

Initial Study Report Meeting

Study 10.7 Dall's Sheep Distribution and Abundance

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Study 10.07 Status

ISR documents (ISR Part D Overview):

- Initial Study Report: Parts A, B and C (June 3, 2014)
- Study Completion Report (SCR) (November 4, 2015)

Status:

- Two years of mineral lick observations completed.
- Two years of aerial surveys completed.
- Analysis of historical data completed.
- **The Study Plan objectives have been met and this study has been completed.**

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** (SCR Section 4.1, pg 2)
- **Mineral Lick Surveys** (SCR Section 4.2, pg 3)
- **Analysis of Historical Data** (SCR Section 4.3, pg 4)



Study 10.7 Variances

- Due to a lack of suitable survey conditions in 2014, the second year of aerial surveys was conducted in 2015 instead.
- A small portion of the Chulitna Mountains block was missed during the 2015 aerial survey (due to pilot miscommunication).
- During visits to the Jay Creek mineral lick in late May 2013 and 2014, the study team **deployed a time-lapse camera** to record sheep presence on the main cliff face of the 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

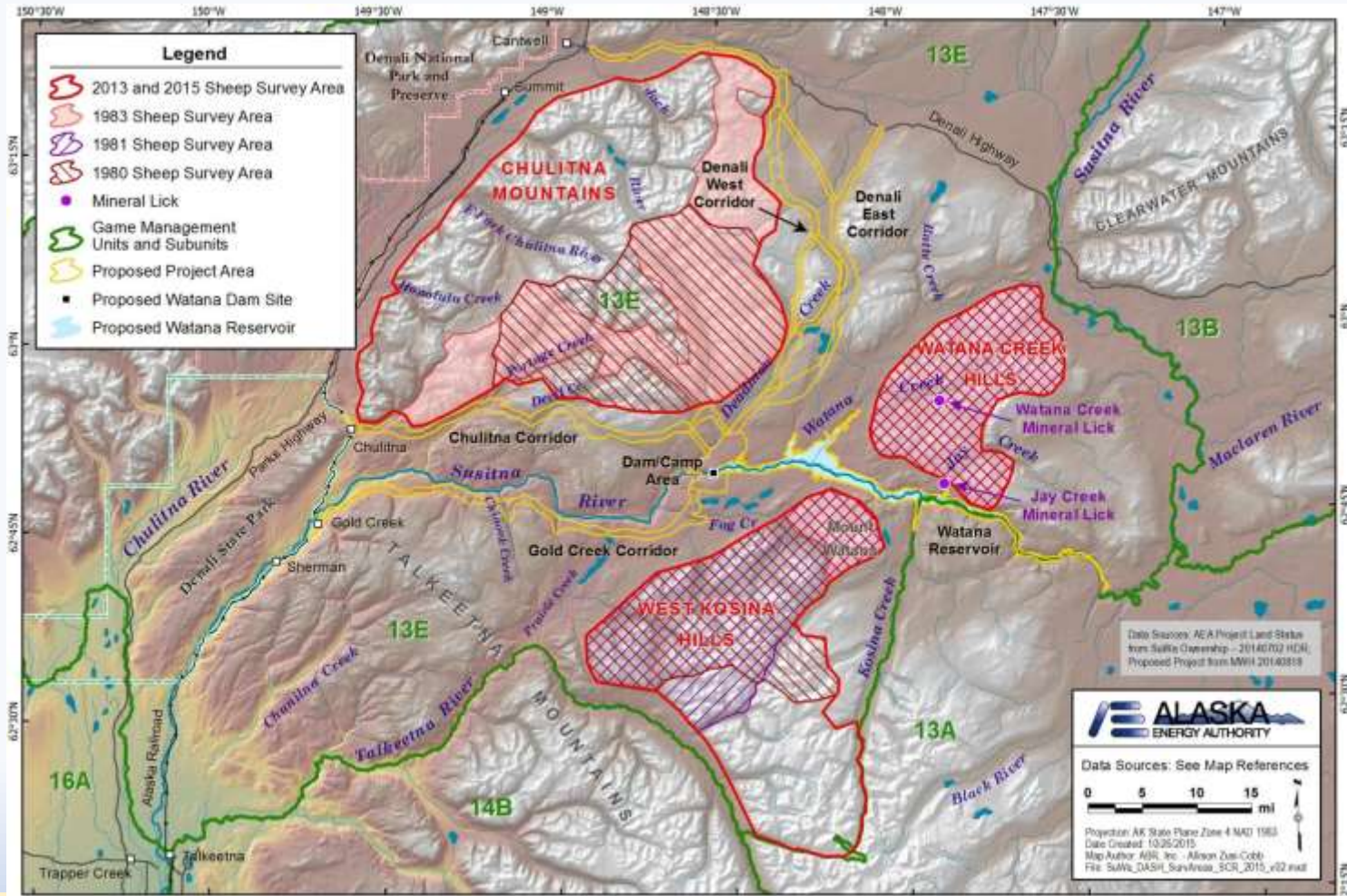
(ISR Part A, Section 5)

