

Initial Study Report Meeting

Study 10.9 Wolverine Distribution, Abundance, and Habitat Occupancy

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Prepared by

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Study 10.9 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:

- Completed occupancy survey in 2013 and occupancy modeling.
- Completed SUPE survey in 2015.
- Calculated population (SUPE) and density estimates.
- Evaluated habitat use and distribution.
- **The Study Plan objectives have been met and this study has been completed.**

Study 10.9 Objectives

- Estimate the current population size of wolverines.
- Establish a population index for wolverines.
- Describe the distribution of wolverines in late winter.
- Describe habitat use by wolverines in late winter.

Study 10.9 Components

- Sample-Unit Probability Estimator (SUPE) and Occupancy Surveys (ISR Part A, Section 4.1, pp 2–3)
- Occupancy Modeling (ISR Part A, Section 4.2, pg 3)
- Habitat Analysis and Distribution (ISR Part A, Section 4.2, pg 3)



Study 10.9 Variances

(SCR Section 4.1.1)

Study area modified:

- Unable to perform SUPE survey in entire study area due to local weather conditions that violated survey assumptions and created hazards to navigation.
- Able to accomplish objective with those areas excluded.

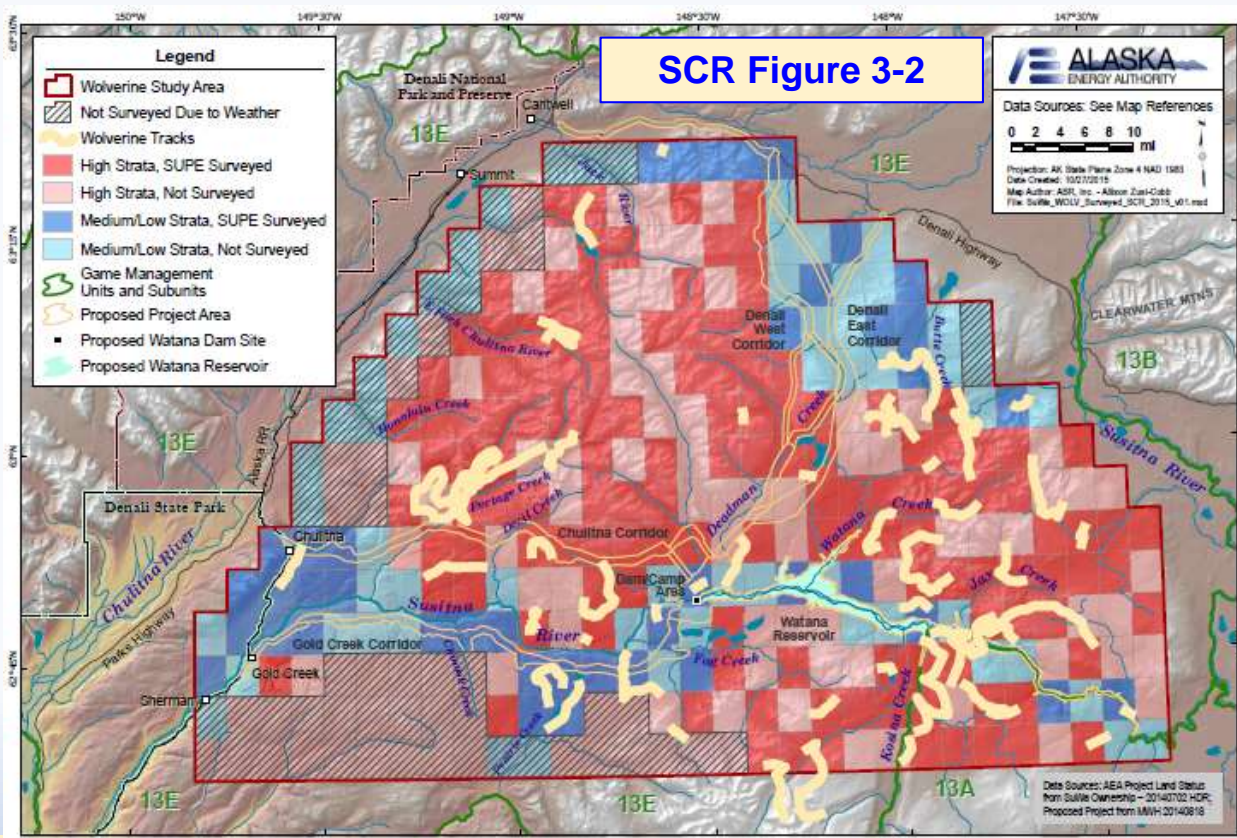
Did not perform multi-season occupancy modeling (OM):

- Recent research demonstrated OM required considerably more survey effort than previously thought to index changes in population abundance.
- OM was abandoned in favor of SUPE, which estimates true abundance.



