August 2013

RE: ALP Progress Report P-13563 Sweetheart Lake Hydroelectric Project


This ALP progress report is to supplement the 6 month Preliminary Permit reports required by the Federal Energy Regulatory Commission for all preliminary permit applicants.

Per our approved ALP Communications Protocol, JHI shall provide:

An updated log of oral and written communications;
• Descriptions of all major action taken on the project;
• Copies of all comment letters and other written correspondence, including those with the Commission staff;
• Copies of all meeting summaries and teleconferences call records, including those with Commission staff;
• Schedule for the next 6-month licensing period, including action items;
• Other information pertinent to the licensing.

1. An updated log of oral and written communications.

JHI has had oral and written communications with stakeholders and agencies related to the filing of study plans and six month reports.

JHI and contractors have had meetings, communications and shared documents with the United States Forest Service personnel related to: Draft License Application and Exhibits, Coastal and Forest Road options, Recreation, Scenic Management, Aquatics, Wildlife Analysis, Botanical, Wetlands, and other facets of the environmental studies, processes and licensing. Some of these meetings and communications also included FERC representatives.

JHI and contractors have had oral communications, e-mails and meetings with Douglas Island Pink and Chum hatchery (DIPAC) personnel on various hatchery and water quality related issues. These discussions include the advice and consultation with DIPAC for determining their preferred method of downstream outmigration for annually transporting of their sockeye smolt from Sweetheart Lake and placing sockeye smolt in Sweetheart Creek, below the anadromous barrier falls. These communications have included design considerations and meeting that included FERC Personnel and Alaska Department of Fish and Game (ADFG) personnel.
Additionally, JHI and contractors have met over the phone, e-mail and in person with NMFS fish collection and transportation experts located in the State of Washington to assist JHI in past research, attraction and design of fish collection and transportation systems.

JHI and contractors have had oral communications, e-mails and met with in with Army Corp personnel related to wetland issues and 404 permitting to include the submission of an application for a Department of Army permit and request for a Jurisdictional Determination.

JHI has had oral communications, e-mails and met with Alaska Department of Natural Resources personnel to discuss and consult and submit applications on: water rights and reservations, hydrology, and tideland leases and easements required for the proposed coastal road and submarine transmission lines for the project infrastructure and facilities.

JHI and contractors have had oral communications, meetings and site visits with ADFG personnel related to Fish and Game concerns to be incorporated in Wildlife, Terrestrial, Aquatic studies, Gilbert Bay salinity, Fish Collection Barge/transport system and Water Rights Reservation and request for accommodations. JHI and ADFG have collaborated on collecting bear hair samples at Sweetheart Lake and establishing game camera as the Sweetheart Lake and Sweetheart Creek locations. JHI worked with ADFG staff in preparing, submitting and gaining approval for a 2013 Research Fisheries Permit. JHI has had telephone, e-mail and personal discussions with ADFG staff (with some communications with FERC staff) on providing research assistance to ADFG that is beyond the scope of licensing and would be part of an out of license agreement.

JHI has had oral and personal communications with USFWS personnel that included participation in wildlife work group meetings.

JHI and contractors have had telephonic, e-mail and written communications with NOAA/NMFS personnel on aquatic study plans, salinity modeling and testing of Gilbert Bay, fish collection and transportation. JHI contractor flew to the State of Washington to meet with NMFS experts on fish collection and transportation. JHI and contractors had several conversations with NMFS related to threatened and endangered species. JHI received e-mail correspondence related to the adequacy of JHI’s salinity studies and also received a draft review from the JHI Kai Environmental Wildlife Analysis- Appendix A-correspondence 1 from NMFS.

JHI and contractors have had telephonic, e-mail, written and meetings with members of the Douglas Indian Association, a federally recognized tribe. These conversations were related to archeological, cultural, historical and recreational areas.

JHI and contractors have had telephonic and e-mail correspondence related to FERC comments on the DLA and PDEA, engineering design, fish collection/transport, aquatic issues, wildlife issues, cultural and archeological issues, threatened and endangered species issues, terrestrial and botanical issues and other environmental and engineering aspects to the Sweetheart Lake.
Hydroelectric facility as well as discussions on administrative questions. Additionally, a conversation held on July 18th between JHI Contractor dam engineer concluded that to meet requirements for a 100 year flood that the dam should be raised by 6.1 feet from the previous design.

2. Description of all major actions taken on the project.

Since the last reporting period:

JHI initiated major and minor contracts with contractors for all remaining study plans based on 2013 Agency and Public meeting held at Centennial Hall in Juneau, Alaska on January 31 and February 1, 2013. This meeting was a 2 day session that included updates on all study areas and the status of JHI’s execution of the Alternative Licensing Process. These contracts include but are not limited to: Scenic Management, Aquatics, Wildlife, Hydrology, Water Quality, and Salinity.

Detailed recordings that include audio and video have been retained of each session of the 2013 Agency Meeting and are available on the Juneau Hydropower website at www.juneauhydro.com. Additionally a summary report of this meeting was filed after the notice of JHI’s successive permit cuss

Submitted and received 2013 ADFG Research Fisheries Permit

JHI continued to operate a base camp for environmental studies at Sweetheart Lake in accordance with JHI USFS Special Use Permit. JHI installed Game Cameras at several locations at Lower Sweetheart Lake and at Sweetheart Creek. Game Cameras at the Sweetheart Lake were installed with ADFG wildlife personnel along with bear hair snares. After bear sampling these lake cameras were placed in areas to determine goat presence. Game cameras at the Sweetheart Creek and Gilbert Bay locations were determined with consultation with ADFG wildlife personnel. Game cameras were installed in June 2013 at Sweetheart Lake and in April 2013 at Gilbert Bay.

