



Energy and Wildlife Policy Committee Report

Chair: Paul Johansen

Vice-chair: Keith Sexson

Meeting on September 11, 2018

Association of Fish and Wildlife Agencies Annual Meeting

Tampa, FL

Committee Charge

The Energy and Wildlife Policy Committee is focused on energy development and generation in North America and its impacts on fish and wildlife resources and their landscape habitats at the state, province, territory, region and international levels.

Participants

Paul Johansen (WVDNR), Keith Sexson (KWPT), Mona Khalil (USGS), Jennifer Goff (FL FWC), Bob Sargent (GA DNR), Laura Zebehazy (TPWD), Pat Dorsey (CPW), Mylea Bayless (BCI), Clay Crowder (AZGFD), Holly Goyert (ABC), Ashley List (AKDFG), Christy Plummer (TRCP), Greg Wathen (TN WRA), Christian Newman (EPRI), Tom Kirschenmann (SDGFP), Jesse Beckers (NDNRT), Kurt Dyroff (NWTF), Taber Allison (AWWI), Abby Arnold (AWWI), Karen Jenni (USGS), Sarah Quinn (NPS), Mike Houts (WAFWA), Sean Saville (AFWA), Dan Kennedy (MIDNR), Steve Hanser (USGS), Brian Reichert (USGS), Mona Khalil (USGS), Mark Humpert (AFWA)

Meeting convened at 1:11pm.

Call to Order and Introductions

Paul Johansen-Welcomed participants and asked them to introduce themselves. Keith Sexton will be stepping down as vice chair after this meeting since he will be retiring. Keith has been an active member of this committee and AFWA.

Approval of Minutes from the March 2018 Meeting

Paul Johansen-Asked if there are additions to the agenda and asked for a motion to approve the meeting notes from the March 2018 meeting. The motion was approved.

Update on the Committee's National Conservation Need

Mark Humpert-Reported that three Letters of Intent (LOI) were submitted under the committee's National Conservation Need. No LOI's were invited to submit full proposals.

State Roundtable

Florida (Jennifer Goff)-There has been a big push for solar, 10 to 20 thousand acres. This is a new issue so the agency started a series of studies and contributed funding and staff to look at avian mortality and post construction impacts to gopher tortoises. This is an important issue in Florida.

Tennessee (Greg Wathen)-We are working on a regional southeast adaptation strategy to identify future energy needs and potential impacts. Some states have a lot of solar development potential in the southeast. The Southeast Conservation Adaptation Strategy is looking out to the year 2060. The Southeast is the fastest growing region in the US and there is a need to determine the sources of power in the future.

Texas (Laura Zebehazy)-We have not had a lot of luck engaging with the energy industry in the past. The American Exploration Council reached out to us and we gave them a presentation about the Recovering America's Wildlife Act. It was a great meeting and resulted in a field trip two weeks ago to see production in the Permian Basin. The meeting ended with agreement to do quarterly or semi-annual meeting so we can engage before there is a problem. Currently we don't engage until there is a spill or an endangered species issue.

Georgia (Bob Sargent)-We are keeping an eye on offshore and inshore wind. Nuclear power is not a big issue. Our agency mainly focuses on transmission lines. Solar is the big issue.

Colorado (Pat Dorsey)-We are negotiating a new MOU with BLM to identify corridors and mitigation. This has changed how we work with BLM.

Oregon (Davia Palmeri)-Solar is booming and lots of wind permits have not been made. If a project is under 12 acres, jurisdiction goes to the county. Above that level the state energy department has jurisdiction. We are seeing small project grouping. The Department of Energy is considering making exceptions for side-by-side projects. We are considering cumulative effects. We are looking for language that has worked in other states.

Arizona (Clay Crowder)-We have population clusters and are seeing an increase in transmission sites to California. Arizona great solar potential. We have developed a relationship with the transmission industry. We have no regulation of solar but have identified conservation opportunities. There is a trend for increasing transmission.

