



MARINE MAMMAL COMMISSION

18 December 2018

Dr. Mary Cogliano, Chief
Branch of Permits, MS: IA
Division of Management Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, Virginia 22041-3803

Re: Permit Application No. 690038
(U.S. Geological Survey)

Dear Dr. Cogliano:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). U.S. Geological Survey (USGS) is seeking to renew its permit to conduct research on polar bears in Alaska during a five-year period—USGS's previous permit authorized similar activities.

USGS proposes to conduct research on polar bears in the southern Beaufort Sea from spring through fall of each year. Researchers would harass, observe, sedate, handle/restrain, collect morphometrics, administer doubly-labeled water, mark, sample, and/or instrument numerous polar bears of both sexes and various age classes (see the take table and application). USGS requests up to four polar bear mortalities¹ per year. Researchers would use various measures to minimize impacts on polar bears and also would be required to abide by the U.S. Fish and Wildlife Service's (FWS) standard permit conditions. USGS's Institutional Animal Care and Use Committee has reviewed and approved the revised research protocols.

General issues

USGS originally submitted its application to FWS in January 2018, and it was provided to the Commission for review in July. At that time, the Commission noted that USGS did not use the most current version of the application instructions that were revised in 2017². The Commission also noted various deficiencies in the information contained in the application and provided specific questions to FWS that USGS needed to address³. FWS published a request for comments on USGS's permit application in the *Federal Register* on 11 December 2018, at which point the

¹ Either unintentional or intentional via euthanasia for humaneness purposes.

² The 2014 application instructions were similar to those of 2017, except they included less clearly stipulated requirements.

³ In addition to questions that FWS had intended to provide.

Commission requested responses to its questions. Although USGS responded to the questions that FWS had provided⁴, the majority of the questions raised by the Commission were not sent to USGS.

Some of the basic information, as required in FWS's 2017 application instructions, that is still lacking includes failing to—

- adequately specify the objectives of the research⁵;
- explain how its proposed research activities meet the *bona fide* scientific research requirement under section 104(c)(3)(A) of the MMPA⁶;
- specify both in general and in a consistent manner⁷ the methods for each procedure and activity it plans to conduct, including surveys, den monitoring, and any and all sample collection, including the use of hair snares and administering doubly-labeled water and collecting serial blood samples⁸;
- specify the sources of the various samples⁹;
- specify *all* drug types and dosages to be used including topical¹⁰, local, and general anesthetics and reversals, any emergency drugs, and doubly-labeled water¹¹;
- specify whether researchers would or would not harass non-target polar bears during the various proposed activities¹²; and
- justify why four mortalities per year are necessary¹³, specify whether a necropsy would be performed, and specify the fate of any dependent cub¹⁴ if a female dies or is euthanized during the proposed activities¹⁵.

⁴ USGS also did not submit a revised application.

⁵ The inclusion of a single sentence stipulating that USGS's objectives are "to characterize factors that influence changes in polar bear survival and abundance, foraging behavior and energetics, health, habitat use, and responses to environmental change and industrial activities" is sorely insufficient. The 2017 application instructions (Item 18) require that the applicant attach a copy of a formal research proposal or include a detailed description of the proposed project that includes objectives and hypotheses, background information discussing relevant published literature (with citations), how the project is different or builds upon past research, power analysis and sample size justification, disposition of specimen material or animals, etc.

⁶ Item 17 in the 2017 application instructions.

⁷ Ensure consistency in the information provided within the various sections of the application and the IACUC protocols that have been provided in some instances in lieu of answers to the relevant questions.

⁸ Item 20a, f, and g in the 2017 application instructions.

⁹ This includes whether the samples originate (1) from live or dead bears, (2) from live bears that were collected during permitted research on free-ranging or captive bears or husbandry activities on captive bears, or (3) from dead bears that were collected from animals that died during permitted research, subsistence hunting activities, in a captive setting (research or public display facilities), or in the wild. See Items 12, 13, and 29 in the 2017 application instructions.

¹⁰ Although topical anesthetics are discussed in the application and/or IACUC protocols, it appears the anesthetics that would be used are actually local anesthetics.

¹¹ Item 20a in the 2017 application instructions.

¹² Items 7 and 21 in the 2017 application instructions.

¹³ Specify whether this is based on numbers of mortalities during previous years or whether new procedures/drugs could cause an increase in unintentional mortalities. The combined taking of polar bears for subsistence hunting purposes by the United States and Canada exceeds the potential biological removal of 14 bears based on the 2017 draft stock assessment report for the southern Beaufort Sea stock.

¹⁴ Specify whether cubs-of-the-year (COYs) could be euthanized or brought into captivity and whether older (1- and 2-year old) cubs would be euthanized, brought into captivity, or released into the wild.

¹⁵ Items 26, 27, and 28 in the 2017 application instructions.