JHI conducted an extensive water/salinity sampling at Gilbert Bay during April 2013 that demonstrated a significant mixing zone/ turnover of water at each tide in Gilbert Bay. A mathematical synopsis of the measurements was sent to the Aquatic Working Group. Appendix B- JHI Salinity measurement spreadsheet

JHI and contractors interviewed salmon fishermen who traditionally fish the Port Snettisham area for their observations of herring and sea lions.
JHI and contractors refined drawings and design plans for the proposed dock, access road to powerhouse, powerhouse and tailrace, damsite, mobilization areas as well as a potential site and engineering plans for a future USFS cabin site.

JHI continued to take stream discharge reading and measurements and made several trips to project location to record and take information from stream gages in Lower Sweetheart Lake and Sweetheart Creek.

Continued to conduct fisheries and aquatic life studies as permitted under our ADFG Research Fisheries Permit to include a spring and summer study of fisheries presence in Lower Sweetheart Lake, recording stream and lake temperature gages, taking water samples and photo documenting all stream habitat that enter Lower Sweetheart Lake. JHI along with ADFG personnel conducted field analysis with JHI aquatic contractor and ADFG personnel to investigate rainbow trout spawning and life cycle habitat. JHI contractors collected macroinvertebrate samples at Sweetheart Lake.

JHI made application for tideland lease with the Alaska Department of Natural Resources, (ADNR) Division of Mining, Land and Water and had e-mails and short meetings with ADNR personnel.

JHI made application for a wetlands jurisdictional determination with US Army Corp of Engineers (USACE) and had consultation meetings with USACE personnel.

JHI made application for an interconnection agreement with the Alaska Industrial Development and Export Agency that owns but does not operate the Snettisham Transmission line and Thane substation.

3. **Copies of all comment letters and other written correspondence, including those with the Commission staff;**

Written correspondence that JHI has received or sent during this period:

On November 29 and November 30, 2012, JHI received notice that the National Park Service (NPS), National Marine Fisheries Service (NMFS) Alaska Electric Light & Power (AEL&P) US Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADFG) and the US Forest Service (USFS) all filed comments related to the Draft License Application (DLA) and Preliminary Draft Environmental Assessment (PDEA) that JHI filed on August 31 2012. These comments as with all foregoing correspondence unless otherwise indicated are available on FERC E-library, a copy at the Juneau, Alaska Public Library and at the JHI website: [www.juneauhydro.com](http://www.juneauhydro.com)
Additionally, all FERC filed documents are sent to stakeholder list on or just after documents are accepted and posted to the FERC E-library system.

On November 30, 2012, JHI applied to FERC for a successive preliminary permit for the Sweetheart Lake Hydroelectric Facility. The application was recorded on FERC E-library on December 3, 2012.

On December 1, 2012, JHI received comments and a Resolution of support from the Alaska Native Brotherhood (ANB) Camp 70 Resolution 02-12 supporting the licensing, development and operation of the Sweetheart Lake Hydroelectric Project. The ANB is Alaska’s oldest civil rights organization. The ANB was founded in 1912 to address racism against Alaska Native peoples in Alaska. For the first half of the 20th century, the ANB and the Alaska Native Sisterhood were the only organizations working for the civil rights of Alaska Natives in the Alaska territory and state.

On December 12, 2012, JHI submitted additional information to FERC to provide clarification on the water storage calculation on the previously submitted application for a successive preliminary permit.

On January 7, 2013, a meeting was held at the Douglas Island Pink and Chum (DIPAC) hatchery to discuss DIPAC salmon collection and transportation. An agenda was sent to participating agencies and a meeting summary was filed on January 9, 2013.

On January 9, 2013, JHI received a notice and letter from FERC that JHI’s preliminary permit application was accepted for the Sweetheart Lake Hydroelectric Project. On January 22, 2013, JHI responded to a letter from FERC received on November 26, 2013. On November 26, 2012, Juneau Hydropower, Inc. (JHI) received the Federal Energy Regulatory Commission (FERC) Comments on Draft License Application for the Sweetheart Lake Hydroelectric Project. The letter discusses and comments on JHI’s study plans and reports; content and format of the draft application and Preliminary Draft Environmental Assessment; and implementation of the Alternative Licensing Process. Further JHI received a, “request to file within 60 days of the date of this letter, a plan and schedule for a study plan meeting with all interested licensing participants to discuss the study plans and study reports filed to date, and any additional data needs that will need to be addressed before the next study season commences. In addition, the next steps before the preparation of your final license application should be discussed”.

In its response JHI scheduled a meeting for January 31st and February 1st, 2013, with all interested parties including resource agencies, tribes, and other interested stakeholders. The purpose of the meeting was to review studies performed; results to date; and address any additional information and study needs for the next study season. The meeting will take place at Centennial Hall in Juneau and will be available to participants outside the Juneau area via web presentations and telephonic participation. A copy of the agenda was attached to the letter along
with assurances that specific dial in numbers and web connections will be provided to stakeholders in advance of the meeting.

