

Initial Study Report Meeting

Study 9.11 Fish Passage Feasibility at Watana Dam

October 15, 2014

Prepared by R2 Resource Consultants, Inc.

Study 9.11 Objectives

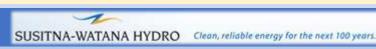
- The goal of this study is to develop, to the feasibility level, a fish passage strategy in support of the License Application for the proposed Project. The methods section of this report outlines the process that was used during 2013 to achieve this objective. A variety of engineering, biological, sociological, and economic factors will be considered during this process as it continues through 2014. The study will explore various alternatives in support of three basic strategies related to fish passage:
 - Proposed Project without fish passage
 - Integration of upstream and downstream passage features into the current Project design
 - The retrofit of upstream and downstream fish passage features to a Project designed without passage
- In the context of this study "retrofit" means that fish passage features would be either geographically or temporally independent from the dam design. A retrofitted passage facility may be constructed some distance upstream or downstream from the dam or later in the future after the construction of the dam, and thus is independent of the dam design process. Option 3, the retrofit option, avoids constraints with having the only option of fish passage being part of the dam structure. Thus, the feasibility evaluation can examine a wider spectrum of passage alternatives

Study 9.11 Components

- Task 1: Establish the Fish Passage Technical Workgroup to Provide Input on the Feasibility Assessment (ISR Part A, Section 4.1; pg 3)
- Task 2: Prepare for Feasibility Study (ISR Part A, Section 4.2; pg 3)
- Task 3: Conduct Site Reconnaissance (ISR Part A, Section 4.3; pg 5)
- Task 4: Develop Concepts (ISR Part A, Section 4.4; pg 5)
- Task 5: Evaluate Feasibility of Conceptual Alternatives (ISR Part A, Section 4.5; pg 5)
- Task 6: Develop Refined Passage Strategy(ies) (ISR Part A, Section 4.6; pg 5)

Study 9.11 Variances

- Variances from the Study Plan in 2013 were limited to schedule modifications for Tasks 3 and 4 (ISR Section 9.11.4.7)
 - Task 3 Site Recon moved to Sept. 2013 for low flow access
 - Task 4 Delayed to allow integration of other studies: kickoff with brainstorm workshop Sept. 9-11, 2014



Study 9.11 Summary of Results in ISR (ISR Study 9.11, Part A – Section 5)

- Completed Tasks 1 -3.
- Site Visit conducted September 18, 2013



Study 9.11 Summary of Results since ISR

Initiated Task 4:

- Collated and delivered updates of biological, physical and operational information based on Technical Team input.
- Conducted Brainstorm Workshop (September 9-11, 2014) to develop initial concepts.
- Development of Biological Performance Tool (ISR 9.11, Appendix B, Information Item B11).
- Presented examples of evaluation matrix (September 18, 2013 and September 11, 2014).

AEA Proposed Modifications to Study 9.11 in ISR (ISR Study 9.11, Part C – Section 7.1.2)

Although the schedule has been modified, no modifications to the Study Plan are needed to complete the study and meet Study Plan objectives.

Steps to Complete Study 9.11 (ISR Study 9.11, Part C – Section 7.1)

To complete this study, AEA will implement the methods in the Study Plan, without modification.

Task 4 (RSP Section 9.11.4):

- Organize and clarify brainstorm concepts, text and sketches
- Develop and update draft evaluation criteria
- Update and perform runs with the Biological Performance Tool (BPT)
- Conduct review meeting with FPTT
- Begin compilation and development of alternatives

Steps to Complete Study 9.11 (ISR Study 9.11, Part C – Section 7.1)

Task 5: Evaluate Feasibility of Conceptual Alternatives (RSP Section 9.11.4)

- Update drawings and descriptions
- Update BPT
- Update criteria, and prepare evaluation matrix
- Submit Draft Report
- Conduct Workshop #4 alternative selection

Task 6: Develop Refined Passage Strategy(ies) (RSP Section 9.11.4)

- Refine alternatives (text and drawings)
- Prepare opinions of probable costs
- Conduct FPTT meeting
- Submit draft Fish Passage Technical Report
- Final FPTT meeting to review report

Steps to Complete Study 9.11 (ISR Study 9.11, Part C – Section 7.1)

 AEA expects to complete development of passage strategies in both the 2014 and 2015 study seasons, which will be reported in the USR.

Licensing Participants Proposed Modifications to Study 9.11?

- Agencies
- CIRWG members and Ahtna
- Public