Susitna-Watana Hydroelectric Project

(FERC No. 14241)

River Recreation Flow and Access Study

Study Plan Section 12.7

Study Summary through FERC

 March 10, 2017 Director Determination

(Update to November 2015 ISR Part D)

Prepared for

Alaska Energy Authority



Prepared by

AECOM

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LIST OF ACRONYMS AND SCIENTIFIC LABELS

| Abbreviation | Definition |
| --- | --- |
| [Insert abbreviation] | [Insert definition]  |

# Introduction

On December 14, 2012, Alaska Energy Authority (AEA) filed with the Federal Energy Regulatory Commission (FERC or Commission) its Revised Study Plan (RSP) for the Susitna-Watana Hydroelectric Project No. 14241 (Project), which included 58 individual study plans (AEA 2012). Included within the RSP was the River Recreation Flow and Access Study, Section 12.7. RSP Section 12.7 focused on conducting a recreation flow analysis on mainstem reaches of the Susitna River that considers the relationship between river flows and ice conditions, and river recreation and transportation. RSP Section 12.7 provided goals, objectives, and proposed methods for river recreation flow and access data collection and analysis.

On February 1, 2013, FERC staff issued its study plan determination (February 1 SPD) for 44 of the 58 studies, approving 31 studies as filed and 13 with modifications. RSP Section 12.7 was one of the 13 approved with modifications. In its February 1 SPD, FERC recommended the following:

*Much of the flow-dependent information to be gathered for the study would be done remotely (e.g., interviews and online surveys), although the study would also utilize data collected during the recreation intercept surveys to be conducted in the field as part of the Recreation Resources Study (study 12.6). At little additional cost ($20,000), AEA could add focus group discussions, as suggested by the [National Park Service], that would substantially add to the information base for, and the analysis of, flow preferences for whitewater boating and ice conditions needed for motorized and non-motorized travel.*

*Therefore, we recommend AEA modify the study plan to include at least one focus group discussion on whitewater boating and one on winter ice and snow travel in the river corridor for motorized and non-motorized users. Focus group participants would be identified by building on the executive interviews with commercial and noncommercial users of the river to include boating clubs, dogsled clubs, etc. Opportunities for online or teleconference participation should be provided for the focus group discussions.*

In accordance with the February 1 SPD, AEA has adopted the FERC requested modification.

Following the first study season, FERC’s regulations for the Integrated Licensing Process (ILP) require AEA to “prepare and file with the Commission an initial study report describing its overall progress in implementing the study plan and schedule and the data collected, including an explanation of any variance from the study plan and schedule” (18 CFR 5.15(c)(1)). This Initial Study Report on the River Recreation Flow and Access Study was prepared in accordance with FERC’s ILP regulations and details AEA’s status in implementing the study, as set forth in the FERC-approved RSP and as modified by FERC’s February 1 SPD (collectively referred to herein as the “Study Plan”).

As detailed in Section 2.2 of the ISR Part D Overview, various circumstances required AEA to extend the original timeframe for completing the Commission-approved Study Plan. However, AEA made meaningful progress with Study 12.7 after the filing of the ISR in June 2014. As detailed below, AEA’s activities for Study 12.7 consisted of the following:

* The study team conducted the river recreation internet survey through the 2014 field season.
* On October 23, 2014 AEA held an ISR meeting for the River Recreation Flow and Access Study.

## Purpose of Study Summary Document

This document provides a concise summary and status of each of the Study Components described in the FERC approved study plan for Study 12.7 up to the release of the March 10, 2017 Director Determination. The document borrows from and cites to both FERC submitted documents (in particular ISR Part D submittals), as well as non-FERC submitted data, information, and other project related materials that are useful in describing the overall status of this resource study. Implications on study completion and costs resulting from the FERC Director Determination are also addressed. In addition, any logistics and/or technical issues that arose during the conduct of the study are presented, and recommendations for their resolution provided.

The document provides a “big-picture” overview of the resource study from its conception during scoping and study plan development, through implementation including field data collection and data analysis.