A record of the meeting, an updated study schedule, and additional features to the communications protocol were agreed to be prepared following the meeting and submitted to the Commission as part of the project record.

On January 30, 2013, JHI and the USFS met and had a meeting related to the JHI’s proposed project coastal road/trail, proposed recreational improvements and timber disposition. A meeting agenda was established and sent to the USFS.


On November 26, 2012 JHI was requested by FERC “to file within 60 days of the date of the letter, a plan and schedule for a study plan meeting with all interested licensing participants to discuss the study plans and study reports filed to date, and any additional data needs that will need to be addressed before the next study season commences. In addition, the next steps before the preparation of your final license application should be discussed”.

JHI scheduled and conducted a meeting for January 31st and February 1st, 2013, with all interested parties including resource agencies, tribes, and other interested stakeholders. An agenda, meeting notices and meeting logistics, call in numbers were established.

On January 31, 2013 JHI receives a copy of a letter sent by US Senator Lisa Murkowski to the FERC related to and supporting the Sweetheart Lake Hydroelectric Facility and the licensing process.


On February 12, 2013, JHI files a meeting record and supporting documents for its January 30, 2013 meeting with the USFS.

On February 13, 2013, JHI receives a Motion to intervene on its successive permit from Alaska Electric Light & Power (AELP)

On February 14, 2013, JHI receives from FERC Notice of successive permit application accepted for filing and soliciting comments, motions to intervene and competing applications.

On February 22, 2013 JHI receives a Motion to intervene on its successive permit by the US Forest Service.

On March 25, 2013, JHI files an Aquatic Group Meeting Record for a meeting conducted on March 15, 2013.

On April 4, 2013, JHI files a Cultural Group Meeting Summary for a meeting conducted on March 20, 2013.

On April 11, 2013 JHI receives order from FERC issuing preliminary permit and granting priority to file license.

On April 23, 2013, JHI receives and Errata Notice from FERC.

On April 25, 2013, JHI files Final Terrestrial and Botany Reports: Biological Assessment for Sensitive Species; Invasive Species Risk Assessment; Botany Resource Report for Plants and Rare Species.

On April 29, 2013 JHI files a Wildlife Working Group Meeting conducted on April 17, 2013.

On April 30, 2013, JHI files detailed meeting summary and access to audio and video material for the 2013 study plan meeting conducted on January 31 and February 1, 2013.

On May 8, 2013, JHI files a Wildlife working group meeting summary and supporting documents from April 24, 2013.


On May 24, 2013, JHI files a Wildlife working group meeting summary and supporting documents from May 13, 2013.

On June 14, 2013, JHI files a Wildlife working group meeting summary and minutes from May 31, 2013.

On July 10, 2013, JHI files Minutes from NMFS Threatened and Endangered Species Consultation meeting of June 21, 2013. Meeting covers issues raised in NMFS draft comments related to JHI Wildlife Analysis See Appendix C NMFS T&E comments

On July 10, 2013, JHI files an Aquatic Work Group Meeting Summary, documents and minutes from a meeting held on 6-20-13.
4. Copies of all meeting summaries and teleconferences call records, including those with Commission staff;

Note, all meeting summaries and meeting transcribed minutes have been submitted and posted to FERC e-library, posted on the JHI website and filed with the Juneau Public Library.

On January 7, 2013, a meeting was held at the Douglas Island Pink and Chum (DIPAC) hatchery to discuss DIPAC salmon collection and transportation. The meeting was attended with representatives from ADFG, DIPAC, FERC Attending the meeting: Eric Prestegard- DIPAC; Duff Mitchell- JHI; Max Schillinger- JHI; Jennifer Harper- FERC; Matt Cutlip- FERC; John Matkowski- FERC; Monte Miller- ADFG; Shawn Johnson- ADFG; Judy Lum- ADFG; Flip Pryor- ADFG and Dan Teske- ADFG. Other Agencies invited, not attending: USFS, NMFS

It was agreed that JHI dial conditioning with DIPAC, draft conditioning criterion and revised drawings for the system and then bring back revised design plan with conditioning criteria. JHI will draft criteria with DIPAC as identified in the meeting along with benchmarks that are trackable and enforceable for FERC applicability. Also the meeting record reflected that JHI has a record of working well with agencies and responding to agencies that provide input.

On January 30, 2013, JHI and the USFS met and had a meeting related to the JHI’s proposed project coastal road/trail, proposed recreational improvements and timber disposition. The meeting was held telephonically. Participants included: Marti Marshall, Juneau District Ranger; Jennifer Berger, Lands and Special Uses Program Manager, Juneau Ranger District; Barbara Stanley, Alaska Regional Energy Coordinator; Kriss Hart, Western Marine; Duff Mitchell, Juneau Hydropower Inc.; Jim Holeman, Juneau Hydropower, Inc. and Brian King, JHI. ADFG, NPS, FERC representatives were invited, but unavailable. The agenda covered:
1. Coastal Road in relation to the Semi-Remote Recreation LUD.
2. Recreation improvements, trail improvements and recreation infrastructure guidance.
3. Timber in the proposed inundation area of the reservoir.

A detailed meeting summary was filed with FERC E-library on February 12, 2013.