- 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 in 2013, 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.
- Up to 5 Dall's sheep at a time were recorded by the time-lapse camera at the Jay Creek mineral lick during May 29–June 20, 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

(SCR Section 5.3)

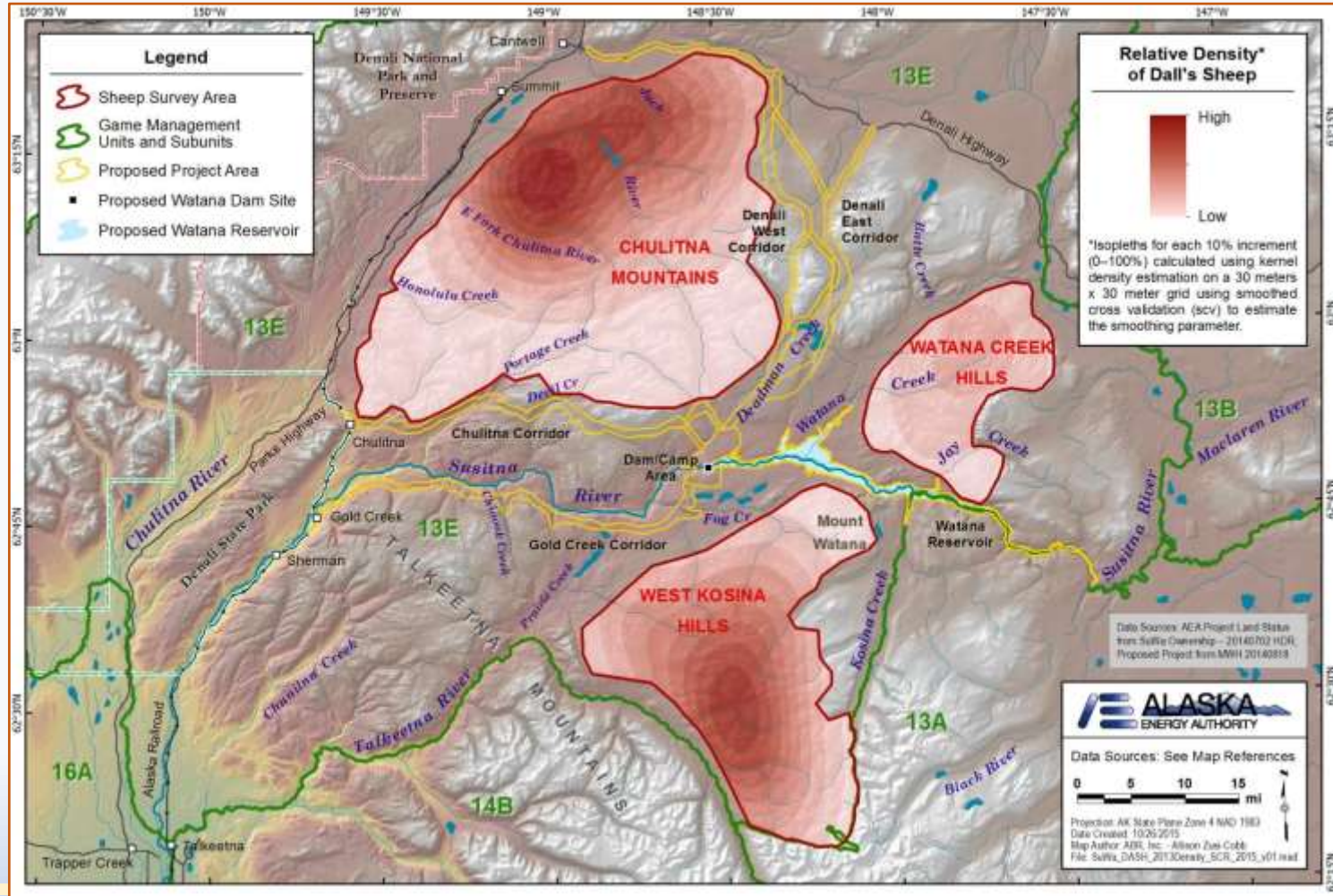
Sheep Survey Areas: 1980s and 2000s (SCR Section 5.3, pg 6; Figure 4.1-1)



