

Dixon Diversion Project
Update and Study Planning Meeting
Meeting Summary
April 1, 2024 2:00 pm – 3:00 pm

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

Subject: Project Description, Terrestrial Studies

Meeting Materials: [Dixon Diversion Project](#)

Presentation
AEA Potential Wildlife Species for Evaluation
ADF&G Recommended Habitat Mapping Extent and Wildlife Species List for Evaluation
(3/22/24)
USFWS Recommended Wildlife Species List for Evaluation (3/29/24)

Attendees: AEA: Bryan Carey, Ryan McLaughlin; Kleinschmidt Associates: Betsy McGregor; ABR: Terry Schick, Wendy Davis; ADF&G: Leah Ellis, Jason Herreman, Kyle Smith; USFWS: Mary Kate Swenarton, Jennifer Spegon, Stephen Miller (KNWR); Kenai Peninsula Borough: Julie Denison.

Meeting Summary

Meeting Goals

Bryan Carey (AEA) presented the goals of the meeting: review the purpose of the study program; complete consultation to finalize the study plans with respect to 1) the extent of the study area for the Vegetation and Wildlife Habitat Mapping Study; and 2) the list of species to be included in the Wildlife Habitat Evaluation Study analysis.

Study Program Purpose

Terry Schick (ABR) provided an overview of the purpose of the study program.

Project Nexus

Bryan summarized the elements of the proposed project and operations.

Vegetation and Wildlife Habitat Mapping Study

Wendy Davis (ABR) presented the goals and objectives of the study and methods. She stated that the extent of the study area to be mapped should include areas likely to be directly or indirectly impacted by the project. ADF&G had provided AEA with recommendations for the extent of the area to be mapped under this study (ADF&G 3/22/2024). Wendy presented a map showing the direct impact area with both a 250-m and 2-km buffer as well as a map depicting a hybrid buffer of 250-m around the Martin River floodplain and Bradley Lake and a 2-km buffer around the Bradley Lake Dam, proposed new access road and the inlet and outlet of the proposed Dixon Diversion tunnel.

Leah Ellis (ADF&G) confirmed that the hybrid 250-m and 2-km buffer shown on slide 10 accurately portrayed ADF&G's 3/22/2024 comments regarding the extent of area that the agency would like to see mapped.

Jason Herreman (ADF&G) expressed concern over effects the drilling rigs may have on denning bears, wolverines, but he has not reviewed available information on what the potential impacts would be. Bryan clarified that the tunnel boring machine would only need to be operated during one winter and, except near the inlet and outlet, would be operated 500 to 1,500 ft subterranean. During that time, vehicles would also be present traveling to the entrance each day. Jason responded that would mean potentially one year of den interruption which would not likely have a huge impact for these species overall.

Bryan commented that most of the area is above the tree and shrub level; it is mostly large rock ridges with maybe a few small shrubs where the borer would be launched. He noted that in the fall, the bears go over to Bradley where they feed on berries. Jason stated that the area provides denning habitat for brown bears, wolverines and marmots and to a lesser extent black bears.

Stephen Miller (USFWS) asked ADF&G what species they consider "large" mammals. Leah responded that ADF&G's recommendation for large mammals included both bears, wolverine, goats and moose and noted that Jason had just mentioned marmots.

Wildlife Habitat Evaluation Study

Terry presented the goals, objectives, and methods of the study. He noted that there is little current project-specific data available and that they will use all available information especially in Upper Kachemak Bay. Terry discussed the potential list of wildlife species to include in the evaluation. ADF&G added black bear, brown bear, wolverine, hoary marmot and Keen's myotis to the list of species to be evaluated and removed the Alaska marmot (ADF&G 3/22/24). The USFWS added 27 bird species and two mammals (USFWS 3/29/24).

Terry commented that many of the bird species USFWS added use estuarine and mudflat habitats and that many are migrant shorebirds. These avian species had not been included in the proposed list of species to include in the evaluation because the project would have minimal or insignificant impacts to these habitats and species. Jenny Spegon (USFWS) responded that if water is diverted from the Martin River, there would be less water available, and that the estuarine habitat would change over time. Bryan noted that sand and larger particles would drop out of the Dixon glacial water before being diverted to Bradley Lake and continue to be carried down the Martin River and that suspended fine silt in the diverted water would go through the Bradley powerhouse. He noted that the Martin River delta is about a mile from the Bradley River delta and powerhouse in Kachemak Bay and that the whole upper Kachemak Bay is mudflats at low tide inaccessible from boats. Bryan added that there are four large glacial rivers, including Fox and Sheep rivers, at the head of Kachemak Bay that contribute substantial sediment to the tidal flats. Jason agreed that given the inputs of sediment from glacial rivers at the head of the bay, any changes from the proposed diversion would be negligible.

Jenny commented that estuarine habitat would not be the only habitat that would be shrinking from the proposed project and noted anticipated changes in the Martin River. Bryan responded that the diversion is anticipated to lead to vegetation encroachment in the Martin River floodplain, creating more habitat.

He cited the Wosnesenski system where the glacier has retreated and as a result, the floodplain is revegetating. Wendy pointed out that the Martin River riparian area is included within the *Vegetation and Wildlife Habitat Mapping Study* area.

Discussion

Bryan requested confirmation on the proposed hybrid 250-m and 2-km habitat mapping area as proposed by ADF&G. Jason indicated that he is amenable to that study area.

Terry noted that the study area includes estuarine habitats, and that the analysis could include all of the avian species added by USFWS. Mary Kate Swenarton (USFWS) noted that the list recommended by the USFWS was narrowed down from a larger list of species. She noted that the USFWS recommended species were grouped by habitat type and requested that at least one species from each of the habitat types noted be included in the analysis. Terry responded that the USFWS proposed list was reasonable. Mary Kate noted the importance of including the Steller's eider in the analysis as it is the only ESA-listed species in the area. Terry concurred and indicated that they were looking for detailed information on occurrence in Kachemak Bay. He noted that surveys have been conducted elsewhere in Cook Inlet where the birds are more common and numerous.

Mary Kate noted that observations could be found on ebird, but that is citizen-based voluntary reporting and not a lot of people cross Kachemak Bay. Bryan added that people rarely use the upper Kachemak Bay area because of the mudflats and noted that most use is typically west of the Martin River. Jenny added that mapping of baseline habitat and future habitat and the effects analysis will be the important for understanding potential affects and for Steller's eiders specifically.

Next Steps

AEA will try and get agency staff out to the site in June, likely travelling from Anchorage.