On November 26, 2012 JHI was requested by FERC “to file within 60 days of the date of the letter, a plan and schedule for a study plan meeting with all interested licensing participants to discuss the study plans and study reports filed to date, and any additional data needs that will need to be addressed before the next study season commences. In addition, the next steps before the preparation of your final license application should be discussed”.
JHI scheduled and conducted a meeting for January 31\textsuperscript{st} and February 1\textsuperscript{st}, 2013, with all interested parties including resource agencies, tribes, and other interested stakeholders. An agenda, meeting notices and meeting logistics, call in numbers were established.

The purpose of the meeting was to review studies performed; results to date; and address any additional information and study needs for the next study season. This meeting took place over two days and consisted of a morning and afternoon session for each day.

**PARTICIPANTS**

Participants physically attending the 2013 Study Plan Meeting

- Marti Marshall, Juneau District Ranger, USFS  
  both days
- Jennifer Berger, Lands and Special Uses Program Manager, USFS  
  both days
- Barbara Stanley, Alaska Regional Energy Coordinator, USFS  
  both days
- Barb Adams, USFS  
  both days
- Duff Mitchell, Juneau Hydropower Inc.  
  both days
- Keith Comstock, Juneau Hydropower, Inc.  
  both days
- Jim Holeman, for Juneau Hydropower, Inc. JR Holeman Consulting  
  both days
- Brian King, for Juneau Hydropower, Inc.  
  both days
  both days
- Shawn Johnson, ADFG  
  both days
- Roger Harding, ADFG  
  31st
- Dan Teske, ADFG  
  31st
- Monte Miller, ADFG, Hydropower Permitting Coordinator  
  both days
- John Sandor, ACE Coalition  
  31st
- Ted Deats, ADNR  
  31st
- Terry Schwarz, ADNR  
  31st
- Clint Gundelfinger, ADNR  
  31st
- Jim Anderson, ADNR  
  31st
- Bob Loescher, Tlingit Haida Community Council  
  both days
- Sue Walker, NMFS  
  31\textsuperscript{st}, 1\textsuperscript{st} morning
- Peter Bibb, IPEC  
  both days
- Dennis Chester, USFS  
  1\textsuperscript{st}
- Neil Barten, ADFG  
  1st
- Ryan Scott, ADFG  
  1\textsuperscript{st}
- Cathy Needham, for Juneau Hydropower, Inc. Kai Environmental  
  both days
- Robina Moyer, for Juneau Hydropower, Inc. Kai Environmental  
  both days
- Richard Carstenson, for Juneau Hydropower, Bosworth Botanical  
  1\textsuperscript{st}
- Don Kubley, AIPPA  
  31st
- Richard Enriquez, USFWS  
  both days
- Myra Gilliam, USFS  
  1\textsuperscript{st} afternoon
Scott Willis, AEL&P
Terry Harvey, Rep. Cathy Munoz, Juneau-
Brad Flutsch, Videographer, True North Video Productions

1st
31st
both days
Telephonic attendance
Jennifer Harper, FERC
John Matkowski, FERC
Dianne Rodman, FERC
Shina Duvall, SHPO
Summer Rickman, SHPO
Glen Martin, AP&T
Cassie Thomas, NPS
Patrick Keelin, Orenco
Mark Storm, Civil Science
Koren Bosworth, Bosworth Botanical
Gary Moore, Schnabel
Mark Pipkin, Walking Dog Archeology

both days
both days
both days
both days
both days
both days
both days
both days
both days
both days
1st
1st
1st
1st
In addition, it appears that from the telephonic record that somebody from a Central Council of
Tlingit Haida Indians telephone number called in on both days but did not identify themselves.

Each Agenda Item has an associated video file that is posted on the Juneau Hydropower, Inc.
website. The Meeting Summary for Record is a synopsis of key points and questions as well as
the go forward plan along with any agreements among the parties at the meeting. In addition
below each section is a link for the video record of the section.

On March 15, 2013 JHI Sweetheart Lake Aquatic Group conducted a meeting.
On March 15, 2013 a meeting was held to discuss the In stream flow work conducted by Liz
Flory of ASI in 2012 and to determine further In-stream flow and related aquatics work
necessary for completing the JHI Aquatics study for the Project’s Environmental Assessment.

Members Attending, Agency and phone numbers:

Barb Adams, USFS
Julianne Thompson, USFS
John Matkowski, FERC
Shawn Johnson, ADFG
Cathy Needham Kai Environmental
Monte Miller ADFG
Rodger Harding ADFG
Dan Teske, ADFG
Mark Storm Civil Science Inc
Robert Johnson Civil Science
Duff Mitchell, JHI
Jim Ferguson, PhD for JHI  
Mark Storm, Civil Science Inc.

Invited but not able to attend:  
Sue Walker, NMFS - - on leave  
Richard Enriquez, USFWS — on leave  
Eric Rothwell, NMFS, unable to attend

Meeting Objectives and Agenda Items:  
1. Discuss the instream flow (ISF) work performed by Elizabeth Flory in 2012;  
2. Determine if further ISF work is necessary downstream of the barrier falls in Lower Sweetheart Creek; and  
3. IF further ISF work is called for, determine the methodology necessary to accomplish any work deemed necessary.  
4. Next step

Prior to the meeting the following documents were distributed:  
Meeting Agenda  
Agency Comments Regarding PHABISM/In stream flow, Sweetheart Lake prepared by Robert Johnson

A copy of the meeting minutes, summary and reporting document are available on the JHI website, FERC e-library and the Juneau Public Library.