Study 10.7: Summary of Results

(SCR Section 5)

Relative Density, 2013 Aerial Survey (SCR Figure 5.1-1)

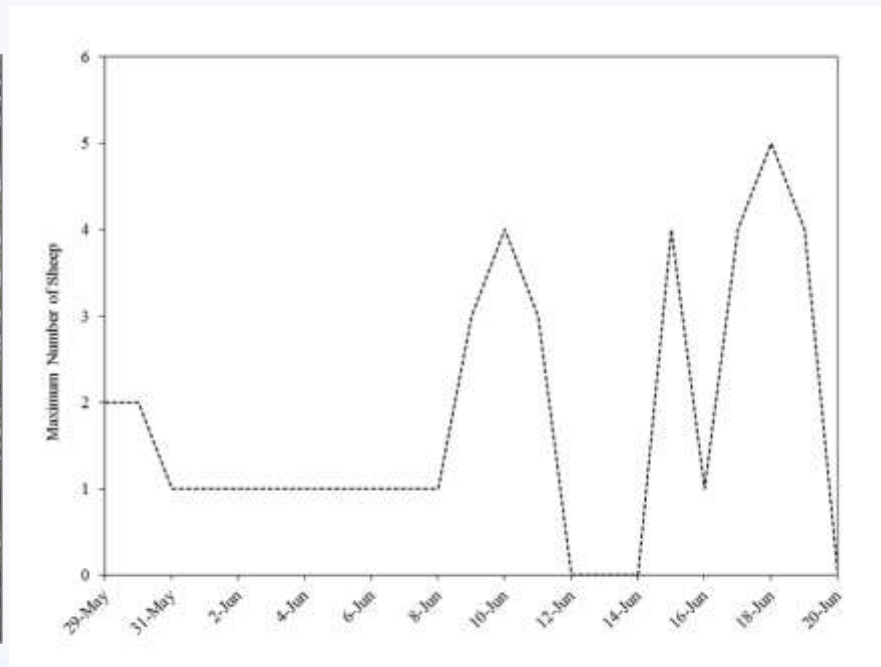


Study 10.7: Summary of Results

(ISR Part A, Section 5.3)

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 the ISR

(SCR Section 5)

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 lick.
- Up to 3 sheep at a time were recorded by the time-lapse camera at the Jay Creek lick during May 29–June 19.

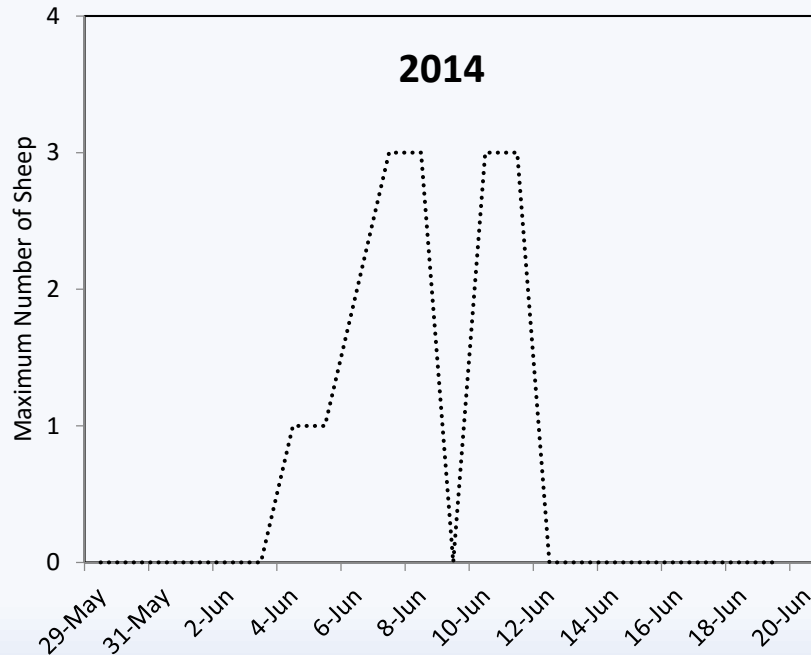
2015 Surveys:

- The Watana Creek Hills, West Kosina Hills, and Chulitna Mountains were surveyed by ADF&G in July–August 2015.
- A total of 454 sheep were observed in 2015: 33 in the Watana Creek Hills, 172 in the West Kosina Hills, and 249 in the Chulitna Mountains.



