
	4. Includes:
		1. Conservation banking
		2. In lieu fee programs
		3. Permittee responsible mitigation
		4. Habitat credit exchanges
	5. Intent is to:
		1. Increase consistency, transparency, and regulatory predictability for Federal agencies and applicants.
		2. Encourage collaborative strategic planning at landscape level.
	6. Questions:
		1. Julie – on habitat credit exchange. There was a news release about a directors order on conservation credit system. Voluntary pre-listing crediting policy. Brought policy to closure as the director’s order. Provide incentive to do this prior to listing . Still a policy…not different if it is Order or in Federal Register.
		2. Noreen – Policies finalized under last administration. Could change.
		3. Does ESA policy apply to Greater Sage Grouse (ie not listed species)? No. But same types of recommendations from Umbrella policy will apply to Greater Sage Grouse recommendations.
		4. Was Mitigation Banking in the 1981 policy? The 1981 policy was from before mitigation banking became a practice.
		5. Can you suggest areas where new administration might want to make changes? Heard a lot of comments about the net conservation gain goal. That might be a place where new administration might not want to recommend.
4. USFWS Migratory Bird Program Update
	1. Eagle Rule Revision & Final PEIS. New rules effective Jan. 17. Applicants in the next 6 months have a choice of coming in under 2016 regulations or 2017 regulations.
		1. Sitting down with regions to come up with implementation guidance in April.
		2. Changes:
			1. Eagle Management Units (flyways—used to be based on recovery objections under ESA) – now managing with states through flyways. Scale for Bald Eagles at flyway level except for Alaska and splitting northern and southern flyway. Golden Eagles at flyway level.
			2. Maximum take permit tenure is now up to 30 years with 5 year reviews.
			3. Mandated monitoring and surveying protocols from eagle conservation plan. Requiring independent third party monitoring.
			4. Updated annual take limits for BAEA. Authorized up to 8000 birds to be taken. Anticipating much lower numbers than that. Best Golden Eagle info shows that they are stable, therefore there is no authorized Golden Eagle take unless otherwise compensated.
			5. Compensatory mitigation for Golden Eagles is 1.2:1
			6. Fee changes (see fee schedule)
	2. Golden Eagle Surveys
		1. Breeding population survey over western united states over last few years to look at distribution of eagles in the winter in addition to breeding populations
		2. Populations largely stable.
		3. There are power poles to be retrofitted, roadkill removals, etc. for mitigation opportunities
	3. Managing incidental take under MBTA
		1. Lots of discussion about MBTA and incidental take.
		2. Has been agreement between Canada and US that the treaty covers all take, including incidental
		3. Substantial opportunity to reduce ongoing mortality
		4. Provide legal certainty with a permit.
		5. Secure compensatory mitigation where appropriate
		6. 2 years ago USFWS published a NOI to prepare PEIS on incidental take regulations
		7. PEIS and Draft Rule are pending further review. Weren’t completed in time for administration change.
		8. Did codify in Service’s manual before transition that MBTA regulates incidental
5. Desert Renewable Energy Conservation Plan
	1. Genesis of plan in 2007 in CA. A lot of pressure from federal funding and state policies. To install renewable scale energy infrastructure. Gave us leeway to manage aggressive approach to developing renewable energy. Wanted to balance .
	2. Three components:
		1. LUPA – Land Use Plan Amendment by BLM
		2. General Conservation plan from USFWS
		3. Natural Communities Conservation Plan (state law for landscape scale permitting of endangered species) Typically a 30 year permit. Only way for state to allow take. –Environmental Community and Solar Developers both were opposed to using this type of plan.
	3. Federal-state MOU nov 2008 --- Renewable Energy Action Team: created group to meet monthly to hammer out conservation values, address specific permitting constraints and (Policy Team) second group with 4 principles (BLM, FWS, DFW, Energy Commission) frequently included DOI and BLM headquarters folks.
	4. Sept 2016 BLM ROD was signed.
	5. Development Focus Areas –where habitat impacts would be minimized and development expedited.
	6. Renewable Energy side was fairly straightforward. They knew which areas would be best for renewable energy. Developing conservation envelope was tougher. Transmission expectations are a big portion of Development Focus Areas.
	7. Science was a huge part of shaping the development of the DRECP. State paid for robust and fine scale map in major parts of the dessert to support the plan.
