



SUSITNA-WATANA HYDRO

Meeting Notes Technical Workgroup Meeting on Terrestrial Resources June 14, 2013

- LOCATION:** Alaska Energy Authority Main Office
813 West Northern Lights Blvd., Anchorage, AK
- TIME:** 8:30 AM–3:00 PM (AKDT)
- SUBJECT:** Agency Update to Wildlife and Botanical Study Plan Implementation
- GOAL:** To discuss wildlife and botanical work completed to date.
- ATTENDEES:** **Mark Burch** (ADF&G), **Kim King** (ADF&G), **Ellen Bechtel** (EPA), **Matthew LaCroix** (EPA), **Maureen de Zeeuw** (USFWS), **Lori Verbrugge** (USFWS), **Dara Glass** (CIRI), **Wayne Dyok** (AEA), **Betsy McGregor** (AEA), **Janet Kidd** (ABR), **Brian Lawhead** (ABR), **Kirby Gilbert** (MWH), **Jeff Randall** (Solstice).
- ON PHONE:** **Becky Long** (Coalition for Susitna Dam Alternatives), **Bob Henszey** (afternoon) (USFWS), **Chuck Sensiba** (Van Ness Feldman), **Sarah Bullock** (BLM), **Alan Michnik** (FERC)

MAJOR TOPICS AND DISCUSSION POINTS (SEE PRESENTATIONS ON PROJECT WEB SITE FOR DETAILS)

INTRODUCTION

- Field studies have begun. Any changes from the RSP that are made during implementation will be documented in the Initial Study Report (ISR) to be distributed February 3, 2014. The methods implemented will be discussed in the ISR, as well as changes that are recommended for the 2014 field season. Licensing participants will have the opportunity to review and comment on the ISR in February 2014.
- Challenges faced during the 2013 field season have included a late spring and lack of access to lands owned by some Alaska Native Claims Settlement Act (ANCSA) corporations. AEA is still working with Cook Inlet Region Inc. in hopes of gaining access to lands owned by CIRI and its associated village corporations, at least for 2014 studies if not for 2013 studies. The wildlife studies for which portions of the study areas include ground access to some ANCSA lands are Moose (browse survey), Large Carnivores (bears), Terrestrial Furbearers, Bats, Eagles and Other Raptors (migration surveys), Landbirds/Shorebirds, Wood Frogs, and possibly Aquatic Furbearers.
- There was a brief discussion about aircraft traffic and safety concerns. Communication with AES on logistics should continue to happen from anyone going into the field. Any safety concerns should be brought to the attention of AEA. AEA will meet with ADF&G and ABR to discuss aircraft safety.
- The invertebrate food supply in Cook Inlet, near the Susitna River mouth, was discussed briefly in relation to Rock Sandpipers. There is no study plan to study marine invertebrates directly; instead, mechanisms that may affect the habitats of marine invertebrates are being studied (e.g., water

quality, river sediment transport). Based on those studies, if it is believed that invertebrate habitat would be affected, then further discussion will focus on how best to proceed.

WILDLIFE RESOURCES PROGRAM

MOOSE (RSP 10.5)

- ADF&G completed collar deployment on moose in March 2013; 40 GPS collars and 60 VHF collars were deployed. Some moose have left the study area. ADF&G uses fixed-wing airplanes to track radio-collared moose.
- A GeoSpatial Population Estimator (GSPE) survey effort was planned for November 2012, but the necessary snow cover was not present. ADF&G will try again in November 2013. If conditions do not permit that survey, they will survey in March 2014.
- Twinning (calving) surveys continued until June 2, 2013 because calving was somewhat delayed (a week or less). ADF&G is not sure why calving was delayed, and they have been discussing internally the possible reasons. A late rut is one possible reason.
- Once ANCSA land access is granted, the moose browse survey will be expanded to include the entire study area. Moose browse and twinning assessments help indicate population health.
- Aerial surveys for moose presence in the proposed inundation zone were conducted; the same number of moose were observed as in winter 2012, a heavy snow year.

CARIBOU (RSP 10.6)

- All caribou collars were deployed in 2012. Dropped collars were retrieved and redeployed in April 2013 (18 redeploys were on bulls and one was on a cow). As stated in the RSP, surveys will be flown once per month, weekly during spring migration, and daily during the calving season.
- The timing of the return of most caribou to the calving grounds was delayed, as was calving itself.
- Calf survival assessments will be made by visual observation during radio-tracking surveys.

