

**Dixon Diversion Project**  
**Update and Study Planning Meeting**  
**Meeting Summary**

**March 19, 2024 10:00 am – 11:00 am**

**Location:** [Virtual Teams Meeting](#) [Teams Meeting](#)

**Subject:** Project Description, Terrestrial Studies

**Meeting Materials:** [Dixon Diversion Project](#)

**Attendees:** AEA: Bryan Carey, Ryan McLaughlin; Kleinschmidt Associates (KA): Betsy McGregor, Finlay Anderson; ABR: Terry Schick, Wendy Davis; ADFG: Leah Ellis, Jason Herreman, Kyle Smith; USFWS: Mary Kate Swenarton, Jennifer Spegon, Stephen Miller (KNWR); Kenai Peninsula Borough: Julie Denison; Seldovia Village Tribe: Stephen Payton; Seldovia Native Association, Inc: Carolyn Kuckertz; Chugachmiut: Charlie Sink; Interested Parties: Allison Edwards, Gary Newman.

### **Meeting Summary**

### **Meeting Goals**

Bryan Carey (AEA) presented the goals of the meeting: provide an overview of the proposed project; discuss the extent of the study area for vegetation and wildlife habitat mapping; discuss the proposed list of wildlife species to include in the wildlife habitat evaluation study.

### **Project Description**

Bryan presented a summary of the Dixon Diversion to Bradley Lake Hydroelectric Project (Project) description including the following components: Dixon Diversion structure near toe of glacier; tunnel from diversion structure to Bradley Lake; new access road from Upper Battle creek access road to the diversion tunnel outlet; Bradley Lake dam/spillway and pool raise up to 28 feet in elevation; and underground power line along existing access road from Bradley power house to Bradley Dam, along the new access road to the diversion tunnel outlet, and through the tunnel to the diversion structure.

### **Questions**

Jason Herreman (ADFG) asked how workers would access the area where the diversion structure and new road would be constructed. Bryan responded that the diversion structure location would be accessed by helicopter and that the workers would stay up there for a month or two during construction. Jason asked about the number of workers that would be required to construct and stay up near the diversion structure. Bryan indicated 5-10 people. Jason asked if the existing Bradley Lake/Upper Battle Creek Road and the new road to the tunnel outlet would be open or closed to the public. Bryan explained that the existing road is open to the public, but access is limited to non-motorized traffic. During construction, the road would be closed to the public for safety reasons.

## Vegetation and Wildlife Habitat Mapping Study

Terry Schick (ABR) presented a summary of the study plan and indicated the purpose of this meeting was to seek input on the extent of the study area to be mapped. The area proposed for mapping vegetation and wildlife habitats consists of the project impact area with an added 250-meter buffer.

### Questions

Jenny Spegon (USFWS) asked for clarification if the purpose of meeting was to identify the extent of study area and the wildlife species to be evaluated. Terry confirmed the purpose of the meeting and jumped ahead to the Wildlife Evaluation Study slides and the list of 31 proposed wildlife species. Jenny asked how the list was generated. Terry explained that the list was developed from species expected to occur in the project area based on species range and available habitats, and species documented in the area in the 1985 Final EIS for the Bradley Lake Project. The list includes ESA-listed species or other species of concern identified as: Species of Greatest Conservation Need in the Alaska Wildlife Action Plan (ADFG 2015); Species of High Conservation Concern or Moderate Concern in the Alaska Shorebird Conservation Plan, Version III (Alaska Shorebird Group 2019); Common Birds in Steep Decline (CBS) and Watch List (WL) species from Boreal Partners in Flight Alaska Landbird Conservation Plan, Version 2.0 (Handel et al. 2021); and Birds of Conservation Concern for Bird Conservation Regions (BCR) 4 and 5 from Birds of Conservation Concern 2021 (USFWS 2021). BCRs 4 and 5 were used because the project area straddles the boundary between those two BRS.

Jenny indicated that the USFWS was in the process of working with the KNWR to develop a list of species for evaluation and that the list would include more than 31 species.

Jenny commented that the proposed 250-m buffer study area was not adequate for bald and golden eagles which would require a greater distance. Terry clarified that the 250-m buffer study area only applied to the vegetation and wildlife habitat mapping area, with the goal of assessing habitat changes over time from project activities. The mapping area is not designed to be a field survey area for wildlife. The survey area to be used for golden eagles and other nesting raptors would be addressed under the Raptor Nesting Study where surveys would be conducted within a 2-mile radius of suitable cliff nesting habitat above Bradley Lake.

Mary Kate Swenarton (USFWS) asked if there is any documentation on how the bird species were whittled down to the proposed list. At that point it was realized that the list of 31 proposed wildlife species along with their status had not been posted to AEA's website with the rest of the meeting materials. The list will be posted.

