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# Susitna-Watana Hydroelectric Project (FERC No. 14241)

# Small Mammal Species Composition and Habitat Use Study Plan Section 10.12

**Initial Study Report** 

Prepared for

Alaska Energy Authority



Prepared by

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Fairbanks, Alaska

February 2014 Draft

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### LIST OF ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

Abbreviation	Definition
AEA	Alaska Energy Authority
АРА	Alaska Power Authority
CFR	Code of Federal Regulations
FERC	Federal Energy Regulatory Commission
ILP	Integrated Licensing Process
ISR	Initial Study Report
Project	Susitna-Watana Hydroelectric Project
RSP	Revised Study Plan
SPD	Study Plan Determination

#### EXECUTIVE SUMMARY

Small Mammal Species Composition and Habitat Use Study 10.12		
Purpose	The purpose of this office-based analysis is to review and synthesize available information on the occurrence and relative abundance of small mammals in the Project area by describing the species of small mammals known to occur in the Project area and their patterns of habitat use.	
Status	This study was rescheduled for implementation during the next study season.	
Study Components	Information on small mammals in the Project area will be compiled and synthesized from the available literature, including the extensive small mammal survey data collected in the 1980s for the Alaska Power Authority (APA) Project. Information synthesis will be used to assess the use and relative importance of wildlife habitats (see RSP Section 10.19).	
2013 Variances	The study was deferred until the next study season rather than being implemented primarily in 2013, as proposed in RSP Sections 10.12.6 and 10.12.10. This study will be informed by the data from the Vegetation and Wildlife Habitat Mapping Study in the Upper and Middle Susitna Basin 11.5, as described in RSP Section 10.12.4. AEA will meet the study objectives completing the entire study in one study season.	
Steps to Complete the Study	As explained in the cover letter to this draft ISR, AEA's plan for completing this study will be included in the final ISR filed with FERC on June 3, 2014.	
Highlighted Results and Achievements	No results specific to this study have been obtained as of this ISR.	

#### 1. INTRODUCTION

On December 14, 2012, Alaska Energy Authority (AEA) filed with the Federal Energy Regulatory Commission (FERC or Commission) its Revised Study Plan (RSP) for the Susitna-Watana Hydroelectric Project No. 14241 (Project), which included 58 individual study plans (AEA 2012). Section 10.12 of the RSP described the Small Mammal Species Composition and Habitat Use Study (Small Mammal Study). The study will be an office-based analysis to review and synthesize available information on the occurrence and relative abundance of small mammals in the Project area. The study will describe the species of small mammals known to occur in the Project area and their patterns of habitat use. RSP Section 10.12 provided goals, objectives, and proposed methods for data collection regarding small mammals.

On February 1, 2013, FERC staff issued its study determination (February 1 SPD) for 44 of the 58 studies, approving 31 studies as filed and 13 with modifications. RSP Section 10.12 was one of the 31 studies approved with no modifications.

Following the first study season, FERC's regulations for the Integrated Licensing Process (ILP) require AEA to "prepare and file with the Commission an initial study report describing its overall progress in implementing the study plan and schedule and the data collected, including an explanation of any variance from the study plan and schedule." (18 CFR 5.15(c)(1)) This Initial Study Report (ISR) on the Small Mammal Study has been prepared in accordance with FERC's ILP regulations and details AEA's status in implementing the study, as set forth in the FERC-approved RSP (referred to herein as the "Study Plan").

#### 2. STUDY OBJECTIVES

The goal of the Small Mammal Study is to synthesize baseline data on small mammals in the Project area to enable habitat-based assessments of the impacts expected to occur from development of the Project.

The Small Mammal Study has two specific objectives, as established in RSP Section 10.12.1:

- Describe the species composition and relative abundance of small mammals in the Project area.
- Describe the habitat associations of small mammals within the Project area

#### 3. STUDY AREA

As established by RSP Section 10.12.3, the study area consists of the entire Project area (Figure 3-1). Existing data on the abundance and habitat associations of small mammals from the original study for the Alaska Power Authority (APA) Susitna Hydroelectric Project (Kessel et al. 1982) will be supplemented with more recent data from other regional studies and will be applied to the wildlife habitat types mapped throughout the reservoir inundation zone, associated facilities areas, and the access road and power transmission corridors.