# Background

## Purpose of Study

The goal of the study is to contribute data to the Recreation Resource Study (Study 12.5) concerning the relationship between river flows and river recreation opportunities and uses. The study objectives are established in RSP Section 12.7.1:

* Document river recreation use and experience for the respective river recreation and transportation opportunities on three mainstem Susitna river reaches.
* Describe potential effects of altered river flows on existing and potential boating activity and other river recreational uses of the Susitna River.
* Understand river ice preferences for the respective river ice dependent winter recreation and transportation on the Susitna River.
* Describe new boating or other flow-dependent recreational opportunities that may be created by Project construction and operation.

## Study Components

This study consists of the following components:

* River recreation surveys.
* Executive interviews for river recreation and ice-dependent winter recreation.
* Focus group discussions.

# Status, Highlighted Results, and Achievements

This multi-year study was initiated in 2012 and includes work to document the range of flows for a variety of motorized and non-motorized watercraft using the Susitna River for recreation as well as for a transportation corridor. Likewise, the study is designed to document river ice-dependent recreation and transportation activities during the winter period. The study designed to inventory baseline conditions and evaluate the potential effects to river recreation flow and access resources that may result from construction and operation of the proposed Project. The river recreation flow and access study components included work to develop and implement river recreation use surveys, conduct executive interviews on use levels, and hold focus group discussions for river recreation and ice-dependent winter recreation. Of these study components, the surveys and executive interview components have been completed while the focus group discussions are incomplete. The status and achievements are presented below by study component.

River Recreation Surveys

* The study team completed development and implementation of the river recreation and river ice-dependent winter recreation surveys. This was accomplished though the river recreation internet survey, which was conducted through the 2014 field season.

Executive Interviews

* The study team completed executive interviews for river recreation and ice-dependent winter recreation.

Focus Groups

* Additional work is required to conduct one focus group discussion on whitewater boating and one on winter ice and snow travel in the river corridor for motorized and non-motorized users.

# Summary of Study 12.7 Documents

Since filing of the RSP in 2012, AEA and FERC have prepared several documents pertaining to this study and are listed below. Each of these documents is accessible on AEA’s Project licensing website (http://www.susitna-watanahydro.org/type/documents/) by clicking on the entry in the “Link” column in the table. In addition, these documents are available on FERC’s eLibrary system (http://www.ferc.gov/docs-filing/elibrary.asp), in Docket No. P-14241.

|  |  |  |  |
| --- | --- | --- | --- |
| **Title**  | **Date**  | **Description**  | **Link**  |
| 12.7. River Recreation Flow and Access Study (Revised Study Plan)  | 12/14/2012  | This document presents the plan for this study, including goals, objectives, the study area, and proposed study methods for the river recreation flow and access study.  | RSP for Study 12.7  |
| FERC Study Plan Determination for Study 12.7  | 2/1/2013  | This document presents FERC approval of Study 12.7, which approved AEA’s Revised Study Plan with recommended adjustments.  | FERC SPD for Study 12.7  |
| Draft Initial Study Report for Study 12.7  | 2/3/2014  | This draft of the ISR summarized the study methods and variances during the 2013 study season, and presented preliminary data collected for Study 12.7. This draft ISR was later republished as Part A of the final ISR.  | Draft ISR for Study 12.7  |
| Initial Study Report for Study 12.7  | 6/3/2014  | This document is the Initial Study Report (Parts A, B, and C) for Study 12.7. Part A republishes the Draft ISR. Part B identifies supplemental information and errata in Part A. Part C presents study modifications and plans for completing the study.  | ISR Part A for Study 12.7 ISR Part B for Study 12.7 ISR Part C for Study 12.7  |
| Initial Study Report Meetings, October 23, 2014 (Parts A and B)  | 11/15/2014  | Transcripts and AEA’s agenda and PowerPoint presentations for the ISR meeting on the Project recreation studies.  | Transcripts from ISR Meeting Materials from ISR Meeting  |
| River Recreation Flow and Access Study (12.7) – Study Implementation Report  | 11/4/2015  | Study Implementation Report: a summary of survey results in 2013-2014.  | 2014 SIR for Study 12.7  |
| Response of the Alaska Energy Authority to Comments on the ISR | 10/24/2016 | Response to comment submitted on Recreation Resource Study (12.6) Study Implementation Report. |  |

The following table identifies and describes additional reports and other documents that update, refine, or otherwise supplement certain sections of the ISR pertaining to this Study 12.7, during AEA’s continued implementation of the Study Plan since the ISR was filed in June 2014.

|  |  |
| --- | --- |
| **ISR Reference**  | **Description**  |
| Part A, Section 4  | This Section is superseded by the Study Implementation Report Section 4, describing 2014 study plan implementation.  |
| Part A, Section 5  | This Section is superseded by the Study Implementation Report Section 5, describing the results of 2014 study plan implementation.  |

# Study Plan Modifications Noted in the ISR

As detailed in Section 7 of the ISR (Part C), AEA plans no modifications of the methods for this study.