	8. There is no guarantee for developers that compensatory mitigation won’t be needed
	9. Decision Support Tool identifies best areas for mitigation based on proposed projects.
	10. Are projects underway on the Development Focus Areas.
	11. Won’t be doing the Natural Community Conservation Plan for the area. While we have a robust federal land use plan amendment and the state has a compensation framework, so permit streamlining won’t be as planned.
	12. Most of major solar developers still don’t like the plan even with 2 million acres, because they would prefer to have the entire dessert. Provides funding for implementation on state and federal sides.
	13. Local governments have embraced it. They are using it to inform local land use decisions. State energy commission offered grants to incorporate in to their local government plans.
	14. Transmission. Everything about this planning is on DRECP.org
6. Update on Administration Transition
	1. Deputy Acting Secretary of the Interior Jim Cason characterized Interior’s protocol or policy for implementing America First Energy Policy as “All of the Above” but differentiated by saying the previous admin favored Solar and Wind, we are not favoring any energy sources, but we will allow the market to drive other forces.
	2. Sec Zinke said that fulfilling Admin energy policy is one of his high priorities but consistent with meeting other consistent values of public land.
	3. Recommendation for other states and other agencies: engage with BLM early and often in the process.
	4. Energy development industry comes to federal agency first. They don’t invite the state fish and wildlife agency in and if the feds don’t invite them in, they must kick the door in!
	5. BLM Planning 2.0: Senate did endorse House resolution to nullify under Congressional Review Act. President very likely to sign it. Authorizing committees for BLM are talking about passing authorization bill for guidance to BLM on what they want the planning parameters to be. Allows Zinke to take what they like from 2.0 and work with stakeholders to modify the rule.
7. Update from USGS
	1. At the USGS, our mission is to provide unbiased scientific information that is needed for sound natural resource management and conservation decisions, particularly related to lands and species, and priority ecosystems managed by the Department of the Interior. We do not have a resource management or regulatory role. We only provide the science. Virtually all types of energy generation projects will entail interactions with wildlife and wildlife habitats.
	2. The Ecosystems Mission Area’s focus is on providing science and tools to achieve a balance between responsible development of energy projects and wildlife conservation
	3. Our projects develop science that improves our understanding of the risks and impacts to wildlife, fish, and other natural resources from energy development
	4. We measure our success by how our science is used to inform solutions that resource managers and industry can use to avoid conflicts, reduce risks, or recover from disturbance by improving project siting and impact mitigation measures.
	5. Specifically, we are addressing the following threats to wildlife:
		1. Impacts of oil and gas development (conventional and unconventional) on terrestrial and aquatic species
		2. Mortality of bats and raptors at wind facilities
		3. Indirect effects of energy development on sage-grouse, seabirds, grassland birds, ungulates, desert tortoise, and other species of conservation concern
		4. Specifically, we are addressing the following threats to wildlife:
	6. **Advancing Technologies and Approaches to Reduce Bat Fatalities**
		1. Wind energy also poses a significant threat to tree-roosting bats, causing hundreds of thousands of fatalities annually.
		2. To help reduce bat mortality from wind turbines, USGS is developing cost-effective technologies and approaches wind operators can use to reduce bat fatalities at wind turbines.
		3. Our scientists are working on an innovative UV illumination technology to deter bats from approaching wind turbines (although we depend on additional funding to test the efficacy of this technology at a large wind facility)
		4. For the Dept. of Energy, and in collaboration with Bat Conservation International and a wind energy company, we are testing existing technologies and operational strategies to identify the most efficacious and cost-effective management approach to reducing bat fatalities at a minimum cost to wind facility operators.
	7. **Impacts from Utility-Scale Solar on Birds and the Landscape in the Desert Southwest**
		1. The newest energy generation technology making important headway is utility-scale solar.
		2. While still making a relatively small contribution to total energy production in the U.S., it is growing at a fast rate.
		3. USGS is a partner in the Multiagency Avian-Solar Collaborative Working Group tasked with identifying research priorities for the emerging large scale solar industry, and playing a part in its implementation.
