

**Kenai Hydro, LLC
Grant Lake Hydroelectric Project
Study Plan Discussion Public Meeting
Moose Pass Community Hall
June 3, 2010, 1:00 pm – 3:30 pm**

In Attendance

Jeff Anderson, U.S. Fish and Wildlife Service (USFWS)
Jenna Borovansky, Long View Associates (LVA)
Valerie Connor, Alaska Center for the Environment
Mike Cooney, Citizen
Mark Luttrell, Resurrection Bay Conservation Alliance (RBCA)
Katherine McCafferty, Army Corps of Engineers (USACE)
John Morsell, Northern Ecological Services (NES)
Sally Morsell, NES
Jason Mouw, Alaska Department of Fish and Game (ADFG)

Patrick O’Leary, United States Forest Service (USFS)
Steve Padula, LVA
Doug Palmer, USFWS
Mike Salzetti, Kenai Hydro, LLC (KHL)/Homer Electric Association (HEA)
Jack Sinclair, Alaska Department of Natural Resources/Parks Division (ADNR)
Cassie Thomas, National Park Service (NPS)
John Wolfe, HDR
Brad Zubeck, KHL/HEA

Meeting Summary

Agenda

- Introductions
- Solicit Input from Participants on Study Plans to Discuss
- Discuss Draft Study Plans

Brad Zubeck (KHL) welcomed meeting participants. Steve Padula (Long View Associates) explained the agenda for the day was to discuss draft study plans and reply to questions. He polled meeting participants regarding plans of interest to determine the order of discussions. Notes have been organized by study plan topic rather than in an exact chronology of the meeting.

Participants provided verbal comments that are summarized below to capture topics that were discussed at the meeting. However, formal written comments will be submitted by participants prior to the comment deadline of July 6, 2010 that will supersede any initial comments offered at the meeting.

Aquatic Resources Draft Study Plan

Doug Palmer (USFWS) summarized general issues that will be addressed in the USFWS written comments on the Aquatic Resources Draft Study Plan, including:

- USFWS prefers more specific objectives related to assessment of potential project impacts, including discussion of testable hypotheses.
- USFWS would like to see study assumptions better explained and justified (e.g, basis for assumption that there is no grayling or whitefish spawning in Grant Creek).
- USFWS suggested that temperature should be added for all life histories in Table 2 on page 23 of the draft Aquatic Resources Study Plan.
- USFWS would like more information on assumptions related to escapement estimates, especially related to stream life and observer efficiency estimates.
- USFWS suggested several revised methodologies:
 - There is no need for CO₂ anesthesia during tagging.
 - Use a drift gill net to catch Chinook in Grant creek.
 - Utilize a second fixed receiver station at the mouth of Grant Creek for telemetry.

Doug Palmer (USFWS) asked whether monitoring of smolt out-migration had been considered as a more direct measurement of productivity information. John Morsell (NES) indicated that monitoring of adult returns as described in the draft study plans is an adequate measure of productivity for impact assessments. Mike Cooney added that annual out-migration seems important to obtain reliable population estimates rather than just relying upon egg-survival estimates and adult returns.

Doug Palmer (USFWS) questioned whether use of a weir was considered. John Morsell (NES) replied that the study team felt that the methodology in the draft study plan was sufficient. John Morsell (NES) noted that a weir had been installed in Grant Creek by researchers in the 1980s late in the season to monitor coho salmon, but that high flows likely prohibit use of a weir during the chinook and sockeye salmon runs starting in July.

Doug Palmer (USFWS) asked whether rainbow trout were using Reach 5. John Morsell (NES) explained that this study season will focus on gathering more information on fish use in Reach 5, and that May study work has shown that some rainbows are getting into Reach 5 with indications that rearing is occurring, as young of year (YOY) were found, but no spawning rainbow trout were found in Reach 5 to date.

Doug Palmer (USFWS) suggested radio tagging sockeye and coho in addition to Chinook to better understand use in Reach 5. The group emphasized an interest in having more information (than was available from the 2009 studies) on Reach 5 fish use and access.

Katie McCafferty (USACE) stated that information on aquatic habitats and potential effects on Vagt Creek at the proposed road crossing will be necessary.

The timing of minnow trapping outlined in the draft study plan (May, July, September) was discussed.

The group also re-iterated comments from the scoping meeting that investigations on impacts to Grant Creek fisheries should consider broader impacts that may occur in the Kenai River watershed.

Water Resources Draft Study Plan

Katherine McCafferty (USACE) noted that the USACE would be looking at the environmental analysis to speak to all potential physical substrate changes and sediment deposition around the shoreline of Grant Lake, at the outlet of penstocks, or any other area of impact on waters of the United States (not just at spawning gravels).

