



# SUSITNA-WATANA HYDRO

## Meeting Notes Fish and Aquatics Resources Technical Workgroup Meeting March 26, 2013

**LOCATION:** Alaska Energy Authority – Board Room  
813 W. Northern Lights BLVD.  
Anchorage AK

**TIME:** 9:00 am – 4:00 pm (AKST)

**SUBJECT:** 2013 Q1 update

**GOAL:** To provide an update on Fish & Aquatic Program activities occurring during the first quarter of 2013.

**ATTENDEES:** Steve Padula McMillen, Kathryn Peltier McMillen, Molly Dischner Alaska Journal of Commerce, Joe Klein ADF&G, Jeff Davis ARRI, Dudley Reiser R2, MaryLouise Keefe R2, Mike Gagner R2, Michael Link LGL, Catherine Berg USFWS, Jack Erickson ADF&G, James Brady HDR, Stormy Hought ADF&G, Eric Rothwell NMFS, Jan Konigsberg AK Hydro Reform, Scott Crowther Ratepayers, Betsy McGregor AEA

**ON PHONE:** Gabe Kopp R2, Dara Glass CIRI, Jennifer Curtis EPA, Sue Walker NMFS, Leanne Hanson USGS, Chris Holmquist-Johnson USGS, Greg Aubel USGS, Alice Shelly R2, Tim Nightengale R2, Matt Love VNF, Kim Sager DNR, Becky Long CSDA, Dana Schmidt Golder Associates, Alan Olson R2, Michael Barclay HDR

AEA has committed to a series of quarterly meetings for the next two years of study. These meetings are to provide an updated status of the study program. Today is the first of three meetings (March 26-28, 2013) which representing the first set of quarterly meetings to cover water-related resources. The following meeting notes are to capture any significant discussion/information in addition to the materials provided on the Project website (<http://www.susitna-watanahydro.org/>). The meeting agenda and materials are available under the “previous meetings” tab (link provided under the meetings tab) on the Project website.

To receive regular updates of new materials posted on the Project website, one can be added to the List Serve emailing list. Please contact Justin Crowther at [jcrowther@aidea.org](mailto:jcrowther@aidea.org) or subscribe using the link provided on the Project website home page.

### Fish and Aquatic Resources Presentation

#### **FERC Study Plan Determination – Slides 2-6 (MaryLouise Keefe, R2)**

- The Fish Harvest Study is now under the oversight of the recreation and socioeconomics.

#### **Fish Distribution and Abundance RSP 9.5, 9.6 - Slide 7 (MaryLouise Keefe, R2)**

- Golder Associates has joined the fish team. Dana Schmidt (Golder Associates) was the juvenile anadromous and resident fish lead for the 1980s studies. He will assist in the Lower River sampling efforts for the Fish Distribution and Abundance and Instream Flow studies.
- Permitting requirements may restrict field efforts.
- PIT tag arrays have been set up in a few locations in Whiskers Slough. A few configurations have been tested (e.g., array on the bottom, arrays vertically distributed) and the preliminary testing has gone well.
- There will be additional field efforts that will target juvenile sampling in Whiskers Slough and Slough 8A.

#### **Salmon Escapement - RSP 9.7 - Slides 8-9 (Michael Link, LGL)**

- Reviewed scope for 2013 and adopting the two recommendations from FERC in the Study Plan Determination. Lower velocity, clear water, and icing of the fishwheels may limit the ability to extend the Curry fishwheel operation fully through the end of September. Installing a weir at the dam site is not feasible due to the flows and size of the river at that location; the use of sonar will be investigated.
- Calculating mark rates, rather than abundance estimates, is an objective of this study.
- Eight additional fixed radio telemetry stations have been added for 2013 efforts, resulting in a total of 27 stations compared to 19 in 2012.
- Jeff Davis asked if AEA had considered using tags that sense muscle activity to aid in identifying spawning activity in turbid waters. During discussion it was questioned if the muscle activity could be confirmed as a sign of spawning.
- Jeff Davis asked if the higher number of sockeye tagged in the 1980s studies was due to more efficient tagging or a higher population than in 2012. Michael Link said that he could not tell if the sockeye population has decreased, but the 2012 fishwheel efficiency seemed adequate and for at least Chinook, efficiency was high.
- Although the Devils Canyon fish wheel operations will target known run times for Chinook (mid-June to late July), all species caught during the field operation will be tagged.

