

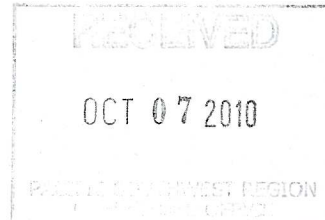


DESERT BIGHORN COUNCIL

Established to promote the advancement of knowledge concerning the Desert Bighorn Sheep and the long-range welfare of these animals.

September 20, 2010

Marie Strassburger
Division Chief, Migratory Birds
Pacific Southwest Region
911 NE 11th Ave.
Portland, OR 97232-4181



Dear Ms. Strassburger:

The Desert Bighorn Council was formed in 1957 to provide for the exchange of information on the needs and management of bighorn sheep. Council members are actively engaged in the management, protection, or scientific study of bighorn sheep.

The Council is aware that renewable energy developers are proposing large wind, solar, and energy transmission projects on private and public lands throughout the western United States. Developers must complete Environmental Assessments for their projects, which includes determining potential impacts on golden eagles, and other migratory birds. This has created a huge demand for the completion of eagle nest surveys. These surveys typically occur during the Spring - which coincides with the bighorn sheep lambing season. Because of the number of surveys needed, and the large areas to be surveyed, helicopter surveys are likely to become the preferred eagle nest survey method.

Bighorn sheep populations in most states enjoy various levels of protection. In California, for example, all desert bighorn sheep are either fully protected, or state listed, except for the seven hunted populations. Even the hunted populations are protected (Title 14 California Code of Regulations) from harassment, including low flying helicopters during the lambing season. In addition, two bighorn sheep populations are federally listed as endangered. The California Department of Fish and Game does not conduct bighorn sheep helicopter surveys during the lambing period.

We have recently reviewed the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (Interim Guidance Protocols). We found this to be a very nice piece of work regarding eagles. It is well supported in its Literature Citations with nearly 50 references - however, only one of which discusses potential impacts of the proposed techniques on bighorn sheep, and that one was published in 1990.

Since that time, numerous papers discussing the impacts of helicopter surveys on mountain ungulates have been published. A few of these include:

Stockwell, C, G. Bateman, and J. Berger. 1991. Conflicts in National Parks: A case study of helicopters and bighorn sheep time budgets in the Grand Canyon. *Biological Conservation* 56: 317-328.

Bleich, V., T. Bowyer, A. Pauli, M. Nicholson, and R. Anthes. 1994. Mountain sheep and helicopter surveys: Ramifications for the Conservation of Large Mammals. *Biological Conservation* 76: 1-7.

Cote, S. 1996. Mountain goat response to helicopter disturbance. *Wildlife Society Bulletin* 24:681-685.

Frid, A. 2003. Dall's sheep responses to overflights by helicopter and fixed-wing aircraft. *Biological Conservation* 110:387-399.

Goldshtein, M., A. Poe, E. Cooper, D. Youkey, B. Brown, and T. McDonald. 2005. Mountain goat response to helicopter overflights in Alaska. *Wildlife Society Bulletin* 33:688-699.

In 2004, the Northern Wild Sheep and Goat Council (NWSGC) published a Position Statement on *Helicopter-Supported Recreation and Mountain Goats*. This document provides multiple management recommendations and an extensive bibliography on this subject. Recommendations address issues such as exclusion zones/avoidance; distance from occupied habitats; timing of activities; and helicopter approach vectors.

The helicopter survey methods identified in the Interim Guidance Protocols are described in sections VIIa and VIIb. We feel that the survey protocol should be modified to include those applicable recommendations identified in the NWSGC Position Statement.

In addition, we feel that the protocols should include modifications specific to protecting bighorn sheep ewes and lambs in lambing habitat. In some cases the location of lambing habitat is not currently known. Bighorn sheep ewes may lamb from January through June, depending on local climatic conditions. Helicopter eagle nest surveys, as presently proposed, put ewes and lambs at risk throughout their range.

The present proposed eagle survey protocol calls for very low flight speeds, very close approaches, and hovering nearby the nests. We believe that this will prove detrimental to bighorn sheep. Likely impacts from conducting eagle surveys as proposed include disruption of the bighorn sheep lambing process and even the actual loss (or "take") of bighorn sheep lambs.

We look forward to working closely with the USFWS to develop appropriate methodologies to ensure the conservation of ALL species of wildlife.

Sincerely,



Raymond Lee
Chairman

Desert Bighorn Council
808 Aspen Drive, Cody, Wyoming, 82414