On March 20 2013, JHI held a Cultural Work Group Meeting  
On March 20, 2013 a cultural work group meeting was held to follow up on remaining issues related to the Juneau Hydropower’s archaeological and cultural report and to determine what further work was necessary in these areas.

The follow Agenda was distributed  
Members Attending, Agency  
Myra Gilliam, USFS  
Mark Pipkin, Walking Dog Archaeology, contractor for JHI  
Shina Duvall, SHPO, Alaska Department of Natural Resources  
Suzanne Novak, FERC  
Ken Wilcox, FERC  
Duff Mitchell, JHI

Members not attending.
Meeting Objectives and Agenda Items:
1. Discuss the draft Area of Potential Effects Letter and Map to obtain concurrence of areas impacted to submit final letter and map.
2. Discuss any other 2013 tasks

On April 17, 2013 JHI holds a Wildlife Working Group Meeting.

Members Attending, Agency

Dianne Rodman, FERC
Dennis Chester, USFS
Neil Barton, ADFG
Stephanie Sell, ADFG
Shawn Johnson, ADFG
Duff Mitchell, JHI
Cathy Needham, Kai Environmental
Robina Moyer, Kai Environmental

Members invited but not attending:

Ryan Scott, ADFG
Richard Enriquez, USFWS
Sadie Wright, NMFS
Sue Walker, NMFS
Barb Stanley, USFS

Meeting Objectives and Agenda Items:
1. Discuss and approve the final draft of the Sweetheart Lake Hydroelectric Wildlife Analysis Report.
2. Discuss any other 2013 wildlife study tasks
3. Identify any licensing plans for JHI in its licensing such as Bear Interaction Mitigation Plan, etc.

Meeting Summary:
A. Discussed Wildlife Analysis report, its function and differences from the Wildlife Study report published last October. Covered areas that are being reviewed by agencies and additional information being worked on.
B. Agreed to have a follow up meeting on ADFG licensing wildlife agreement, mitigation or out of license agreement for wildlife under the Alternative License Process.

C. Agreed to set a follow up meeting on above issue B, with an additional future meeting to discuss finalization and review of Kai’s completed wildlife analysis report.

On, April 24, 2013 JHI held a Wildlife working group meeting.

Members Attending, Agency

Dianne Rodman, FERC
John Matkowski Dennis
Chester, USFS Ryan
Scott, ADFG Shawn
Johnson, ADFG Neil
Barton, ADFG Stephanie
Sell, ADFG

Members invited but not attending:

Richard Enriquez, USFWS
Sadie Wright, NMFS
Barb Stanley, USFS

Meeting Objectives and Agenda Items:

1. Review additional draft wildlife surveys and flight surveys from JHI.
2. Beavers, that were not raised at last meeting
3. Discuss and follow up from April 17, 2013 meeting on ADFG licensing wildlife agreement, mitigation or out of license agreement for wildlife under the Alternative License Process.

On May 13, 2013 JHI held a Wildlife Working Group Meeting and supplied supporting documents

Members Attending, Agency

Dianne Rodman, FERC
Dennis Chester, USFS
Ryan Scott, ADFG
Meeting Objectives and Agenda Items:

1. Review Wildlife Analysis to date.
2. Discuss and follow up from April 24, 2013 meeting on ADFG licensing wildlife agreement, mitigation or out of license agreement for wildlife under the Alternative License Process.

JHI held a Wildlife Work Group Meeting Friday, May 31, 2013 8:30 AM

Members Attending, Agency

Dianne Rodman, FERC
Dennis Chester, USFS
Ryan Scott, ADFG
Shawn Johnson, ADFG
Stephanie Sell, ADFG
Richard Enriquez, USFWS
John Matkowski, FERC
Cathy Needham, Kai Environmental

Members invited but not attending:

Barb Adams, USFS
Susan Walker, NMFS
Neil Barton, ADFG
Sadie Wright, NMFS
Barb Stanley, USFS

Meeting Objectives and Agenda Items:
1. Update, review and input on Wildlife Review document
2. Follow up on JHI ADFG agreement
3. Sweetheart Lake install of game cameras and snares

On June 20, 2013 JHI held an Aquatic Studies Work Group Meeting Summary and Minutes

Members Invited
Barb Adams, USFS       bjadams@fs.fed.us
Barbara Stanley, USFS   bstanley@fs.fed.us
Cathy Needham, Kai    cathy@kaienvironmental.com
Eric Rothwell, NMFS      Eric.rothwell@noaa.gov
John Matkowski, FERC   john.matkowski@ferc.gov
Julianne Thompson, USFS jethompson@fs.fed.us
Monte Miller, ADFG      monte.miller@alaska.gov
Richard Enriquez, USFWS richard_enriquez@fws.gov
Roger Harding, ADFG     roger.harding@alaska.gov
Shawn Johnson, ADFG     shawn.johnson@alaska.gov
Sue Walker, NMFS        susan.walker@noaa.gov
Duff Mitchell, JHI      duff.mitchell@juneauhydro.com
Robert Johnson, JHI     rj.ak@starband.net