Doug Palmer (USFWS) noted that temperature information will be important to determine winter habitat impacts (e.g., potential temperature impacts on habitat due to winter water releases, in particular relative to incubation, exposure, and hatch timing). John Morsell (NES) stated that information collected according to the draft study plan should allow modeling of temperatures to determine potential effects on fish.

Cultural Resources Draft Study Plan

Jenna Borovansky (LVA) noted that HDR cultural resources specialists were in the process of scheduling a consultation meeting with identified parties and that in general, cultural resources issues would be handled in separate meetings due to confidentiality requirements.

Katherine McCafferty stated that the USACE is also required to consult regarding cultural resources under Section 106 of the National Historic Preservation Act and would get back to KHL if the USACE had unique Section 106 consultation requirements.

Mark Luttrell (RBCA) stated that he is concerned the fluctuating lake levels proposed will impact identified historic mine sites. He also noted that he would like the Area of Potential Effect (APE) to be larger to account for uncertainty. Jenna Borovansky (LVA) added that the State Historic Preservation Officer (SHPO) would be consulted at the upcoming consultation meeting regarding the size of the APE, and that she understood that definition of the APE should encompass all potentially impacted areas, but also not be so large as to disturb areas too broadly outside of APE.

Terrestrial Resources Draft Study Plan

Katherine McCafferty (USACE) summarized the USACE requirements for alternatives analysis in an environmental document. She noted that the USACE will need to determine that the least environmentally damaging alternative is being proposed. Alternatives considered for analysis should meet the Project purpose and be considered practicable. She also requested that the wetlands analysis section of the study plans and other licensing documents recognize that the USACE will be considering potential impacts (positive or negative) to all Waters of the United States, not solely wetlands. She indicated that it will be necessary for the application to define the mean high water mark of Grant Lake in order to determine potential impacts on the Waters of the United States.

Katherine McCafferty noted that the methods identified in the terrestrial resources draft study plan seemed appropriate, and offered to provide the Alaska 0902 guidance document, if necessary. She also noted that KHL may want to discuss with the USACE whether the Nationwide Permit for Hydropower was applicable or appropriate for this project.

Cassie Thomas (NPS) suggested that analysis of potential mass-wasting risk and vegetation loss to wind throw along the road corridor should be considered.

Cassie Thomas (NPS) recommended that dippers be added to the harlequin surveys. Sally Morsell (NES) indicated that dipper observations could be recorded during the harlequin surveys.

Cassie Thomas (NPS) also asked if macro-invertebrates were being studied, in particular recognizing their importance as a food source for dippers. John and Sally Morsell (NES) indicated that macro-invertebrates were being sampled per the aquatic resources draft study plan.

Recreation and Visual Resources Draft Study Plan

Patrick O'Leary (USFS) explained the various types of easements for the Iditarod Trail held by the USFS, stating that he believed the Grant Creek section was involved in an early transfer, so the USFS holds a 100-foot easement for the trail on state lands. He suggested the KHL continue to work with the USFS regarding identifying the location of the Iditarod Trail and the proposed access road to avoid and minimize potential conflicts. He noted that there is not much visitor use data available for the Grant Lake area, so the study report will be useful.

Cassie Thomas (NPS) inquired about the timeline in the draft study plan, as consultation with the workgroup for review of potential survey materials had not occurred yet. She noted that it will be important to gather winter and hunter use data, and that the study should consider information in a document titled "Report of the Kenai Peninsula Borough Trails Commission, March 2, 2000" and consider information on the proposed wilderness hut-to-hut system. John Wolfe (HDR) noted he was familiar with this information. Cassie Thomas (NPS) noted that views from the air may be useful to consider for the aesthetic study. She also encouraged KHL to contact the BLM regarding input on the Iditarod Trail.

The group discussed the height of the intake tower, and Mike Cooney asked whether it would interfere with airplane use of the lake. The location and height of the surge tank was also discussed, and KHL was asked to consult FAA regulations regarding any potential conflicts between float plane use in the area and the proposed location of project facilities.

Jack Sinclair (ADNR) noted that land use designations by the Parks division should be considered, as the Trail Lakes are in a state parks management area. He noted that ADNR-Parks cooperates with the USFS on management of the Vagt Lake trail. He also noted that there are easements that were granted to the USFS on Falls Creek to reach the Crown Point road.

Closing

The meeting adjourned at approximately 3:30 pm. KHL representatives stayed at the meeting location until 5:45 pm, as the time was advertised to allow additional participation.

Action Items

- KHL confirmed that comments will be accepted on draft study plans until July 6, 2010.
- Pat O'Leary (USFS) to research and provide GIS coordinates and confirmation of proposed location of the Iditarod Trail to KHL.

- USFS and KHL to work together to confirm the location of the Iditarod Trail relative to the proposed access road.
- Katherine McCafferty to confirm whether the Corps has any unique Section 106 consultation requirements. (HDR cultural resources leads will also confirm.)

Meeting Materials

Draft study plans are available on the Project website (www.kenaihydro.com).