South Dakota (Tom Kirschenmann)-Wind power is a consideration in the eastern part of the state with prairie potholes and prairies. We have been involved with several projects with the state utility commission. We provide recommendations but are not used. We have been tasked with looking into creating a mitigation policy. We will finalize next month and present to the public utilities commission and incorporate into the permitting process.

West Virginia (Paul Johansen)-Interstate gas transmission lines are going through the state. We've come up with an innovative way to encourage voluntary mitigation. It has been a very collaborative effort. There has been some public opposition, but it has been successful to date in bringing in \$27M for core forest habitat. We entered into arrangement with the Conservation Fund to hold money. Most of the funds will be spent on land protection and management to address impacts to core forest habitat. This is new and exciting.

National Park Service (Sarah Quinn)-We have a vacancy for an energy specialist to work on mitigation.

Pau Johansen-I'm impressed by the range of issues the states are dealing with. I find it helpful to hear from folks.

Recovering America's Wildlife Act & Alliance for America's Fish and Wildlife (RAWA)

Sean Saville-The dedicated funding bill in the US House of Representatives has 90 co-sponsors. We are seeking bipartisan support. We will be working with the House Natural Resources Committee. A Senate bill was introduced in July by Senators Risch, Manchin, Alexander and Heitkamp. Senators Hoeven and Peters have added their names as co-sponsors. We are working with staff from relevant committees. The bills would redirect \$1.3 billion in funding from oil and gas extraction to implement State Wildlife Action Plans. We have a great coalition with legislative capacity. Supportive resolutions have been passed in 27 states. We are seeking letters of support from stakeholders and partners. The energy sector has been an ally. The Restore Our Parks bill will get a hearing on Thursday. We are tracking it because it is being fast tracked and is a top priority of Secretary Zinke. To protect habitats you also need RAWA, people go to parks to see wildlife, so there is a connection. We are keeping close eyes on this. We've received good media coverage through opinion pieces and articles. Texas has been doing a great job with media. We appreciate the states getting information out to the media. We want to leverage opinion pieces in the next several weeks. If you know energy partners who are willing to work on this, let me know. USA TODAY digital content was used on social media and highlighted a species of greatest conservation need in each state. Ducks Unlimited produced a 15 second video. We have had requests for downloadable resources. Next steps are to advance legislation before the mid-term elections and advocate for permanent and dedicated funding. We will continue to get high visibility pieces out. The State of the Birds Report from Cornell and NABCI will highlight funding. Our website has an action portal. I am happy to travel and speak at a conferences.

Davia Palmeri-Are energy companies helping?

Sean Saville-Shell, Hess, American Petroleum Institute, renewable and smaller companies are helping but we could use more.

Sara Quinn-Have you had to shift positions because of changes to Administrative policies like mitigation?

Sean Saville-This is a good message, prevention will eliminate the need for a regulatory approach.

Mike Houts-At WAFWA there has been a decline in voluntary activities because the regulatory stick may be disappearing.

Curt Dyroff-What are the differences between the House and Senate bills?

Sean Saville-The Senate bill does not include dedicated funding. The House bill is the gold standard.

Sara Quinn-Have you had to deal with how this could increase energy development or mitigation.

Sean Saville-Market forces influence development. We are not advocating for increased development. These bills are not tied to new leasing.