Members Attending:
Roger Harding
Shawn Johnson
Monte Miller
John Matkowski
Julianne Thompson
Robert Johnson
Duff Mitchell
Cathy Needham
Richard Enriquez

Meeting Objectives and Agenda Items:
1. Presentation of JHI Proposed Aquatic Study Plan by Robert Johnson
2. Substrate surveys
3. Follow up on Salinity measurements/report Gilbert Bay
4. Schedule for Actions

Supporting Documents:
Proposed Aquatic Study Plan outline objectives
BMI study plan
JHI holds a NMFS T&E Consultation Meeting on June 21, 2013

Attending:
Cathy Needham, Kai Environmental for JHI
Duff Mitchell, JHI
John Matkowski, FERC
Dianne Rodman, FERC
Sadie Wright, NMFS

The consultation meeting discussed NMFS T&E comments, potential T&E species, consultation protocol and procedures and processes for incidental take, if needed.

5. Schedule for the next 6-month licensing period, including action items;

JHI is completing all current study requirements to complete all study plans in 2013. JHI will file a successive and complete draft license application and draft environmental assessment and upon receipt of agency comments and licensing conditions, intends to file a final license application and applicant prepared environmental assessment during the latter end of 2013. The following studies are anticipated to be completed: Scenic Management, Wildlife Analysis, Aquatics, Recreation. JHI is also in the process of updating all of its engineer drawings and exhibits required in the license application.

6. Other information pertinent to the licensing.

JHI is on track and on schedule to submit an applicant prepared environmental assessment and license application for the Sweetheart Lake Hydroelectric Facility.


Sincerely,

Duff W. Mitchell
V.P. and Business Manager
Hi Duff,

Sorry for not responding immediately. Your request was emailed late Thursday afternoon, and I have been on leave and out of state since Thursday, and in fact I still am. A few days is not being unresponsive. It is though not possible to respond as quickly as you would prefer given our extreme workload and staffing and budget constraints and your late scheduling.

It would be best if you schedule meetings at least two weeks in advance, and plan a master schedule of any needed regularly scheduled aquatic TWG meetings. We need to plan meetings in advance and our schedules are very full.

I will check my schedule and Eric's and will get back to you later tomorrow afternoon after I deal with other urgent business.

As for your earlier request to review your salinity effects assessment, we do concur that you have enough information on the changes to salinity that the proposed project operations may have on Gilbert Bay.

Sent from my iPad
Appendix B- JHI Salinity measurement spreadsheet

<table>
<thead>
<tr>
<th>Discharge Measurements April 25-28, 2013</th>
<th>cfs</th>
<th>% of input</th>
<th>Per 6 hour tide</th>
<th>60 seconds 60 minutes 6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilbert Bay</td>
<td>1644.7</td>
<td>1</td>
<td>35,525,520</td>
<td>Total cubic feet discharge into Gilbert Bay per 6 hour tide</td>
</tr>
<tr>
<td>Whiting River</td>
<td>1100</td>
<td>66.80%</td>
<td>23,760,000</td>
<td>1</td>
</tr>
<tr>
<td>No Name Creek Site 1</td>
<td>195</td>
<td>1.19%</td>
<td>421,200</td>
<td>2</td>
</tr>
<tr>
<td>No Name Creek Site 2</td>
<td>35</td>
<td>2.13%</td>
<td>756,000</td>
<td>3</td>
</tr>
<tr>
<td>Sweetheart Creek Site 3</td>
<td>259</td>
<td>15.75%</td>
<td>5,594,400</td>
<td>4</td>
</tr>
<tr>
<td>Gilbert Creek Site 4</td>
<td>65.2</td>
<td>3.96%</td>
<td>1,408,320</td>
<td>5</td>
</tr>
<tr>
<td>No Name Creek 5</td>
<td>39.4</td>
<td>2.40%</td>
<td>851,040</td>
<td>6</td>
</tr>
<tr>
<td>No Name Creek Site 6</td>
<td>69.2</td>
<td>4.21%</td>
<td>1,494,720</td>
<td>7</td>
</tr>
<tr>
<td>No Name Creek Site 7</td>
<td>57.4</td>
<td>3.49%</td>
<td>1,239,840</td>
<td>8</td>
</tr>
<tr>
<td>Total cfs discharge into Gilbert Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volume of Gilbert Bay: Cubic Feet
12,210,490.908 (south of Whiting River)

From JHI Tidewater Report Cubic Feet of Gilbert Bay per Kai Environmental
0.290942602% 0.0458163398%

Salinity measurements taken at mouth of Whiting River and at mouth of Sweetheart Creek were fresh water indicating a high influence of fresh water not dissimilar to measurements taken in the summer.