DALL'S SHEEP (RSP 10.7)

- Dall's sheep surveys will be flown by ADF&G to count sheep in the study area during July or possibly August. This survey would have been conducted in June, but there is still too much snow and the sheep will not stand out. The survey must be completed by August 10, so as not to interfere with the hunting season.
- Field visits were made in late May to the mineral licks used by Dall's sheep near Jay Creek and Watana Creek. Three sheep were seen at Watana Creek lick and four sheep were seen at the Jay Creek lick. A time-lapse camera was deployed at Jay Creek, recording in 10-minute intervals. The camera will be picked up the week of June 17, 2013. The next visit to the licks will occur June 19-20, 2013, after lambing. Discussion was held about why the mineral licks were being studied if they will not be inundated. Jay Creek will be just above the maximum pool elevation of the proposed reservoir, so access to the lick may be affected. The Watana Creek lick will not be affected directly by the Project, however. Discussion also included access routes to and from the licks. Collars are not being used to track sheep movement, but observations being made by the field team include routes used by sheep to access and exit from the sites.

WOLVERINE (RSP 10.9)

- For the Wolverine Study, ADF&G had hoped to conduct a Sample Unit Probability Estimator (SUPE) survey and a survey for Occupancy Modeling (OM). Because the necessary field conditions did not occur in winter 2013, only an OM survey was flown (in April). ADF&G hopes to conduct both SUPE and OM surveys in 2014. Initial results of the OM indicate a population density of 5.5 wolverines/1,000 km².

LARGE CARNIVORE (RSP 10.8)

- ADF&G proposed a revised study area for the desktop modeling of bear population density being conducted with recent survey data. The revised area would match the Moose study area, excluding GMU subunit 13A. The study area will be discussed further among ADF&G, ABR, and AEA.

PTARMIGAN (RSP 10.17)

- ADF&G had planned to deploy 120 ptarmigan telemetry necklaces but, due to poor weather and snow conditions, only 29 have been deployed. The late spring snow was too soft to travel well in snowshoes and too sparse to allow travel by snowmachine. ADF&G will attempt to collar more birds in August 2013. Aerial transect survey flights will begin in October 2013. Ptarmigan clutch sizes in 2013 appear to be normal, despite the late spring.

TERRESTRIAL FURBEARERS (RSP 10.10)

- Prey abundance indices were sampled in August 2012 and track and scat surveys were conducted from January to early April 2013. Permits were obtained from CIRI and its associated village corporations in 2012 and from Ahtna in 2013, but not from CIRI and associated village corporations in 2013. Hence, the sites sampled in 2012 will not be able to be visited until access by CIRI and its associated village corporations is granted for the next field effort. Not all of the plots within the study area could be reached due to the remoteness of the area and the lack of a suitable operations base in the center of the study area. Some private cabins exist in the area, but they were not in suitable condition or permission from owners could not be obtained. More attempts to find a camp site closer to the study area will be made for the 2014 effort. DNA analyses will begin next month.

AQUATIC FURBEARERS (RSP 10.11)

- Track surveys of Aquatic Furbearers were not conducted in winter 2013, but observations of aquatic furbearers in the study area were obtained during surveys for other species. No fur samples of river otters or mink were obtained from trappers, as had been planned for mercury analysis. Mink pelts do not need to be sealed by ADF&G. River otter pelts need to be sealed, but no one trapped otters in the study area. The possibility of hiring a trapper to target these species in the area in 2014 was taken as an action item. Nonlethal methods do not appear to be viable to obtain the appropriate amount of hair samples needed for mercury analysis. Muskrat pushups were late in appearing due to the late spring, and were first reported by the waterbird survey team during the 3rd week in May.

BATS (RSP 10.13)

- Twenty Anabat[®] detectors were deployed on state (DNR) and federal (BLM) lands. CIRI and its associated village corporations' lands were avoided. Final site selection was made in the field. Equipment will be checked throughout the season, ending in October. Cabins and other structures that may function as roosts or hibernacula have been identified and ABR is in the process of contacting the owners to request access to these structures.

EAGLES AND OTHER RAPTORS (RSP 10.15)

- The spring migration survey for eagles and other raptors was completed from mid-April through mid-May 2013. Nest occupancy surveys were conducted in May and productivity surveys are planned for July. Roosting and staging surveys will be conducted during October–December.

WATERBIRDS (RSP 10.14)

- Breeding-pair and Harlequin Duck surveys were conducted during June 1-6 and 14-17. Brood surveys are scheduled for July and August. The portable marine radar survey and visual observation of migration began April 20 and ended June 4. The fall migration survey is planned for August 15 through mid-October, at least (possibly later, depending on results).

