

PINEDALE ANTICLINE PROJECT AREA SAGE GROUSE MONITORING PROGRESS REPORT

**PREPARED FOR:
PINEDALE AREA PROJECT OFFICE
P.O. BOX 768
PINEDALE, WY 82941**

**PREPARED BY:
KC HARVEY, INC.
376 GALLATIN PARK DRIVE
BOZEMAN, MT 59715**

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KC HARVEY
Soil & Water Resource Consulting

 **AN ENERCREST COMPANY**

1.0 Introduction

The purpose of this project is to monitor sage grouse activity in the Pinedale Anticline Project Area (PAPA). This will satisfy sage grouse monitoring requirements as described in Appendix B of the Record of Decision (ROD), Final Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project. The project area includes six sage grouse lek complexes and covers approximately 550,000 acres in Sublette County, Wyoming.

2.0 Project Tasks

The project consists of two tasks; determination of sage grouse nesting success and habitat selection, and noise level monitoring. Due to a late start for the project, a third task; winter concentration area use, was not included in the work scope.

2.1. Determination of Nesting Success and Habitat Selection

Determination of nesting success and habitat selection involves several sub-tasks. The following sections describe these sub-tasks.

2.1.1. Capture and Marking

Sage grouse capture and marking began on March 23 and finished on April 17. During this time, KC Harvey field crews captured and affixed radio collars to 89 sage grouse hens. Wyoming Game and Fish Department (WGFD) personnel provided guidance for the distribution of sage grouse captured. The locations of the sage grouse captured are listed in Table 1 and illustrated in Figure 1.

Table 1. Target numbers and actual numbers and locations of captured and collared sage grouse hens.

Lek Complex	Target Number of Collared Hens	Number of Hens Collared
Duke's Triangle	10	5
Mesa	20	16
Ryegrass	25	25
Speedway	25	23
Yellowpoint	20	20
East Fork	0	0
TOTAL	100	89

2.1.2. Monitoring Nesting Success

KC Harvey field crews began tracking collared hens toward the end of the capture effort. As of June 13, 2009, 11 of 89 collared hens were still sitting on nests. Summary results as of June 13, 2009 are in Table 2 below.