<table>
<thead>
<tr>
<th>Month</th>
<th>USGS average</th>
<th>JHI requested discharge</th>
<th>Percent change2</th>
<th>Change in discharge per day entering Gilbert Bay</th>
<th>Change as a percentage of Gilbert Bay volume</th>
<th>Per tide change as a percentage of Gilbert Bay volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 143 cfs</td>
<td>335</td>
<td>134%</td>
<td>16,588,800</td>
<td>0.1586%</td>
<td>0.0396423642%</td>
<td>0.0396423642%</td>
</tr>
<tr>
<td>February</td>
<td>71 cfs</td>
<td>372%</td>
<td>22,809,600</td>
<td>0.18680%</td>
<td>0.0467082508%</td>
<td>0.0467082508%</td>
</tr>
<tr>
<td>March</td>
<td>78 cfs</td>
<td>329%</td>
<td>22,204,800</td>
<td>0.18185%</td>
<td>0.04546254562%</td>
<td>0.04546254562%</td>
</tr>
<tr>
<td>April</td>
<td>153 cfs</td>
<td>119%</td>
<td>15,724,800</td>
<td>0.12878%</td>
<td>0.03219526577%</td>
<td>0.03219526577%</td>
</tr>
<tr>
<td>May</td>
<td>415 cfs</td>
<td>-19%</td>
<td>-6,912,000</td>
<td>-0.096631%</td>
<td>-0.0141517617%</td>
<td>-0.0141517617%</td>
</tr>
<tr>
<td>June</td>
<td>670 cfs</td>
<td>-50%</td>
<td>-28,944,000</td>
<td>-0.23704%</td>
<td>-0.05926051667%</td>
<td>-0.05926051667%</td>
</tr>
<tr>
<td>July</td>
<td>552 cfs</td>
<td>-39%</td>
<td>-18,748,800</td>
<td>-0.15355%</td>
<td>-0.03838666304%</td>
<td>-0.03838666304%</td>
</tr>
<tr>
<td>August</td>
<td>492 cfs</td>
<td>-32%</td>
<td>-13,564,800</td>
<td>-0.11109%</td>
<td>-0.02777283916%</td>
<td>-0.02777283916%</td>
</tr>
<tr>
<td>September</td>
<td>545 cfs</td>
<td>-39%</td>
<td>-18,144,000</td>
<td>-0.14859%</td>
<td>-0.03714833589%</td>
<td>-0.03714833589%</td>
</tr>
<tr>
<td>October</td>
<td>448 cfs</td>
<td>-25%</td>
<td>-9,763,200</td>
<td>-0.07906%</td>
<td>-0.01998936831%</td>
<td>-0.01998936831%</td>
</tr>
<tr>
<td>November</td>
<td>290 cfs</td>
<td>16%</td>
<td>3,888,000</td>
<td>0.03184%</td>
<td>0.00796036791%</td>
<td>0.00796036791%</td>
</tr>
<tr>
<td>December</td>
<td>187 cfs</td>
<td>79%</td>
<td>12,878,200</td>
<td>0.10547%</td>
<td>0.02636708077%</td>
<td>0.02636708077%</td>
</tr>
</tbody>
</table>
Average monthly discharge calculated over a 10-year period (Sloan, et al. 1986)
calculated as: \( \frac{(\text{new value} - \text{old value})}{\text{old value}} \times 100 \)

Tidal Flat of Gilbert Bay is one of the largest tidal mixing zones in Acreage located on Stephens Passage.
USFS Satellite photo demonstrating Whiting River influence on Gilbert Bay (silt)
Appendix C NMFS T&E comments

Draft Wildlife Review for Juneau Hydropower Inc. Sweetheart Lake Hydroelectric Project FERC #13563

Comments and Revisions by Sadie Wright, NMFS Protected Resources Division

My comments are focused on shaping this Wildlife Review to be an applicable part of an Endangered Species Act (ESA) Section 7 consultation initiation package.

- **Project Description:** A complete and detailed description of the proposed project/action is needed, including timing and required equipment. Any parts of the action that may affect ESA-listed species need to be fully described (e.g., sound source levels, speeds, timing, etc.). Section 7 consultations occur for the Final Action, not for multiple potential alternatives.

- **Action Area:** This needs to include all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR 402.02). For example, transit routes of vessels bringing supplies to the site, or arriving to bring/lay underwater cable. Will vessels be coming from Juneau or somewhere else? What route will they take? What elevation will aircraft fly at to arrive at the site?
• Species Descriptions: First, do not rely on information on NMFS websites. This is not peer-reviewed information and may be erroneous. In addition, the websites are frequently updated, so the same website may look very different a year later, with completely different information. Instead, use Stock Assessment Reports. These are official citable reports that can be located years later.

  o Humpback Whale: See updated Stock Assessment Reports for the Central North Pacific stock. The most recent SAR (from 2012) will provide more accurate, up to date information regarding population abundance and trends for this species. In addition, the SAR also describes known and potential threats to the species. It would be better to reference the SAR instead of a NMFS website.

  o Steller Sea Lion: Western DPS Steller sea lions have been observed in Southeast Alaska. I suggest that you contact Lauri Jemison at ADF&G for the more recent data about WDPS sightings, and for count data for Port Snettisham. A Steller sea lion haulout is present at Mist Island in Port Snettisham. The presence and number of Steller sea lions at this haulout needs to be documented in your consultation initiation package. Brand re-sighting effort at this haulout may determine the proportion of WDPS individuals in the area. Use the Steller sea lion SSRs to cite population trend information and potential threats (instead of NMFS websites). Section 3.2.1.2 of your report states that “Habitat for Steller sea lions include a terrestrial zone, an aquatic zone, and an air zone that extends 3,000,” This is actually the description for officially designated Critical Habitat for this species (58 FR 45269; August 27, 1993). The description of habitat in general for this species should be much broader and encompass most of the marine environment. Reference SARs for potential threats to this species (instead of NMFS websites). Reference the Federal Register notices, which are the official documents, for legal action such as the proposed de-listing of the EDPS of Steller sea lion (77 FR 23209; April 18, 2012), instead of NMFS websites.

  o Southeast Alaska Pacific Herring: Don’t reference NMFS websites. Anecdotal information exists that Pacific Herring do periodically spawn in Gilbert Bay and Port Snettisham. Contact David Harris at the ADF&G Commercial Fisheries Division for more information. It is important to know when and where herring have been observed to spawn in this area in order to establish mitigation measures so this activity can avoid or minimize impacts to this species.