Update on USGS Energy Development and Fish and Wildlife

Mona Khahil-I have distributed an annual report on USGS energy and wildlife research. USGS is the science agency for the Department of Interior to deliver data to partners. There are forty cooperative research units and 16 science centers. My job is to pull together science on energy. The report includes a map of research study locations. We have developed a wind energy interactive map that shows all the wind turbines in the country. There are currently 57,000 turbines on the landscape. Raptor impacts are an area of concern. We are studying condor behavior, we learned the raptors stay away from rugged terrain. We may need to change eagle survey methodology. We are tracking seabirds offshore and are developing devices for diving ducks to track movements with more precision. We developed a new whooping crane migration corridor map. North American Bat and the US Wind Turbine database let us see where there may be data that can be shared. Bats are an important issue and we are trying to determine why bats approach turbines. The National Renewable Energy Lab (NREL) is testing UV light on turbines. We are trying to determine if bat movements can be detected ahead of time. Can NEXRAD be an alert system? The generalized mortality estimator will help us make better estimates of bat mortality. The SMART energy development tool is in the works. On the east coast we are looking at Marcellus shale development and stream vulnerability. We have been doing Louisiana waterthrush research in West Virginia and hydroelectric dam management. One hundred thirty research projects are included in the report.

Paul Johansen-Who will be conducting Genex training and who is the audience?

Mona Khahil-The details of the training are being worked out. We will hold a training session at the wind and wildlife research meeting.

Tabor Allison-We are planning training for a wide variety of audiences including states, federal agencies and consultants.

Paul Johansen-If you could share information with Mark then we can send to the states.

Davia Palmeri-Where is the wind energy map and how often is it updated?

Mona Khahil-You can find it by searching "wind energy database". The database will be updated quarterly.

Abby Arnold-Do you have a list of projects?

Mona Khahil-We will have a list after funding decisions are made. If you click on a wind turbine you can see information about the turbine.

Bob Sargent-There is not much in the report about solar.

Mona Khahil-We are doing research on solar. We are examining bird flight patterns around solar. We are also examining the lake effect, does a solar field look like lakes to a bird. This might lead to technology that makes the panels less attractive. NREL is doing work on pollinators too. We are working in Minnesota to make wind more pollinator friendly.

Abby Arnold-The National Wildlife Federation is doing a project to see if we can have habitat under solar arrays.

Jennifer Goff-Florida is looking at that too, but we don't want to attract.

AWWI 10-Year Anniversary, AWWIC Database and Wind Wildlife Research

Abby Arnold-AFWA is on the Board of AWWI and Paul currently serves as the representative. Our mission is to promote development of wind while protecting wildlife. The program includes assessing risk, developing solutions and enabling application. We have a list of published research. This is a big year for us, our 10-year anniversary. Our website has a report that includes a summary of what we know about wind and wildlife. We do targeted webinars and workshops and am piloting a work shop in New Mexico Oct 2-3. We are working with 29 states and maintain an email list. We will partner with anyone with ideas and resources. We are hosting a wind research meeting, and everyone is welcome to attend. We will have a celebratory event at the research meeting. The biggest question in wind is data-what do we know? Dr. James Walker had a vision to create a database. We want to know the states' needs.

Tabor Allison-The American Wind Wildlife Information Center (AWWIC) is a pilot project. If we provide a place for confidential data, can we analyze data to improve our ability to predict risk? We are focused on post mortality using private data. The data are anonymized, and we have associated data and details for data. Data is being added to the database all the time. One of the big questions is how representative are the data. Public data is regionally skewed. Data in some jurisdictions is public and data in other areas is not. The estimate of bat fatality from data in our database was a medium of 2.7 bats per MW per year with a range of 0-50. Fatalities are highest in the northeast and lowest in the Pacific region. We compared bat fatalities and bird fatalities. There is not as much variation for birds across regions compared to bats. There are 190 studies of mortality on bats. Hoary, silver-haired and eastern red bats make up the majority of bat mortality. We collect data by ecoregion. The tri-colored bat is warranted for listing and there may be differences in risk or exposure by region. Major takeaways are do we have enough data in the database and representation matters? The standardized estimator will provide more accurate fatality estimates. We will rerun the data in the database using the new estimator. Next steps are to do a bat technical report and outreach and produce a whitepaper on bats.

Christy Plummer-Are you getting all the data from companies?

Tabor Allison-We have agreements and they provide all data past and future.

Mylea Bayless-You did a good job getting the data for the database. It is not perfect but is so much better than where we were. This will make companies more comfortable with secondary sharing. It will create a better environment.

