I. PROGRESS ON PROJECT OBJECTIVES DURING LAST SEGMENT

Objective 1: Conduct more frequent and more robust surveys to estimate the population size and composition (bulls, cows and calves) of moose to evaluate if IM treatments are successful.

Region II

Weather conditions in the 2015-2016 reporting period did not allow for a regular winter S&I census to be completed. No additional surveys were planned during this period.

Region III

As part of our assessment of on-going predation control we conducted Geospatial Population Estimator (GSPE) surveys during November in Unit 19D East Bear Control Focus Area (preliminary results found 2014 moose) and the Unit 24B Upper Koyukuk Management Area (preliminary results found 509 moose).

Two other surveys were planned for spring in Unit 19A, but were not accomplished due to unsatisfactory survey conditions.
Region IV

Between November 22 and December 2 RII performed an early winter GSPE survey in game management subunit 13B preliminary estimates are 4,762 moose (80% CI 4,232-5,293). This survey is post wolf control activity (which last occurred in FY2014) which ceased in FY2015. We are comparing the GSPE results to results from annual trend surveys and we are evaluating composition with results from GSPE survey (results not available at this time).

**Objective 2:** Estimate calf production, survival and causes of mortality using radio-collars and or camera-collars to determine if a) calf mortality can be reduced to meet IM population and/or harvest objectives or b) to evaluate the effects of the IM treatment.

Region II

Since 2012, calf production and calf survival in Units 15A and 15C has been assessed each year under regional moose research protocols not associated with the Intensive Management grant. Region II did not conduct any activities relevant to this grant objective in FY2016.

Region III

We deployed 60 radio collars on moose calves in Unit 24B and completed 12 tracking flights throughout the year. Calf mortality study were conducted in Unit 19D, beginning in May. In that survey, 64 calves were radiocollared to determine survival and cause of death. Results are pending. Hair was collected, when present, at calf kill sites. However, the calf mortality study is still ongoing and thus the hair has not yet been submitted for DNA analysis.

Region IV

Region IV is not planning to conduct work which would address this objective in the near term.

**Objective 3:** Estimate adult moose survival rates using radio collars to evaluate the effects of the IM treatment.

Region II

Adult cow survival in 15A and 15C has been assessed each year since 2012 under regional research protocols not associated with the Intensive Management grant. Region II did not conduct any activities relevant to this grant objective in FY2016.
Region III

Region III did not conduct any activities relevant to this objective in FY2016.

Region IV

Region IV did not conduct any activities relevant to this objective in FY2016 but is planning to do so in FY2017.

Objective 4: Monitor moose nutritional status to evaluate the influence of nutrition on moose population status and evaluate IM population objectives.

Region II

Region II did not conduct any activities relevant to this objective in FY2016 associated with the Intensive Management grant.

Region III

During 1-5 March 2016, we captured 60 short-yearlings in Unit 20A. Fifty-nine of which were weighed (n=30 females and 29 males). Twinning survey was conducted in Unit 19D during May. We observed a twinning rate ranging 4% to 18%.

Region IV

Region IV is conducting work to address this objective through other funding sources.

Objective 5: Monitor forage abundance and utilization to evaluate browse abundance and quality and determine habitat capability to develop reasonable IM population objectives.

Region II

Forage abundance and utilization surveys have not been planned in Unit 15A. Measurement of forage availability in Unit 15C began in spring of 2016 and will be included in the next report period.

Region III

Region III does not plan on using AKW-7 to fund work on objective 5 at this time.

Region IV

Region IV address this objective using other funding sources in Unit 14A, and has plans to use AKW-7 funds in FY2017 for conducting work in Unit 16.

Objective 6: Investigate and monitor wolf, black bear and brown bear abundance relative to defined IM objectives.
Region II

Weather conditions have not allowed surveys of wolf numbers in Units 15A or 15C to be completed for the last several years. Bear abundance studies were not completed during FY2016.

Region III

A black bear survey was conducted in Unit 19D. We attempted to estimate black bear harvest rates. However, No radiomarked bears were harvested in the study area during the report period.

Region IV

Bear survey work in Unit 16 did not come together due to staffing issues in FY2016. In FY2016 the division has planned to deploy wolf collars in Units 13, 16, and 17 in FY2017. Surveys will be completed in those areas but management may decide to use other sources of funding.

Objective 7: Report findings in appropriate scientific and popular publications.

The Division did not publish any findings from survey work conducted in FY2016.

II. SIGNIFICANT DEVIATIONS AND/OR ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD

For FY2016 statewide weather conditions (lack of snow) prevented many routine aerial surveys under the existing Moose Survey & Inventory project to occur. This has prevented many of AKW-7 2.0 activities to occur (thus the lack of reportable activities on objectives).

III. RECOMMENDATIONS FOR THIS PROJECT

Possible revision of AKW-7 2.0 project objectives many need to occur if weather conditions persist into the future which prevent snow-dependent surveys from happening. Additional project objective planning will be undertaken to revise AKW-7. Annual project statements may be a better grant management practice for AKW-7.

Prepared by: Nathan Soboleff
Date: December 22, 2016