#### 4. METHODS AND VARIANCES IN 2013

This Study Plan was not implemented in 2013, as was proposed in RSP Sections 10.12.6 and 10.12.10. Deferring the entire study to the next study season is a variance. AEA will meet Study Plan objectives by completing the study in the next study season. Deferral of this study until the next study season also will benefit from having contemporaneous data from the Vegetation and Wildlife Habitat Mapping Study in the Upper and Middle Susitna Basin (Study 11.5) ("Vegetation Mapping Study") available at the time this study is completed.

#### 5. RESULTS

There are no results to report for this study.

#### 6. DISCUSSION

As described in RSP Section 10.12.7, this study will use information from the Vegetation Mapping Study. Because the Vegetation Mapping Study is ongoing and not yet complete, this study has been deferred until the next study season.

In addition, this study is one of several studies that will be used in the habitat rankings prepared by the Evaluation of Wildlife Habitat Use (Study 10.19). The other studies (including the Vegetation Mapping Study (Study 11.5) and Terrestrial Furbearer Abundance and Habitat Use (Study 10.10) are ongoing and are unaffected by the deferral of this study in 2013.

#### 7. COMPLETING THE STUDY

[As explained in the cover letter to this draft ISR, AEA's plan for completing this study will be included in the final ISR filed with FERC on June 3, 2014.]

#### 8. LITERATURE CITED

- AEA (Alaska Energy Authority). 2012. Revised Study Plan: Susitna-Watana Hydroelectric Project FERC Project No. 14241. December 2012. Prepared for the Federal Energy Regulatory Commission by the Alaska Energy Authority, Anchorage, Alaska. Available online: http://www.susitna-watanahydro.org/study-plan.
- Kessel, B., S. O. MacDonald, D. D. Gibson, B. A. Cooper, and B. A. Anderson. 1982. Susitna Hydroelectric Project environmental studies, Phase I final report—Subtask 7.11: Birds and non-game mammals. Report by University of Alaska Museum, Fairbanks, and Terrestrial Environmental Specialists, Inc., Phoenix, NY for Alaska Power Authority, Anchorage. 149 pp.

#### 9. FIGURES

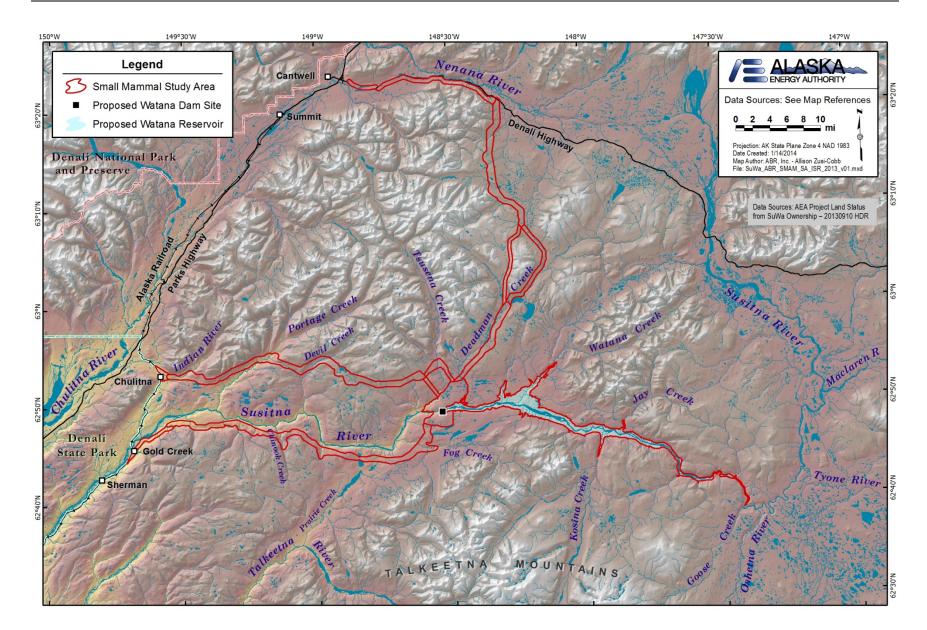


Figure 3-1. Study Area for the Small Mammal Study.