Jason Herreman (ADFG) commented that a 500-m buffer area around the diversion would not be large enough, especially for goats; goats would require an 1,800-m or 2-km buffer. Jason is concerned about disturbance to goats during construction from workers and other activities such as blasting. Bryan noted that construction of the diversion structure would be completed within one year. Terry noted that behavioral disturbance to wildlife is a different type of impact than changes in habitats that may be expected from project activities and climate change. The proposed 250-m mapping buffer is designed to address how habitats may change over time; it is not a disturbance buffer to be used during construction activities. AEA agrees that a disturbance buffer to avoid displacement of wildlife should be much larger for goats during the construction period, where practicable.

Jenny asked if the Wildlife Habitat Evaluation Study would identify potential compensatory mitigation. Betsy McGregor (Kleinschmidt) explained that the purpose of the studies was to gather the necessary information to describe existing conditions, evaluate potential impacts from the project, and develop protection, enhancement, and mitigation (PME) measures. Wendy Davis (ABR) added that the habitat mapping study is a habitat change analysis. Two maps will be developed – one of current conditions and the other of predicted future conditions. These maps will be overlayed to determine the potential habitat loss or change.

Jenny asked if the vegetation maps would address loss of water in Martin River. Terry responded that is the intent and noted a similar study that was conducted at the Eklutna Lake Hydro Project comparing historical conditions to current conditions after 63 years of very low flow in the Eklutna River. Bryan clarified that the Martin River would not be dewatered from the proposed Dixon Diversion Project; there would be minimum flows through the East Fork canyon into the Martin River and enough flow to allow salmon to migrate.

## Wildlife Habitat Evaluation Study

Terry Schick (ABR) provided a summary of the study plan and explained that quantification of habitat change from the project would be developed under the Vegetation and Wildlife Habitat Mapping Study. Habitat-use information for wildlife species would come largely from the scientific literature and the value of each of the available habitats would be categorized as High, Moderate, Low, or Negligible. He noted that the method has been used in other studies to assess habitat changes in Alaska, both from industrial project activities and climate change. The currently proposed list includes 31 wildlife species.

## Raptor Nesting Study

Terry Schick (ABR) provided a summary of the proposed study plan and explained that the previous project design included overhead power lines and there was concern over potential for bird collisions and electrocution, especially during migration. Since the project no longer includes any overhead power lines, the draft study plan was modified to collect baseline data on nesting raptors to minimize potential impacts. The study will identify potential cliff nesting habitat for golden eagles above Bradley Lake. (Bald eagle nesting habitat is known to occur along the coast and rivers in the area.) The nesting quality of the cliffs for golden eagles will be evaluated and surveys will be conducted following the USFWS protocols. The surveys for bald eagles near the coast, and possibly a second survey for golden eagles if needed, will occur later in time, closer to the start of construction, because nest locations can change over time.

## Wetlands Study

Betsy McGregor (Kleinschmidt) provided a brief summary of the study plan. The vegetation mapping will be completed under the Vegetation and Wildlife Habitat Mapping Study. The preliminary map will be used to identify where wetland assessments/delineations and functional assessments will occur. AEA will hold a pre-application meeting with the USACE to determine what portion of the impact area is potentially under their CWA Section 404 jurisdiction; wetland delineations will occur in these areas following the USACE methodology.

## General Discussion

The group scheduled a meeting for **April 1 at 2:00 pm** to discuss the study area to be mapped and list of wildlife species to be evaluated. Mary Kate requested the species list. It will be provided. Jenny suggested USWFS and ADFG meet prior to meeting with AEA to develop a list of species together and avoid conflicting direction. Leah Ellis (ADFG) confirmed that she is the main contact for ADFG.

Jason asked for more information regarding the construction work period. Bryan responded that the new power line would be placed underground along the road during May-July. New road construction would occur during the summer in June/July, with associated vegetation clearing occurring within the allowed Migratory Bird Treaty Act work window. Construction of the diversion structure would not occur until August after the snow is gone. The tunnel boring machine would operate year-round, and the Bradley Road would be cleared year-round up to the boring machine.

Jason asked about the noise and vibrations from tunnel boring machine. Bryan indicated that noise from the machine would not likely be heard because it would be underground. He noted that some of the typical noise from this activity is due to running diesel generators as a power source. Instead, AEA has designed the project to include the installation of an underground power line to power the construction activities, eliminating the need to truck diesel fuel up to the lake and noise from running diesel generators. Jason asked if there would be any seismic activity from boring machine. Bryan responded that the boring machine basically scrapes away chips of rock about 1 inch across and that seismic activity would likely be below detect level or less than magnitude 1, less than what would be generated by a truck. He added that blasting would occur to create the tunnel entrance. Bryan noted that FERC would place requirements on the construction activities and seismographs would be installed prior to construction for monitoring as part of ensuring dam safety.

Meeting Adjourned 11:15.