Study 10.9: Summary of Results - Population Estimation (SCR Section 5)

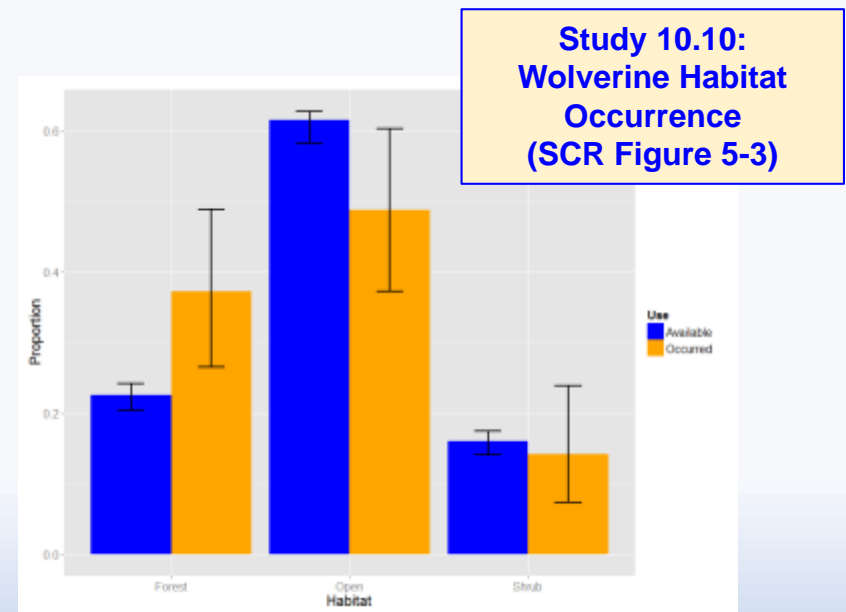
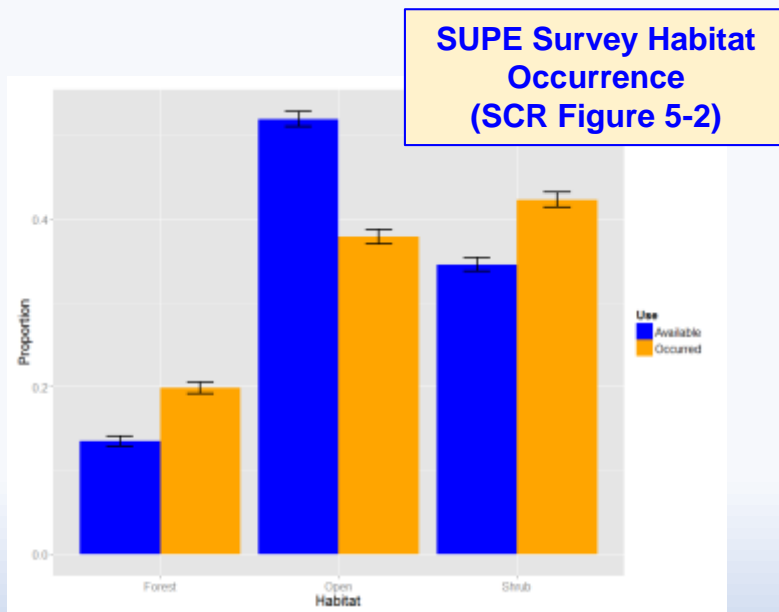
- Conducted SUPE survey in 2015 (SCR Section 4, pg 3).
- Density estimate of 9.4 wolverines /1,000 km².
- Adjusted lower limit of 50.06 wolverines (SCR Section 5, pg 7).



Summary of Results: Habitat Use and Distribution

(SCR Section 5)

- Wolverines were widely distributed in study area (SCR 10.9, Section 4, pg 7).
- Examined habitat associations using both the Study 10.10 SUPE survey and data gathered during Study 10.10, Terrestrial Furbearers (SCR 10.10, Section 5, pg 4).
- Occurrence in forested habitat was greater than availability, and in open habitat was less than availability (SCR 10.9, Section 5, pg 7).



AEA Proposed Modifications to Study 10.9

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

Steps to Complete Study 10.9

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 10.9?

- Agencies
- CIRWG members and Ahtna
- Public