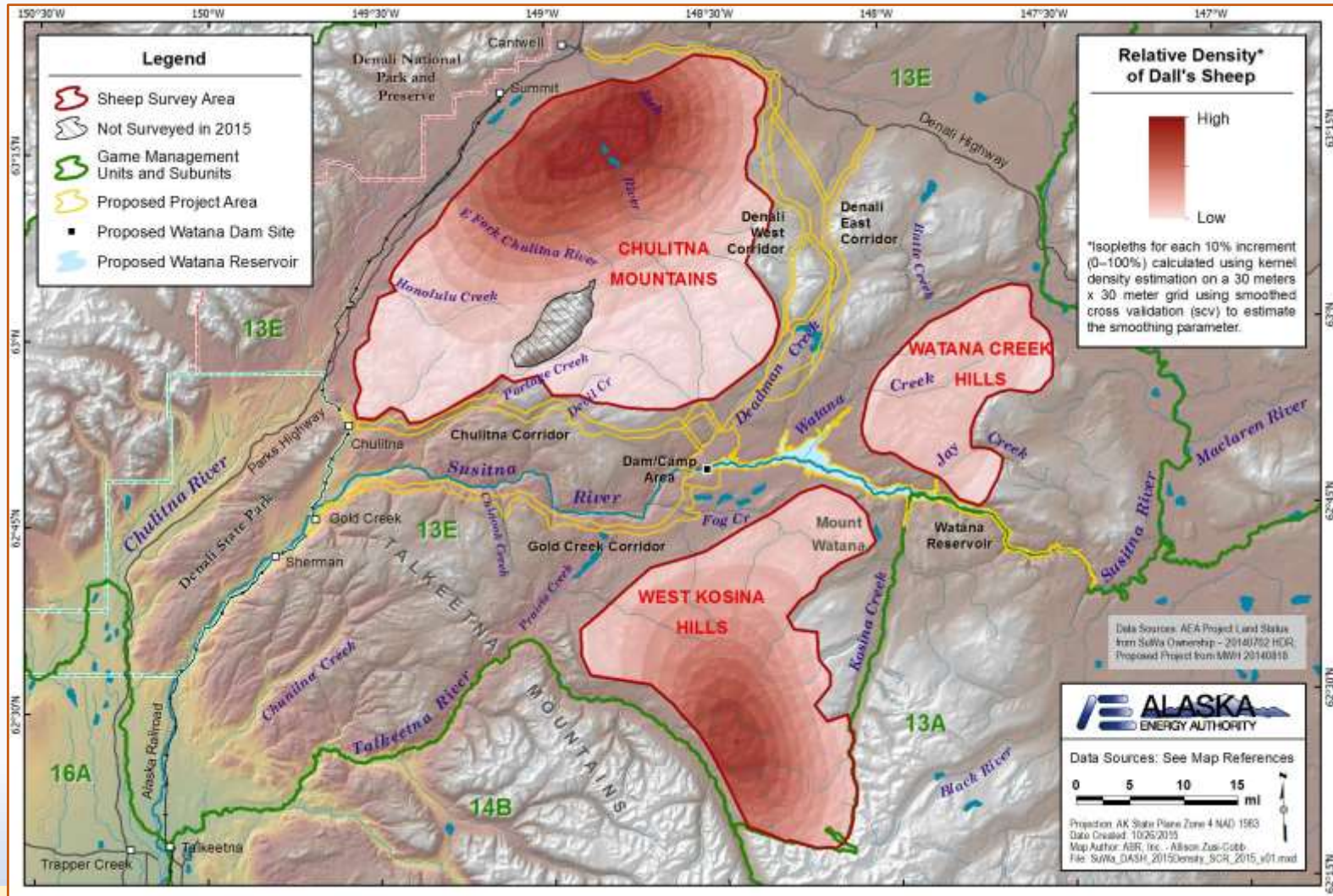
Study 10.7: Summary of Results since the ISR (SCR Section 5)

Based on time-lapse photos of the main cliff at the Jay Creek lick from May 29 to June 19, sheep were present between June 4 and June 11, at minimum, with the maximum number visible at one time being 3 sheep.



Study 10.7: Summary of Results Since the ISR

Relative Density, 2015 Survey (SCR Figure 5.1-2)



AEA Proposed Modifications to Study 10.7

AEA plans no modifications of the methods for this study, as this study is now complete.

Steps to Complete Study 10.7

The field work, data collection, data analysis, and reporting for this study successfully met all study objectives in the FERC-approved Study Plan.

AEA has completed this study.

Licensing Participants' Comments and Proposed Modifications to Study 10.7?

- Agencies
- CIRWG members and Ahtna
- Public