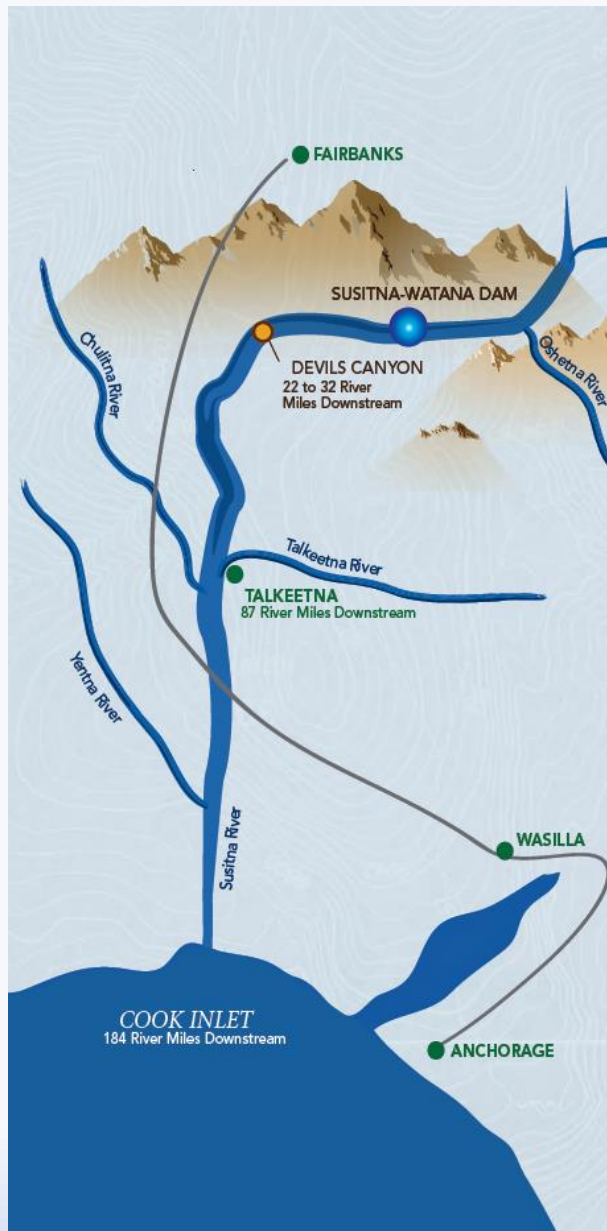


Initial Study Report Meeting

Study 9.11 Fish Passage Feasibility at Watana Dam

March 22, 2016

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Study 9.11 Status

- ISR Documents (ISR Part D Overview)
 - Initial Study Report (June 3, 2014)
 - 2014 Study Implementation Report (Nov 6, 2015)
- Tasks 1- 3 completed
- Task 4 initiated:
 - Updated biological, physical and operational information,
 - Summary of Brainstorm Workshop and initial concepts,
 - Development of Biological Performance Tool,
 - Consolidated summary of upstream and downstream passage concepts.
- Tasks 4, 5 and 6 remain to be completed.

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 in 2013 were limited to schedule modifications (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



Summary of Results

(ISR Part A – Section 5)

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



Summary of Results

(SIR November 2015)

Initiated Task 4:

- Collated and delivered updates of biological, physical and operational information based on Technical Team input.
- Conducted Brainstorm Workshop Sept 9-11, 2014 to develop initial concepts.
- Continued Development of Biological Performance Tool (ISR Part A, Appendix B, Information Item B11).
- Presented examples of evaluation matrix (Sept 18, 2013 and Sept 11, 2014).
- Conducted FPTT Meeting #5 on Dec 3, 2014.
- Reduced list of concepts into a consolidated summary table of upstream and downstream passage concepts (SIR Nov 2015).

AEA Proposed Modifications

(ISR Part D – Section 7)

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

Steps to Complete Study 9.11

Task 4 - Complete development of passage concepts (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

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

- Update drawings and descriptions
- Update BPT
- Update criteria, and prepare evaluation matrix
- 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

Licensing Participants Proposed Modifications to Study 9.11?

- Agencies
- CIRWG members and Ahtna
- Public