

*The following questions were identified in a focus group discussion on April 8, 2016 as overarching management questions for CWG Agencies. These questions have been grouped into the following 7 management categories. There are 14 questions in total.*

**1. Landscape Considerations**

What are the larger-scale avian movement patterns in the region (including seasonal movements and factors that influence avian movements such as the presence of stopover sites in the landscape)?

What are the landscape-level cumulative impacts on regional bird populations or on bird populations migrating through landscapes targeted for solar development?

What is the anticipated solar energy build-out for the foreseeable future? (e.g., project size, location, technology type)

**2. Methods to Evaluate Avian Risk and Impacts**

What are the best methods for monitoring and evaluating avian mortality, specific to each type of solar energy technology?

What are the best methods for identifying the bird species that would be most vulnerable during all phases of solar development (pre-construction, construction, and post-construction)?

**3. Sources of Mortality and Injury**

What are the sources of avian mortality and injury at solar facilities (i.e., project features), and what factors (e.g., location, habitat characteristics, time of year, species) affect frequency of those mortalities and injuries?

**4. Avian Behavior (Attraction/Avoidance)**

How do solar facilities affect landscape level movements of birds (i.e., migration and dispersal movements), and what factors (e.g., location, habitat characteristics, time of year, species) affect these movements?

How do solar facilities affect local-scale movements/behaviors of birds (i.e., foraging and breeding behaviors), and what factors affect these behaviors?

**5. Impacts to Habitat and Other Wildlife That Might Affect Birds**

What are the impacts of solar development to other wildlife (such as predators or prey) and habitat that might affect birds?

## **6. Taxonomic and Guild-Specific Impacts**

How do solar developments affect different bird taxa or guilds?

What are the population effects from solar developments to individual bird species, particularly those of conservation concern?

Which population or species-specific impacts are of greatest conservation concern?

## **7. Minimization, Mitigation, and Adaptive Management**

What are the most effective minimization and mitigation methods to reduce or eliminate avian mortality? (e.g., project siting, technology engineering and project design to reduce attractiveness of facilities to birds, construction timing, operational parameters, deterrents, or offset)

What off-site mitigation is most effective for off-setting mortalities for affected populations/species?