LANDBIRDS AND SHOREBIRDS (RSP 10.16)

- Intensive point-count surveys of landbirds/shorebirds began May 23 and will continue through June 20. As of June 13, 905 point-count stations had been completed along 75 transects. Access to all CIRI and its associated village corporations' lands will be needed in 2014 to complete the sampling as planned.

WOOD FROG (RSP 10.18)

- Wood frog acoustic surveys during the breeding season were conducted from May 30 through June 8. Swab sampling for chytrid fungus may not have gone well due to low numbers of frogs captured (field teams have just returned from the field and data are being reviewed). Sites were revisited if frogs were not heard on the first survey and acoustic monitors were deployed at 5 sites to provide more information on detectability of calling frogs. The initial results indicate frogs were present at approximately 40 percent of the waterbodies sampled.

OTHER

- Permits will be obtained from USFWS to collect bird feathers for mercury assessment (RSP 5.7).

BOTANICAL RESOURCES PROGRAM

VEGETATION AND MAPPING STUDY (RSP 11.5)

- Vegetation surveys will be conducted July 1-12 and July 29- August 9. Eighty transects will be surveyed, with 27 back-up transects identified. The data will be analyzed in September. To date, 70,970 acres of vegetation have been mapped.

WETLAND MAPPING STUDY (RSP 11.7)

- A crosswalk table will be prepared between the Cook Inlet basin wetland (“Gracz method”) data and ABR’s ecotype maps after mapping is completed.
- Android® tablets are being taken in the field to enter data being collected as part of the wetland functional assessment and Vegetation and Wildlife Habitat Mapping Study efforts.

RIPARIAN STUDY (RSP 11.6)

- Rare ecotypes not included in the Riparian Vegetation Study plots selected from the stratified random sampling will be sampled, as follow-up to a previous comment raised on the RSP.
- A vegetation community-type verification (Vioreck Level 3) was conducted for the Riparian Vegetation Study from April 30 through May 3. Two soil trenches were excavated and described in May and samples were collected for stable isotope and sieve analysis.
- Discussion focused on characterization of root depth. This was taken as an action item to confirm with the Riparian Vegetation Study Lead if this is able to be done by examining the soil pits.
- An ecotype that appeared on a map figure of FA-104 (Whiskers Slough) led to discussion over a single polygon labeled as ‘Sandy-Loamy Balsam Poplar Large Forest.’ It was taken as an action item to follow up with the Riparian Vegetation Study Lead to see if this single polygon will be sampled.

INVASIVE PLANT STUDY (RSP 11.9)

- For the Invasive Plant Study, 20 species (this number was incorrectly stated as 21 in the presentation) have been identified from the Alaska Exotic Plant Information Clearinghouse database. Rankings are assigned to each plant and range from weakly invasive to extremely invasive, with most plants ranging between weakly and moderately invasive. The UA herbarium will be consulted for any plants that cannot be identified.

RARE PLANT STUDY (RSP 11.8)

- The Rare Plant Study will focus on plants identified in the Alaska Rare Plant field guide and plants listed in the Natural Heritage Institute’s database. Based on these data, two rare sedges and a grass were identified during the 2012 wetlands and vegetation surveys. The first 2013 rare plant survey will be conducted to capture early-flowering species during July 1–9. A second survey will occur in late July and early August to look for late-flowering (e.g., alpine) species.

OTHER

- Some discussion focused on the presence of mountain goats in the Project area. One of ABR's field crews spotted a single goat during the raptor occupancy survey in May, and ADF&G stated that guides from Talkeetna have reported seeing goats in the area. No studies of goats in the area are planned, however. If a self-sustaining population exists, it is very small; it is more likely that the sightings are of transient individuals. Subsistence harvest is not an issue in the area because no goat hunting is permitted in the area.

ACTION ITEMS

The following ACTION ITEMS were identified:

Action Items	Responsibility
Discussion over aircraft traffic safety concerns	Bryan Carey, Wayne Dyok, Mark Burch, Brian Lawhead
Follow-up call on the study area for bear population-density modeling	Betsy McGregor, Brian Lawhead, Mark Burch, Earl Becker
Follow up with Aaron Wells, ABR study lead, on the Sandy-Loamy Balsam Poplar Large Tree Forest ecotype polygon at FA-104 (Whiskers Slough) to determine if it was studied.	Janet Kidd
Follow up with Aaron Wells to determine if root depth can be determined from soil pits.	Janet Kidd
Determine the best sampling approach for river otter fur and bird feather collection for mercury assessment.	AEA, URS, ABR, with input from ADF&G and USFWS