Tabor Allison-This is evolutionary. We needed to start by getting companies to share data.

Sarah Quinn-Are you seeing better standards for data and monitoring?

Tabor Allison-Yes, we encourage states to do new analysis with their own data.

Davia Palmeri-Will you be able to break this down by turbine height or turbine age?

Paul Johansen-Congratulations to AWWI on your 10-year anniversary.

Enhancing Working Agricultural Lands and Wildlife Habitat near Energy Sites in North Dakota

Jesse Beckers-The Badlands Advisory Group was formed in August 2016 after a stakeholder assessment detailing perceptions of oil development. We set goals to improve grazing lands. We submitted a grant request from the outdoor heritage fund for \$2M. In the State Wildlife Action Plan over one hundred species of greatest conservation need were identified. Landscape restoration through burning, infrastructure and restoration activities were identified. We did landscape reclamation of unbonded sites to convert reclaimed areas into productive grasslands. We created nature sites in Watford City. We talk a lot about science and research and wanted to show the importance of finding common ground.

Paul Johansen-This is a great example of working with partners.

Bat and Wind Energy Cooperative Research Priorities

Mylea Bayless-The Bat Wind Energy Cooperative (BWEC) was formed in 2003 as a collection of experts to address emerging threats to bats. We focused on how to help prevent mortality to bats from wind. We held our 5th science meeting in June to select research priorities. Twenty committee members attended. A summary of the priorities is available at www.batswind.org. In 2007, AFWA and others distributed the wind power siting guidelines. We are in the process of collecting preliminary data that we will send back to state representatives for fact checking. The Department of Energy announced \$6M in grants will be available for bats and wind energy research on curtailment, deterrents and offshore wind monitoring. We participate in the in the National Wind Coordinating Collaborative. BWEC celebrates 15 years next year.

Report from the US Fish and Wildlife Service

Gary Frazer-There has been lots of change with regulation procedures. FAST41, is a new federal law that set up an infrastructure office to coordinate agency review. Mechanisms are in place to keep things on track. There is a federal permitting dashboard. The FWS is involved in 11 of 19 projects that meet certain standards for size. Few new projects appear to be coming in, possibly because benefits are not being seen by industry. Another Executive Order (E.O. 13807) was designed to streamline environmental review. It directed 12 departments to enter into an MOU. Agencies nominate projects and there are biweekly calls and executive meetings to monitor progress and identify/resolve issues. Environmental review is focused on things that matter. This is known as "one federal decision process". In the Department of Interior, a Secretarial order on NEPA is intended to streamline environmental impact statements and set a timeline of one year to complete. Interior bureaus are struggling with implementation. Affected states are encouraged to learn and work within the established schedules if you want to engage. You must engage quickly. At the end of July, the FWS withdrew revised mitigation policies issued in December 2016. There were widespread concerns with the mitigation goal of net conservation benefit. The current Administration's perception is that mitigation can be an impediment to infrastructure development. The Department of Interior has decided to withdraw the policy rather than revise it. The stepdown policy applicable to mitigation under the Endangered Species Act was also withdrawn. With the withdrawal of the 2006 revised mitigation policies, the Service's 1981 mitigation policy and 2001 ESA conservation banking policies are in effect. We continue to operate under these

longstanding mitigation policies, although they are less current and comprehensive , and states shouldn't over-read into the withdrawal of policies.

Davia Palmeri-Can you give an update on the migratory bird treaty act?

Gary Frazer- The M-opinion established that the FWS has no authority under the Migratory Bird Treaty Act to regulate incidental take of migratory birds. This is being challenged by private organizations and some states. A separate guidance memo clarified to law enforcement and other Service employees as to what activities that may take migratory birds this legal opinion applies to.

Bob Sargent-The Bird Conservation Committee discussed doing an evaluation of state regulations. A handful of states are evaluating if they can beef up their state regulations to compensate for the federal change.