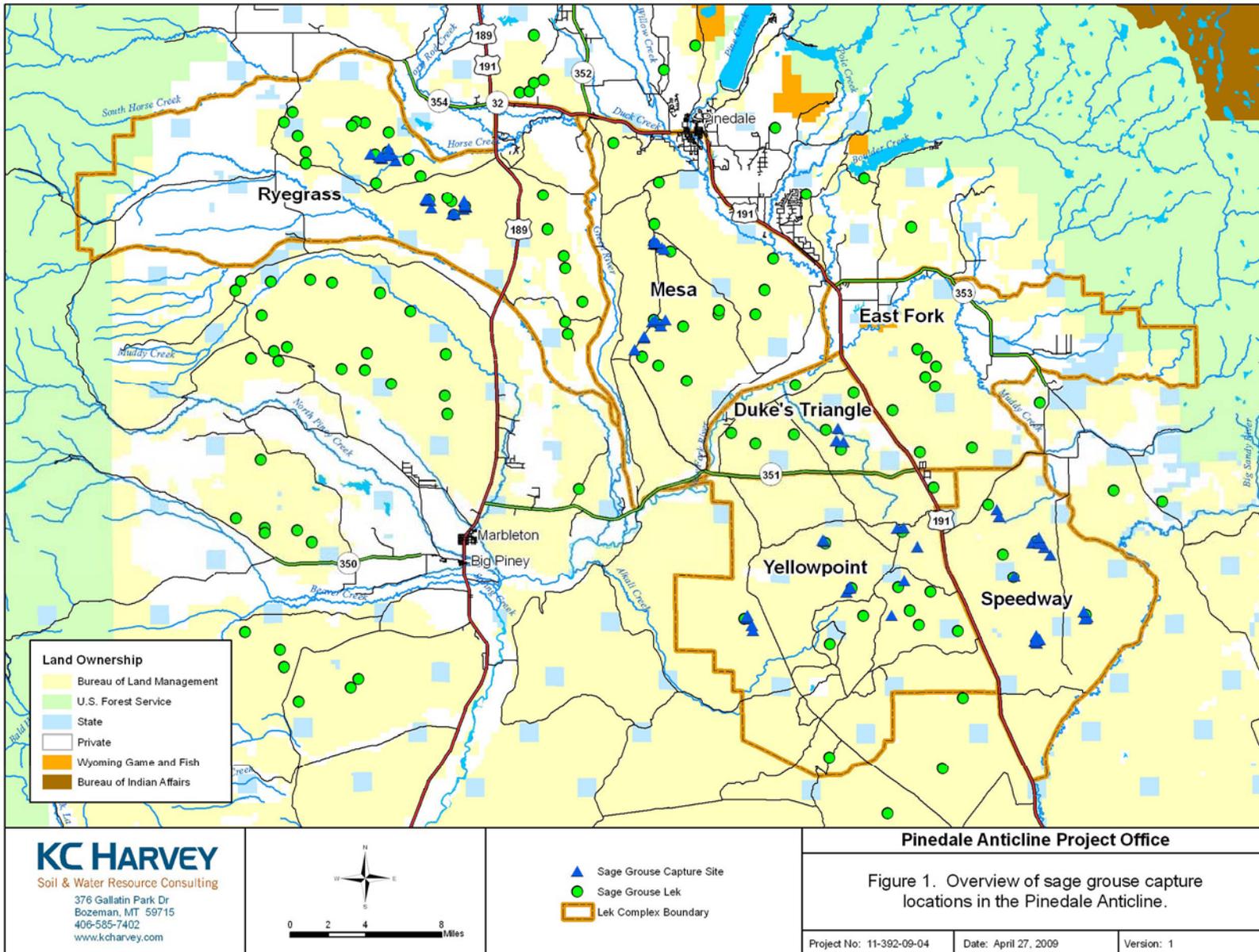


Table 2. Summary of sage grouse nesting and hatching data as of June 13, 2009.

Complex	Hens Collared	Number of Nests	Number of Re-Nests	Non-Nesting Hens	Number of Hens Still on Nest	Predated Nests	Mortalities	Hatches	PreliminaryPct Hatching
Speedway	23	14	0	9	1	7	2	6	26.1%
Ryegrass	25	20	4	4	6	13	2	4	16.0%
Yellowpoint	20	17	3	3	1	15	2	4	20.0%
Duke's Triangle	5	4	0	1	1	1	1	2	40.0%
Mesa	16	12	3	4	2	11	0	2	12.5%
TOTALS	89	67	10	21	11	47	7	18	20.2%

2.1.3. Determining Habitat Selection

Determining sage grouse habitat selection during the brood rearing period will commence in July. KC Harvey field personnel will monitor bird locations monthly in order to determine habitat selection.

2.2. Noise Level Monitoring

Noise level monitoring consisted of deploying four Quest Technologies DL-2-1/3-10 sound level meters at designated leks for 10-day and subsequent 5-day periods between March 27 and May 17, 2009. The sound level meters included an outdoor measurement conversion system consisting of a weatherproof case, rechargeable 12-volt car batteries, cables, and adapters. This allowed deployment of the meters in adverse conditions for five to seven day periods between battery changes. The noise meters were deployed at 13 active leks in the Mesa, Duke's Triangle, and Yellowpoint lek complexes. The following table provides location information, study duration, and preliminary results for the noise monitoring study.

Table 3. Preliminary noise monitoring results.

Complex	Lek	Duration	Average Noise Level (db)	Difference from 39 db Baseline
Mesa	Oil Fork Road	One 10-day and one 5-day period	42.8	3.8
	Mesa Road 3	One 10-day and one 5-day period	32.5	-6.5
	Lovatt West	One 10-day and one 5-day period	47.4	8.4
	Two Buttes	One 10-day and one 5-day period	37.8	-1.2
	Bloom Reservoir	One 10-day period	41.9	2.9
	Cat	One 10-day period	44.3	5.3
Duke's Triangle	Lower Sand Springs Draw	One 10-day and one 5-day period	39.7	0.7
	Little Fred	One 10-day and one 5-day period	44.2	5.2
	Big Fred	One 10-day and one 5-day period	42.4	3.4
Yellowpoint	South Rocks	One 10-day and one 5-day period	42.7	3.7
	The Rocks	One 10-day and one 5-day period	44.4	5.4
	Shelter Cabin Reservoir	One 10-day and one 5-day period	40.5	1.5
	Alkali Draw	One 10-day and one 5-day period	44.0	5.0

Summary data analysis indicates that background noise levels are all below the 10 db above background threshold level (49 db). Two locations had noise level below baseline (Two Buttes and Mesa Road 3) and the highest level was 47.4 db at the Lovatt West lek.

3.0 Summary

Eighty-nine hens were captured and fitted with radio collars during the capture and marking phase of this project. This is within the acceptable level defined by the contract and agreed upon between KC Harvey and BLM and WGFD personnel. Monitoring nesting success is ongoing, with 11 birds still sitting on nests. Preliminary noise monitoring results indicate no exceedences of the threshold defined by Appendix B (Wildlife Mitigation Matrix) of the Record of Decision (ROD), Final Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project.