

Initial Study Report Meeting

Study 10.7 Dall's Sheep Distribution and **Abundance**

October 21, 2014

Prepared by Alaska Department of Fish and Game and

ABR, Inc.—Environmental Research & Services

Study 10.7 Objectives

- Estimate the current **minimum population size** of Dall's sheep in the study area.
- Delineate the summer range of Dall's sheep in the study area.
- Evaluate the current condition of mineral licks in and near the Project area.
- Analyze and synthesize data from historical and current studies of Dall's sheep in the study area, as a continuation of AEA's 2012 study of big-game movement and habitat use.

Study 10.7 Components

- Aerial Surveys (ISR Part A, Section 4.1, pg 2)
- Mineral Lick Surveys (ISR Part A, Section 4.2, pg 2)
- Analysis of Historical Data (ISR Part A, Section 4.3, pg 3)



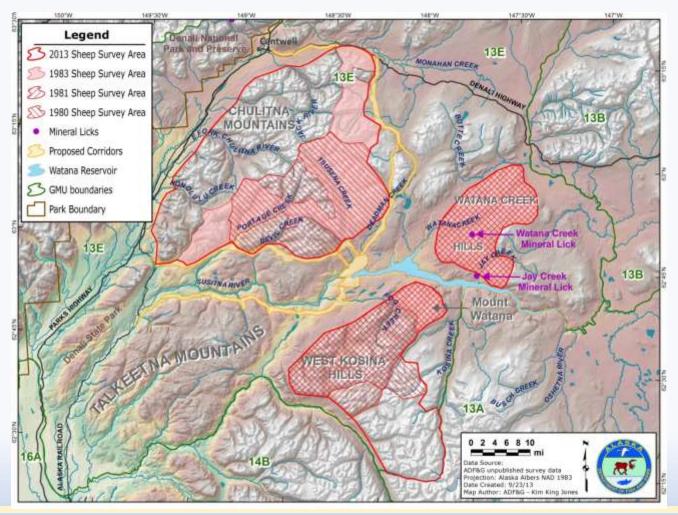


Study 10.7 Variances

- During the site visit to the Jay Creek mineral lick in late May 2013, the study team deployed a time-lapse camera to record sheep presence on the main cliff face of the mineral lick, thereby providing a greater volume of data on lick use than would have resulted from the two site visits proposed in RSP Section 10.7.4.
- The data obtained from time-lapse photography provided additional information to use in achieving the study objective regarding characterization of mineral lick use.

Study 10.7 Summary of Results in ISR (ISR Part A – Section 5)

Dall's Sheep Survey Areas: 1980s and 2013 (ISR Part A, Section 5.3, pg 4; Figure 4.1-1)

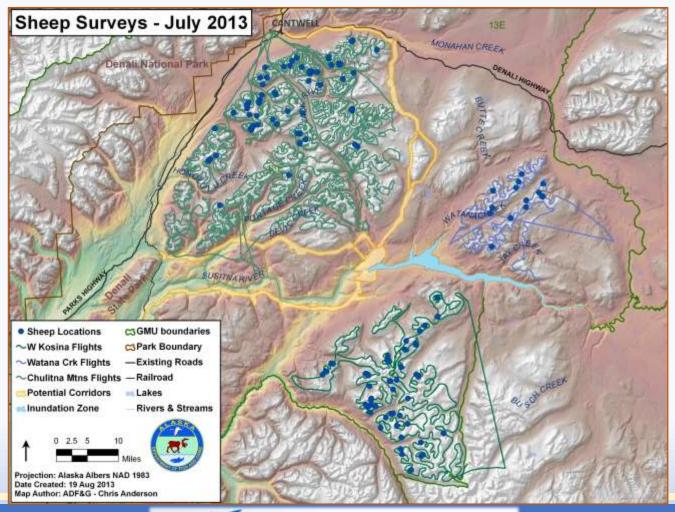


Study 10.7 Summary of Results in ISR (ISR Part A – Section 5)

- The Watana Creek Hills, West Kosina Hills, and Chulitna Mountains were surveyed by ADF&G in July 2013.
- A total of 512 sheep were observed during that survey (including 71 lambs), numbering 41 in the Watana Creek Hills, 194 in the West Kosina Hills, and 277 in the Chulitna Mountains.
- The Jay Creek and Watana Creek mineral licks were visited twice in 2013, on May 28–29 and June 19–20.
- Maximum counts were 7 sheep at the Jay Creek mineral lick and 3 sheep at the Watana Creek mineral lick during the two site visits in 2013.
- The Dall's sheep population in the Talkeetna Mountains declined sharply after the winter of 1999–2000 and have remained low, but stable, since then.

Study 10.7 Summary of Results in ISR (ISR Part A – Section 5)

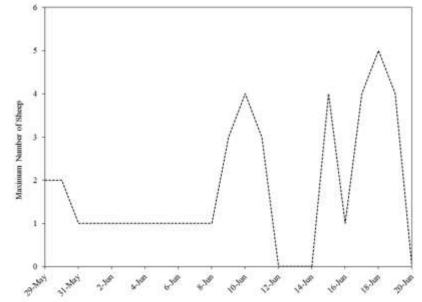
Dall's Sheep Locations on July 2013 Surveys (ISR Part A, Figure 5.1-1)



Study 10.7 Summary of Results in ISR (ISR Part A – Section 5)

Up to 5 Dall's sheep at a time were counted in time-lapse photos of the Jay Creek mineral lick during May 29–June 20, 2013. (ISR Part A, Section 5.3, pg 4; Figure 5.2-1)









Study 10.7 Summary of Results since ISR

2014 Surveys:

- The Jay Creek and Watana Creek mineral licks were visited twice in 2014, on May 28–29 and June 18–19.
- On the May visit, 9 sheep were observed at the Watana Creek lick, whereas none were observed at the Jay Creek lick.
- On the June visit, no sheep were observed at either mineral lick.
- Based on time-lapse photos of the main cliff at the Jay Creek lick between May 29 and June 19, sheep were present at least between June 4 and June 11, with the maximum number visible at one time being 3 sheep.

AEA Proposed Modifications to Study 10.7 in ISR (ISR Part C – Section 7.1.2)

 No modifications to the Study Plan are needed to complete the study and meet the Study Plan objectives.

New Modifications to Study 10.7 since ISR

The study team was unable to conduct aerial surveys of sheep in 2014 as planned, due to extensive, persistent snow throughout survey period; hence, ADF&G plans to conduct the second year of aerial surveys when conditions allow during June-early August 2015.





Current Status and Steps to Complete Study 10.7

 Mineral lick observations were completed in 2014.

 ADF&G plans to conduct the second year of aerial surveys when conditions allow in 2015 (during June–early August).

Steps to Complete Study 10.7 (ISR Part C – Section 7.1)

- AEA plans to finish this study in 2015 by completing the following methods, as described in RSP Section 10.7.4:
 - Complete the second year of aerial surveys for summer distribution and minimum population estimation (June– early August 2015).
 - Complete analysis of mineral lick visits.
 - Complete analysis of historical (1980s) data and synthesis with current ADF&G monitoring results.
 - Synthesize all information for presentation in USR.

Licensing Participants' Proposed Modifications to Study 10.7?

