

**Agricultural Watershed Institute ◊ Environmental and Energy Study Institute
Environmental Law & Policy Center ◊ Green Lands Blue Waters
Izaak Walton League of America ◊ National Wildlife Federation
Natural Resources Defense Council ◊ North Carolina Wildlife Federation
Partnership for Policy Integrity ◊ Roeslein Alternative Energy ◊ The Wildlife Society**

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The undersigned conservation, wildlife, and environmental groups request an increased emphasis on wildlife in your consideration of the sustainability of bioenergy. We are concerned that the Department of Energy does not give wildlife sufficient recognition, as was made evident in the 2017 DOE Bioenergy Technologies Office (BETO) project peer review which contains little mention of wildlife. We would like to emphasize to BETO the importance of wildlife when evaluating the potential implications of biomass projects.

The nation's wildlife populations currently face many challenges. Expanded biomass utilization must include thought and planning to avoid increased pressure on native species and sensitive habitats. We wish to draw your attention to specific considerations regarding wildlife in the report:

1. The description of the Crosscutting Sustainability program is: "quantify effects and enhance the benefits of advanced bioenergy with regard to water, air, soil, and quality of life" (p. 4). We recognize the impact the Sustainability program has had with these guiding values, particularly using landscape design to create multifunctional landscapes that seek to benefit biomass producers, wildlife, water quality, and other critical ecosystem services. However, wildlife and native ecosystem aspects of sustainability appear to be otherwise absent, unless the intent is to capture these factors in "quality of life". If the latter is the case, the unspecific term diminishes the implications that bioenergy design has on species and habitat. Wildlife should be explicitly included within the scope of this work. In addition to improving quality of life, fish and wildlife and their native habitats are integral to the \$887 billion per year outdoor recreational economy that supports 7.6 million jobs and numerous families in this industry.¹
2. We recognize that BETO has commissioned a study of biodiversity and bioenergy in the project "Forecasting Water Quality and Biodiversity". The project description references species diversity as a metric. Although this brief description likely does not capture the breadth of the project, general diversity should not alone be the metric for evaluating the interaction of bioenergy and wildlife. General diversity undervalues the importance of native, and particularly, declining species. Bioenergy projects can change habitat conditions, inviting in habitat generalists at the expense of habitat specialists that are native to that ecosystem. These specialists are often the species that become rare and endangered. Destruction, modification, or curtailment of habitat as well as loss of genetic diversity are two of the main drivers in threatened and endangered species listings. The project needs to explicitly incorporate native

¹ Outdoor Industry Association. 2017. The Outdoor Recreation Economy. Boulder, CO. USA. 20 pp.

species sustainability as an indicator of the bioenergy relationship with wildlife so as to avoid potentially costly mitigation measures at a later date.

3. Neither the U.S. Fish and Wildlife Service (FWS) or state fish and wildlife agencies are described as collaborators in the report. FWS is a logical stakeholder for BETO to coordinate with since biomass production is inextricably linked with sustainability of federal trust species. State fish and wildlife agencies have responsibility for the management and viability of fish and wildlife resources (and the habitats on which they depend) within the states and, therefore, are logical collaborators as well. The robust outdoor recreation economy depends, in significant part, on the complementary efforts of FWS and state fish and wildlife agencies.
4. In the list of reviewers and their affiliations, there is no indication of wildlife expertise.

We encourage BETO to incorporate wildlife more broadly into its agenda. This general omission of wildlife concerns is not exclusive to the Project Peer Review Report—it also is characteristic of BETO’s Multi-Year Program Plan and Strategic Plan. The office’s role in commercializing bioenergy must stand on the foundation of sustainability that includes native ecosystems and associated wildlife. It is absolutely critical that, as the government office dedicated to commercializing affordable and sustainable bioenergy, BETO be at the forefront of addressing the intersection of bioenergy and wildlife. By accounting for native habitat and other ecosystem services, BETO can catalyze collaborators like FWS, USDA, and EPA to help the bioenergy industry limit environmental risks associated with biomass production.

Like the Peer Review Report, the recent Funding Opportunity Announcement on Affordable and Sustainable Energy Crops continues this trend. The project description pays little attention to wildlife and native species within the sustainability categories.

Production of energy crops relies heavily on land use decisions. Such production can contribute to direct and indirect land use changes on lands that currently contribute important habitat sustainability for native and at-risk wildlife. Thoughtful landscape and project design is key to ameliorating bioenergy interactions with wildlife, native habitat, and ecosystem services.

Sincerely,

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