

Technical WorkGroup Meeting

Fish and Aquatics

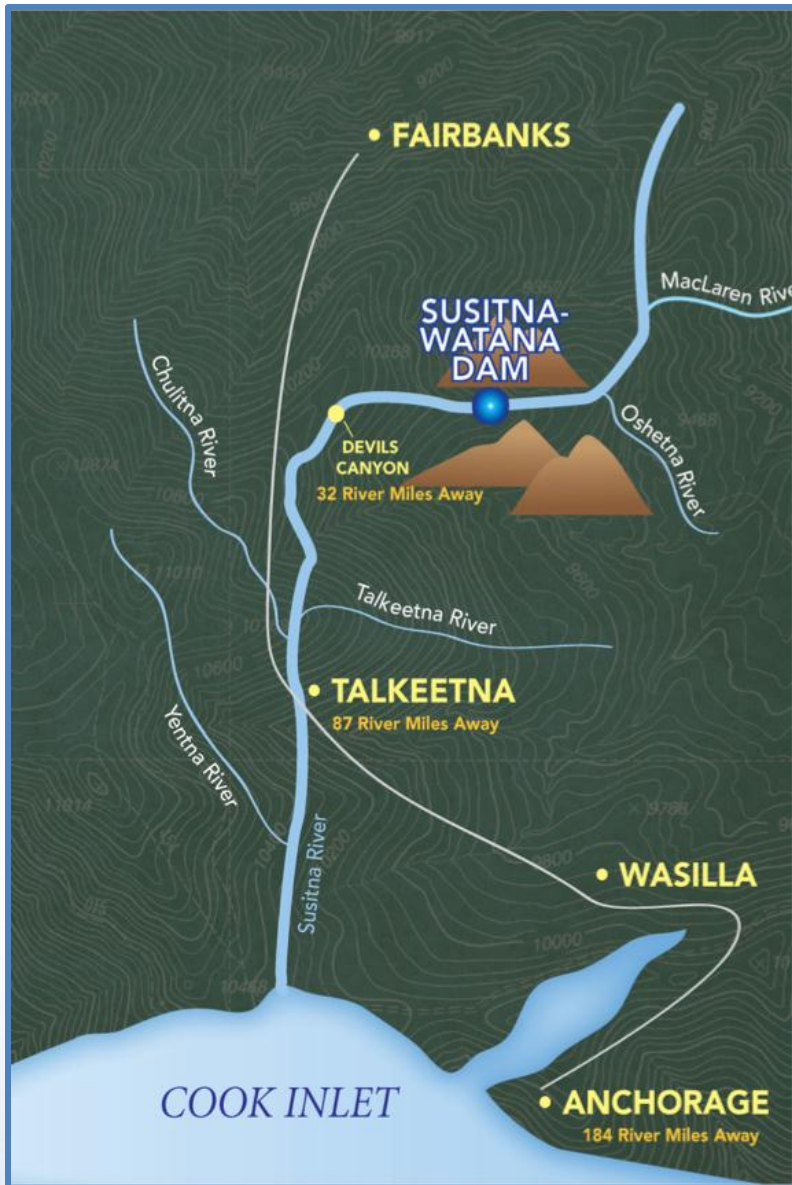
Instream Flow

Document Structure

PSP to RSP

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- 8.0 FISH AND AQUATICS INSTREAM FLOW STUDY**
- 8.1 Introduction**
- 8.2 Nexus between Project Construction / Existence / Operations and Effects on Resources to be Studied**
- 8.3 Resource Management Goals and Objectives**
- 8.4 Summary of Consultation with Agencies, Alaska Native Entities, and Other Stakeholders**
- 8.5 Fish and Aquatics Instream Flow Study**
 - 8.5.1 General Description of the Study**
 - 8.5.2 Existing Information and Need for Additional Information**
 - 8.5.3 Study Area**
 - 8.5.4 Study Methods**
 - 8.5.5 Consistency with Generally Accepted Scientific Practice**
 - 8.5.6 Schedule**
 - 8.5.7 Level of Effort and Cost**
 - 8.5.8 Literature Cited**
 - 8.5.9 Tables**
 - 8.5.10 Figures**



8.5.2 Existing Information and Need for Additional Information

8.5.2.1 Habitat Distribution

8.5.2.2 Fish Distribution and Abundance

8.5.2.3 Salmonid Spawning and Incubation

8.5.2.4 Study Site Selection

8.5.2.5 HSC/HSI

8.5.2.6 Winter Studies

8.5.2.7 Periodicity

8.5.2.8 Instream Flow Methods and Models



8.5.4 Study Methods

8.5.4.1 IFS Analytical Framework

8.5.4.2 Habitat Mapping

8.5.4.3 Hydraulic Routing and Hydrologic Data Analysis

8.5.4.4 Habitat Suitability Criteria Development

8.5.4.5 Habitat-Specific Models Development

Hydraulic – Habitat Model Integration

Habitat Weighted Usable Area/Habitat Metrics

Effective Habitat and Varial Zone Modeling

Fish Passage/Off-channel Connectivity

Temporal Habitat Analyses

8.5.4 Study Methods

8.5.4.1 IFS Analytical Framework

8.5.4.2 River Stratification and Study Area Selection

8.5.4.3 Hydraulic Routing

8.5.4.4 Hydrologic Data Analysis

Data Collection

Data Analyses

IHA and EFC

8.5.4.5 Habitat Suitability Criteria Development

Habitat Suitability Curves (HSC)

Habitat Suitability Index (HSI)

Winter Habitat Use

Stranding

Trapping

Spawning and Incubation

Periodicity



RSP Technical Headings

8.5.4.6 Habitat-Specific Model Development

Habitat Model Selection

Physical and Hydraulic Data Collection

Hydraulic Model Calibration

Weighted Usable Area Habitat Metrics

Effective Spawning/Incubation Habitat Analyses

Varial Zone Modeling

Fish (Stranding and Trapping)

Aquatic Productivity

Fish Passage/Off-channel Connectivity

8.5.4.7 Temporal and Spatial Habitat Analyses

8.5.4.8 Instream Flow Study Integration