Gary Frazer-Some states did not realize their Attorney Generals were part of the lawsuit challenging the MBTA M-opinion. The FWS will help make determinations but it is a business decision if take is likely and if they want to get a permit. The memo established a standard and the role of the FWS. The FWS only advises if there is potential for take and the standard for how likely take is.

Laura Zebehazy-Is there any chance that proposed ESA changes will be extended?

Gary Frazer-The Department has expressed a firm commitment to finalize these ESA rule revisions without delay.

Sara Quinn-The states should continue to develop relationships with infrastructure folks and engage early during the pre-application phase.

Jennifer Goff-How do you engage in the pre-application process? WGA has a forum.

Paul Johansen-We need to watch this very carefully.

Sara Quinn-Some states have more robust processes, some states not so much.

Jennifer Goff-I want to know what we need to do as a state agency.

Sara Quinn-If I get contacted I don't wait for the NOI. I go to the first meeting.

Gary Fraser-We are working in uncharted waters.

Sara Quinn-The Fast Act is in the surface transportation bill. It mostly addresses surface transportation.

Georgia Partnerships: Working to Avoid Impacts to At-risk Species during Solar Development

Bob Sargent-Concerns about the impacts on gopher tortoise from solar panels are increasing. Growth of solar energy is exploding in Georgia from 3,000 megawatts to 2.1 million megawatts in five years. The cost of solar is dropping but the percentage of energy generated by solar is still relatively small. Coal use is dropping, and natural gas is increasing. There is more development in the southern part of the state where solar potential is higher. Gopher tortoise range is in the southern part of the state. Habitats used by gopher tortoise are most vulnerable from solar power. Keystone species were petitioned for listing in 2006 but listing was precluded. A final decision will be made by 2022. A candidate conservation agreement is in place for gopher tortoises. The purpose is to take a proactive collective approach to stop

the decline across the range. Georgia is trying to establish minimum viable populations. A population must have a minimum of 200 animals. Conservation options include redesign, mitigation and translocation. The agency offers best practices, but most companies lay down gravel. They do expensive digging to remove tortoises and don't translocate. They can move to another site, often on a wildlife management area with early successional habitat. Tortoises have a strong homing instinct and don't stay on site, so fencing is needed. The lack of regulatory guidance makes it easier to build on the landscape instead of roof tops. Companies want to sell to Georgia Power or use best practices and environmental review. Georgia DNR gets to review. If selling energy out of state, there is no RFP or EA so there is no Georgia DNR input. There is less hassle if a company develops in the countryside. The agency is trying build a stronger partnership with the solar energy. Other partnerships include the Gopher Tortoise Council which is proposing to include the gopher tortoise in a CCA. There has been a success story. The largest solar project in the state reduced their footprint and minimized impacts to wetlands and high value wildlife habitat. The survey showed no gopher tortoise burrows.

Dan Kennedy-Who does the survey and are the best management practices on a website.

Bob Sargent-Yes, they are on a website.

Pat Dorsey-Seems odd that there is a lack of regulation of out of state projects. These can have great impacts to wildlife.

Sara Goff-It's important to consider all operation and maintenance activities.

Jennifer Quinn-We are working with utilities to sign agreements to do monitoring

Committee Work Plan

Paul Johansen-Are there any tasks/activities that the committee should consider taking on in the future?

Steve Holmer-Have you considered doing an analysis of impacts from different types of renewable energy. Distributed solar is increasing and seems less impactful.

Sara Goff-California may be a source of information on impacts of solar on wildlife because they evaluate solar projects.

Christian Newman-I'm looking for ideas to pitch to energy companies to reduce impacts to wildlife.

Paul Johansen-This has been an Interesting discussion. I appreciate the speakers and the great questions. I would like to recognize Keith Sexton again for his work.

Meeting was adjourned.

Action Items

There were no action items.

Progress and Opportunities

There were updates on important topics of interest to the committee

Threats and Emerging Issues Identified

None identified.

New Opportunities Identified

None

Submitted by: Paul Johansen