		4. We are also developing adapting tools for measuring impacts to species to solar facilities
		5. Tested wildlife monitoring technologies at a solar tower facility
		6. Developed fatality monitoring design specific to utility-scale solar power facilities
		7. Inform energy and land-use planning and assist with delineating conservation and development zones
		8. Assess food habits, reproductive success and prey availability of nesting golden eagles in the Mojave Desert
		9. Synthesize and review rabbit distribution and abundance in the West
		10. Develop a regional prey database for rabbit populations across 17 western states
	8. **U.S. Geological Survey Science for the Wyoming Landscape Conservation Initiative**
		1. The Wyoming Landscape Conservation Initiative (WLCI) is a multi-agency partnership convened to assess, conserve, and/or enhance wildlife habitats in southwestern Wyoming while facilitating responsible energy development. The U.S. Geological Survey conducts the science for the WLCI effort, including developing innovative monitoring approaches and decision-support tools; assessing past-to-future landscape conditions; long-term monitoring of key indicators and effectiveness of habitat improvement projects; and managing data, products, and outreach. The science is designed to address specific WLCI partner management needs and habitats of concern (sagebrush steppe, aspen woodlands, mixed mountain shrublands, riparian, and aquatic). This report highlights accomplishments for the 24 WLCI science projects conducted during 2015. This work includes mapping oil and gas well-pads and and modeling potential future oil and gas build-out scenarios; assessments of sagebrush-inhabiting wildlife, including sage-grouse, to project potential effects of future development scenarios on those species; employing remote sensing technology to monitor long-term changes in sagebrush habitat; time-series analysis of imagery to quantify sagebrush mortality in southwestern Wyoming and to monitor the effectiveness of sage-grouse habitat-enhancing vegetation treatments; assessment of how survey timing affects lek counts; and a number of population assessments aimed at determine effects of land-use and climate change on sage-grouse populations. Combined, the outcomes and products provide a large body of information and decision-support tools for managing sagebrush and sage-grouse in the face of rapid changes.
	9. **A method to assess vegetation recovery following oil and gas well pad abandonment**
		1. USGS developed the Disturbance automated reference toolset (DART), a tool that assesses patterns in ecological recovery from energy development on the Colorado Plateau. The study describes a novel method to assess the recovery of vegetation cover on abandoned and plugged oil and gas well pads in the Southwest, and quantifies patterns in the degree of vegetation recovery on abandoned well pads compared to intact, reference sites. [Study](http://www.sciencedirect.com/science/article/pii/S0048969717300347)
		2. New scientific approach for assessments of land recovery following oil and gas drilling activities
		3. Recovery rates were slow and differed across environmental gradients and land stewardship types
		4. Tool can help managers identify policies or procedures that may lead to improved well pad recovery rates
	10. **Fatality Software**
		1. An area of research where the USGS has made a large contribution is the development of a consistent technique and statistical tool (Evidence of Absence) for estimating bird and fatality at wind facilities.
		2. Our statistical tool was developed in close collaboration with stakeholders and was designed to also serve as a Decision Support tool
		3. it estimates bird and bat fatalities
		4. it also provides appropriate search protocols
		5. Software and user's guide and training
		6. Now used widely by land managers and industry
8. Update from BCI and the Bats and Wind Energy Cooperative
	1. BWEC is an alliance of federal and state agencies, the wind industry, NGOs, and academia with goal of developing solutions to reduce bat fatalities and disseminate research findings.
	2. First got concerned about bats in 2003. Industry has grown much more rapidly. DOE projected that by 2030 we would have 210,000 MW of installed capacity.
	3. Land-based Collaborative – 4 year funding initiative from DOE to bring in AFWA, AWWI, & BCI to increase communication and reduce redundancies.
	4. GenEst – Generalized Fatality Estimator
		1. Develop an accurate & precise fatality estimator. Reduce confusion among the various estimators, foster comparability among studies, accommodate all assumptions.
		2. By August/September there should be a Beta version for feedback/testing
	5. Bat Behavior & Wind Energy
		1. Thermal video observations -understand how bats behave around wind turbines, updating processing software to increase efficiency
		2. Short & Long Term movement patterns – bat acoustic monitoring portal, GPS transmitters
	6. Operational Minimization
		1. If we prevent the blades from spinning at low wind speeds, we can cut ~50% of fatalities. Industry not terribly interested in incorporating (expensive).
		2. Wind Power Siting Regulations & Wildlife Guidelines in the US (AFWA 2007) –what all the states are doing. Seems like it is a good idea to update that. ABC and BCI are working on this together.
	7. Hoary Bat paper – Migratory bat. Highest percentage of fatalities in US and Canada. Paper projects a 90% decline in population by 2050.
		1. Can’t know the impact of existing minimization strategies, but this is a call to action.
	8. Ultrasonic Acoustic Deterrents (UADs) in reducing bat fatalities at wind energy facilities
		1. installing newest model for testing this year.