

Jessica Stockel

From: Johnson, Shawn L (DFG) [shawn.johnson@alaska.gov]
Sent: Monday, June 21, 2010 3:55 PM
To: Dean Orbison
Cc: Tydingco, Troy A (DFG); Charles Mike Prewitt; Melissa Dinsmore; Chadwick, Robert E (DFG); Fowler, Patrick A (DFG); Susan Walker; Richard_Enriquez@fws.gov; Perry Edwards; Kanouse, Kate M (DFG)
Subject: RE: Draft Water Temperature Effects Report, Blue Lake Hydro Project (FERC No. 2230) Expansion

Good Afternoon Dean,

ADF&G has the following questions and comments on the draft report Evaluation of Change in Blue Lake Hydroelectric Project Intake Location on Water Temperatures and Anadromous Salmonid Utilization in Sawmill Creek (FERC No. 2230).

1. How will water temperatures in Sawmill Creek be impacted during project construction given that it may be necessary to control the level of Blue Lake at certain construction stages to permit working in the dry?
2. How will water temperatures in Sawmill Creek be impacted during the two seasons that the newly expanded reservoir is filling?
3. Is it correct to assume that there will be no spill during the filling process and all flows in Sawmill Creek will be from the project intake?
4. At what point during the filling process will the project intake be switched from the existing intake to the new intake and how will this effect water temperatures?
5. How will increased summer water temperatures (up to 3°C) in Sawmill Creek impact spawning timing for salmonids in Sawmill Creek? The modeling of incubation and subsequent emergence timing in the analysis presented in this report assumed that spawning timing would remain the same, regardless of changes in the temperature regime of Sawmill Creek. As noted in the report, this assumption may not be valid, in that salmon may adjust their spawning timing in response to differences in temperature (e.g., warmer water temperatures may delay spawn timing for salmonids).
6. How would delayed spawning timing impact incubation and emergence timing?
7. How will increased summer water temperatures in Sawmill Creek impact spawning and incubating steelhead? Steelhead provide a rare and important fishery. Incubating steelhead embryos will likely be affected by warmer spring and summer water temperatures.
8. How will increased summer water temperatures in Sawmill Creek impact benthic macro invertebrates, an important food source for resident and rearing fish? Will warmer summer water temperatures change the life history patterns of these prey species? If so, how would that effect prey availability for resident and rearing fish?

Thank you for the opportunity to provide these belated comments. Please let me know if you have any questions.

Shawn Johnson
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From: Dean Orbison [<mailto:deano@cityofsitka.com>]
Sent: Saturday, January 30, 2010 4:07 PM
Subject: Draft Water Temperature Effects Report, Blue Lake Hydro Project (FERC No. 2230) Expansion

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To: Blue Lake Expansion Stakeholder

Attached please find the subject draft report. The report was prepared by EES consultants of Bellingham, WA, to document effects of a proposed change in elevation of the water intake for the subject project.

We would appreciate your comments at your earliest convenience. If you have questions or concerns, don't hesitate to contact me at 907-747-1827, or via email.

Thanks for your participation in the Blue Lake project Expansion.

Dean.

Attachments:

[Blue Lake Water Temperature report draft 1-29-10.pdf](#)

(781 KB)