In addition, FWS requested that USGS provide a take table for the various activities. That table is lacking information on marking live-captured animals and whether COYs could be harassed during den surveys. If COYs could be harassed during the den surveys, then the requested number of takes needs to be increased accordingly.

The Commission initially raised all these issues several months ago, but FWS chose not to seek additional information from USGS to address them. In two instances, FWS provided USGS with some of the Commission's questions, but they were not sufficiently addressed. The shortcomings of the application and the absence of critical information present difficulties to the Commission and any other reviewer to ascertain whether USGS's proposed activities would meet the MMPA's *bona fide* requirement, how the various activities would be conducted, and whether the requested mortalities are necessary and reasonable and if so, whether additional mitigation measures should be implemented to reduce the likelihood that up to four polar bears could be killed each year. Therefore, the Commission recommends that FWS return the application to USGS with instructions to address the deficiencies stipulated herein and to submit a revised application. Upon submission of a revised application that satisfies the requirements of FWS's 2017 permit application instructions, section 104(c)(3) of the MMPA, and applicable implementing regulations, FWS should expeditiously provide the revised application to the Commission and any member of the public who requested the original application and provide an additional opportunity for comment and review. If FWS decides to process the application in its present state, the Commission recommends that the application be denied as not meeting the applicable requirements.

Application instructions availability and application completeness

FWS's 2014 application instructions expired in Spring 2014 and its revised application instructions were finalized in August 2017, yet those revised application instructions were just made available on FWS's website within the past two weeks. Since the revised application instructions were not readily available, many applicants (including USGS) have had to use the old application instructions by default. FWS provided a copy of the 2017 application instructions to USGS when it sent its and some of the Commission's questions regarding the application to USGS in July. However, FWS did not provide USGS¹⁶ with additional guidance on why the instructions were sent—they appear to have been sent merely for informational purposes. FWS should have instructed USGS to amend its application to conform to the 2017 instructions and to address all of the questions that were provided.

It is imperative that the application that underpins a research permit contain accurate, complete, and consistent information. Furthermore, condition 11.A., included in each FWS research permit, requires that "all activities authorized herein must be carried out in accord [sic] with and for the purposes described in the application". There are inconsistencies and inaccuracies within USGS's application and between the application and responses to the questions from FWS. In addition, some of the activities that USGS originally proposed in its application of January 2018 no longer would be conducted¹⁷. When a permit is issued on the basis of an application that contains inaccurate information, the permit holder risks unintentionally violating its permit. When an application contains inconsistent information, a permit holder could be in technical violation of its

¹⁶ Or any other applicant.

¹⁷ Based on information provided by USGS in its response to questions sent by FWS.

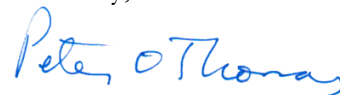
permit based on which information the agency thought it had approved by way of the permit. Moreover, applications that contain inaccurate and inconsistent information make it difficult, and sometimes impossible, for the Commission and the public to provide meaningful comments. The Commission therefore recommends that FWS ensure that all applicants use the 2017 application instructions and, if an applicant has not used those application instructions, require that they do so and resubmit a revised application. FWS processes between 10 and 20 marine mammal permit applications per year so it should not be difficult for FWS to determine at the time the application is submitted¹⁸ whether an applicant has used the current instructions. Additionally, the Commission recommends that, when an applicant responds to questions sent by FWS¹⁹, FWS request that the applicant provide both (1) written responses and clarifications to address each of the questions posed and (2) a revised application that incorporates the responses and clarifications.

The Commission's role

The Commission and its Committee of Scientific Advisors spend considerable time and effort reviewing permit applications and take their review responsibilities under sections 101(a)(1), 202(a)(2) and 203(c) of the MMPA seriously. The Commission expects FWS to take our role in permit application reviews equally seriously. As noted in this and other recent letters, the Commission poses questions or seeks additional information during its reviews because either (1) the applicant has not provided all of the information required under FWS's application instructions or (2) the information provided is not sufficiently complete or clear to support the findings required under the MMPA and FWS's implementing regulations or to recommend appropriate permit conditions for inclusion in furtherance of MMPA section 104(b)(2). As such, the Commission expects FWS to be responsive to our requests for clarifications and additional information, provide applicants with the Commission's questions and comments, and seek the requested information in a timely manner—all before further action is taken on an application.

Kindly contact me if you have any questions concerning the Commission's comments and recommendations.

Sincerely,



Peter O. Thomas, Ph.D.,
Executive Director

cc: Diane Bowen, FWS
Todd Atwood, USGS
Kristin Simac, USGS
Karyn Rode, USGS

¹⁸ Not many months later when an analyst reviews the information within the application.

¹⁹ Including the Commission's informal comments as well.