• Table 4: This Table was produced by the U.S. Fish and Wildlife Service and a link to view the table is provided on the NMFS website (which is what you apparently referenced). The information in the table is no longer accurate, and it would be better to not reference a website. New information is now available on the NMFS website with a list of T&E species under NMFS authority in Alaska. If you do reference the tables on the website, provide a screen copy of the website with the date that you accessed the site so that people understand that although the information may have changed, that is what you saw that day. Another option is to request an official species list from NMFS, and you can reference the response letter.
• Map referenced locations: For example, in Section 3.2.2 you reference Sentinel Point. Please include this location on a map, and reference the map where I can see the location when you mention the area (e.g., Sentinel Point (see Figure x.x)).

• Section 3.2.2.1: In the first paragraph you mention humpback whale critical habitat. This terminology can be confusing because no official designation of critical habitat has occurred for this species. It should not be inferred that critical habitat has not been designated because there is no critical habitat for this species. Humpback whales enter Gilbert Bay to forage, so care should be taken to avoid and minimize effects to that species during that time.

Paragraph 5 states that cable could be laid in early spring or late fall to reduce the likelihood of humpback whale being present. Is that accurate? Have surveys been conducted throughout the year across multiple years to determine peak humpback whale usage in Port Snettisham and Gilbert Bay? What data was that statement based on?

MMPA language on page 21: USFWS 2013(b) does not appear in the References section, but I assume it is a website. Instead of referencing websites, use the Marine Mammal Protection Act itself. You can reference the actual Act and just quote the language in the Act. If the definition you are using is outside of the Act you can reference other legal documents or agency guidance documents where the definition was officially described.

Page 21, paragraph 3: You can reference the regulation or Federal Register notice (instead of a website) for the regulations governing the approach to humpback whales in Alaska (66 FR 29502; May 31, 2001). The language in the regs is a little different than what you describe in this paragraph (e.g., the approach regs do not just apply to vessels).

Page 21, last paragraph in section 3.2.2.1: For Section 7 consultation purposes, you will need to include in the description of the project/action all timing restrictions that will be in place to minimize effects to species. Other mitigation measures that you may consider including in the action description is the presence of training marine mammal observers to halt potentially harmful activities when marine mammals are present. You may also consider adding distance buffers from potentially harmful sounds sources (e.g., if a marine mammal is sighted within 500 m of xx sound source, work will be halted until the marine mammals has moved away). Distances and timing windows will likely be different for different species.

• Section 3.2.2.2: This section needs to reflect the haulout on Misty Island (see my comments on page 1). I suggest you examine each potential stressor (e.g., ship strike, acoustic harm/harassment/disturbance, risk of pollution, cumulative effects, entanglement, change in food availability, etc.) separately and give explanations for why you expect “take” of Steller sea lions to occur or not.
• Section 3.2.2.3: See my comments on page 2 regarding the presence of Pacific Herring in Gilbert Bay and Port Snettisham. David Harris, with ADF&G, has been notified by the AK State Troopers and others that herring spawning events have been observed in that area. Explain why you expect that the proposed activity will not affect herring spawning in Gilbert Bay.

• Section 3.2.3: These determinations (may affect, but is not likely to adversely affect) means that you think the activity will take zero individuals. Do you think this activity can be conducted in such a way that zero Steller sea lions will be flushed from their haulout, and zero humpback whales will be hit by vessels, or change their foraging behavior significantly to avoid cable-laying and other vessels?

• Section 4.2: Does subsistence harvest of marine mammals occur in this area?

• Section 4.3.1.: First sentence—MMPA, not MMPSA. First paragraph—you referenced the 2011 Stock Assessment Report. A 2012 SAR is available for this species.

Paragraph 2: Instead of referencing websites, this information can also be found in peer-reviewed journal articles.

Paragraph 3: You mention that the Tongass Forest Plan includes measures that would apply to harbor seals. Please include the specific measures in the description of the proposed action so that it is clear what measures will be taken during/after the project.

• 5.0 Discussion: The Section 7 consultation will analyze the potential effects of the final proposed action, not multiple alternatives.

• 6.0 Recommendations: My understanding is that FERC is federal action agency for this Section 7 consultation and that Juneau Hydropower (Duff Mitchell) is the non-federal designee for FERC. If any issues arise regarding endangered, threatened, or candidate species under NMFS authority during the project, I would expect to be notified by Duff or FERC (not through the USFS as an intermediary). Details of an outreach/education plan associated with marine mammals should be included in the action description. All planned mitigation measures to avoid or minimize effects to marine mammals should be included clearly in the project description. It must be clear what will be done, not what could or might be done.