# Study Plan Modifications Resulting from FERC Director Determination

As stated in the SPD, FERC recommends that AEA (1) identify use and key locations for river recreation, access, and travel along the Susitna River from Parks Highway Bridge downstream to Susitna Station; (2) include users of this stretch of river in its planned interviews and focus group discussions to determine suitable flows and ice conditions for recreation and travel; and (3) assess availability of identified flows and ice conditions suitable for recreational use and travel in this reach in the USR. Participants should include those who can provide first-hand knowledge and site-specific observations of river use, access, and river conditions that may support or impede these activities.

Because the study team plans to conduct focus group discussions and further interviews as part of study 12.7 and the Transportation Study (study 15.7), this effort should not increase costs or significantly affect the schedule.

# Logistical and Technical Issues and Suggested Solutions

## Logistical Issues

Weather

* The field teams were often required to stand down for several days due to weather conditions (rain, clouds, wind, etc.) that prevented the helicopter from flying or limited the available flight time, which was allocated to other studies with a greater need for helicopter time.

Permitting and land access

* Native Corporation Lands: Access to privately held Native Corporation lands was prohibited during the study period. As a result the study team was not able to inventory and assess river access locations and river camps on Native Corporation lands above mean high water during the river float trip. However, land access restrictions did not impede the study team’s ability to navigate the river corridor overall.

Safety

* No issues with project safety were encountered related to helicopter travel, fixed wing or field camps.
* AEA required and prioritized the need to have all field staff working along the river corridor take swiftwater rescue course. The study team felt this training was valuable and appreciated the importance that AEA placed on this type of training and awareness for crews working along rivers.
* AEA allowed the study team to utilize our own Bear Guard once it was clearly documented that the individual had the requisite training and certifications to serve in that role. This allowed the study team to streamline their field study efforts and logistics and reduce costs.

Field accommodations

* Overall the study team was very impressed with the accommodations provided by AEA during their field efforts in the study area.

Equipment

* Appropriate insurance was required from the outfitter that provided logistic and material support for the float trip field effort.

## Technical Issues

Data Collection

* The study team was unable to collect information on flow preferences and acceptable river flows for various river recreation uses due to concerns from the project’s legal team. Recent FERC determinations (Sunset Falls Project, June 2014) have specifically requested the applicant to collect this type of information as part of baseline data collection efforts. Future efforts should review existing data and determine if additional flow preference data should be collected to supplement existing data.

Data Analysis

* The lack of flow preference data from executive interviews and survey efforts limited the analysis of existing river use data. When river recreation use was documented during a particular flow level, the study team assumed this flow level was preferred by those using the river. However, executive interviews with river recreation users and groups indicated that other factors such as access, weather, and seasonality (hunting season) had a greater bearing on the timing of river recreation use. As a result, the occurrence of past river recreation use at a particular flow may not represent a flow preference for river recreation users.

Interpretation of Data

* Similar to above, the interpretation of data was limited due to the lack of flow preference data and the assumptions made during data analysis.

# Steps to Complete the Task

In light of the variances described above, the steps necessary for AEA complete this study are summarized below. As necessary and appropriate, these steps have been updated from those appearing in Section 7 of the ISR (Part C):

* Conduct focus group discussions for: (1) whitewater boating, and (2) winter ice and snow travel in the river corridor for motorized and non-motorized users. Once completed, information obtained from the focus discussions will be summarized for flow preferences for whitewater boating and ice conditions needed for motorized and non-motorized travel.

# Recommendations

See Section 7 above for detailed description of logistical and technical issues encountered and recommendations to address each issue during the future implementation of Study 12.7 River Recreation Flow and Access Study.

# References Cited

Alaska Energy Authority (AEA). 2012. Revised Study Plan. Susitna-Watana Hydroelectric Project, FERC Project No. 14241 Submittal: December 14, 2012. <http://www.susitna-watanahydro.org/study-plan>.

# Appendix A

Appendix A: Data Archive