#### **River Productivity - RSP 9.8 - Slides 10-13 (Tim Nightengale, R2)**

- Reviewed additions to the final implementation plan submitted to FERC, which included an additional site in the Lower River that coincides with an Instream Flow location, and placement of emergence traps at slow-water sites at each station.
- The winter pilot study deployed a drift net under thick ice at Whiskers Slough as a feasibility test. The drift net was set at the same location that a minnow trap was set.
- The reference site on the Talkeetna River is still under consideration and will be decided upon with TWG input at a later date.

#### **Fish Passage - RSP 9.11 - Slides 14-15 (MaryLouise Keefe, R2)**

- A Fish Passage Technical Team carries out this study and updates of their work will be provided at quarterly F&A TWG meetings.
- "Retrofit" refers to fish passage that is geographically or temporally separate of the dam structure.
- Eric Rothwell would like to attend the Fish Passage Technical Team meetings.

#### **Historic Synthesis - "Attachment B, Synthesis of Existing Fish Population Data" (MaryLouise Keefe, R2)**

Materials presented include the table of contents (document found under March 01, 2013 Filing, as well as the 2012 Environmental Studies, under the Documents tab of the Project website).

- The periodicity data was consistent with that which was provided in the Instream Flow synthesis.
- If there are areas of one's particular interest, it is encouraged that they review the original report(s).

**Fish Barriers Study - RSP 9.12 - Slides 16-22 (Michael Barclay, HDR)**

- A firm date will be provided by 3/28/13 for the delivery of the draft Implementation Plan.
- The closest gages to Devils Canyon are currently at Gold Creek and Tsusena Creek.
- Discharges in Devils Canyon and at the dam site will be prorated.
- Instream Flow and Fish Barriers target species will be the same.
- Although Fish Barriers will not be extending the study downstream below Three Rivers, many studies that provide data to Fish Barriers will be.

**Genetic Baseline Study - RSP 9.14 – Slides 23-24 (Michael Link, LGL)**

- ADF&G is leading the Genetics Study efforts.
- A draft Operational Plan was prepared by ADF&G and is currently under AEA's review. The draft plan will be distributed to USFWS and NMFS by the end of this week (March 29, 2013) to initiate a 15-day comment period for consultation. The draft plan will also be made available to licensing participants on the Project website; a notification will be provided via List Serve when the draft document is available.
- AEA will confer with ADF&G to identify the consultation that occurred with USFWS and NMFS while creating the draft Operational Plan.

**Habitat Characterization Video – RSP 9.9 (James Brady, HDR)**

- A map book and instructions on how to obtain this 2012 habitat videography will be available on the Project website under the Documents tab. The videography is not posted due to the large size of the files. There will be several hard drives available for licensing participants to "check out" from AEA.
- While viewing the videography, the habitat classification applied to particular areas of the river was discussed, and this topic will be further discussed in a future small technical meeting.

**General Discussion**

Final Study Plans will be available on the Project website once FERC required modifications are made and after the resolution of any study disputes.

Action Items	Date	Responsibility
Provide a delivery date of the draft Detailed Plan for the Fish Passage Barriers Study.	3/28/13	AEA
AEA will follow up with the ADF&G genetics lab to identify what consultation occurred with USFWS and/or NMFS when creating the draft Operational Plan.	4/30/13	AEA
Post the instructions and map book for the 2012 habitat videography on the Project website. Thumb drives with videography available for “check out” through AEA.	4/1/13	AEA
Schedule a subgroup meeting to discuss habitat classification.	After 4/1/13	AEA