
Cultural Resources Study

*Swan Lake Hydroelectric Project
(FERC Project No. 2911)*

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Ketchikan, Alaska

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ACRONYMS AND ABBREVIATIONS

AHRS	Alaska Heritage Resources Survey
ARPA	Archaeological Resources Protection Act
CFR	Code of Federal Regulations
FERC	Federal Energy Regulatory Commission
ICD	Initial Consultation Document
NEPA	National Environmental Policy Act
SEAPA	Southeast Alaska Power Agency
SHPO	State Historic Preservation Officer
USDA	U.S. Department of Agriculture
USFS	USDA Forest Service

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1. INTRODUCTION

1.1. Project Description

The Southeast Alaska Power Agency (SEAPA) owns the Swan Lake Hydroelectric Project (Project, FERC No. 2911) on the northeast side of Carroll Inlet in Southeast Alaska (Figure 1). SEAPA is currently evaluating the engineering feasibility and value of increasing the reservoir's storage capacity through an increase in dam height. SEAPA is planning a 20-foot raise in full pool reservoir elevation; the top of dam would increase from an elevation of 344 feet to 358 feet and the new normal maximum reservoir elevation would be 350 feet, subject to final design and environmental review.

The Project's Federal Energy Regulatory Commission (FERC) license sets the Project's boundaries at the 350-foot elevation contour. An increase in dam height may require revision of these boundaries to allow for operation and maintenance of the Project and to accommodate other Project purposes such as recreation, shoreline control, or protection of environmental resources. The proposed changes to the facilities, the operation of the reservoir, and potential changes to Project boundaries will require amending the Project's FERC license, a process that includes evaluating the potential impacts to environmental resources from the proposed action.

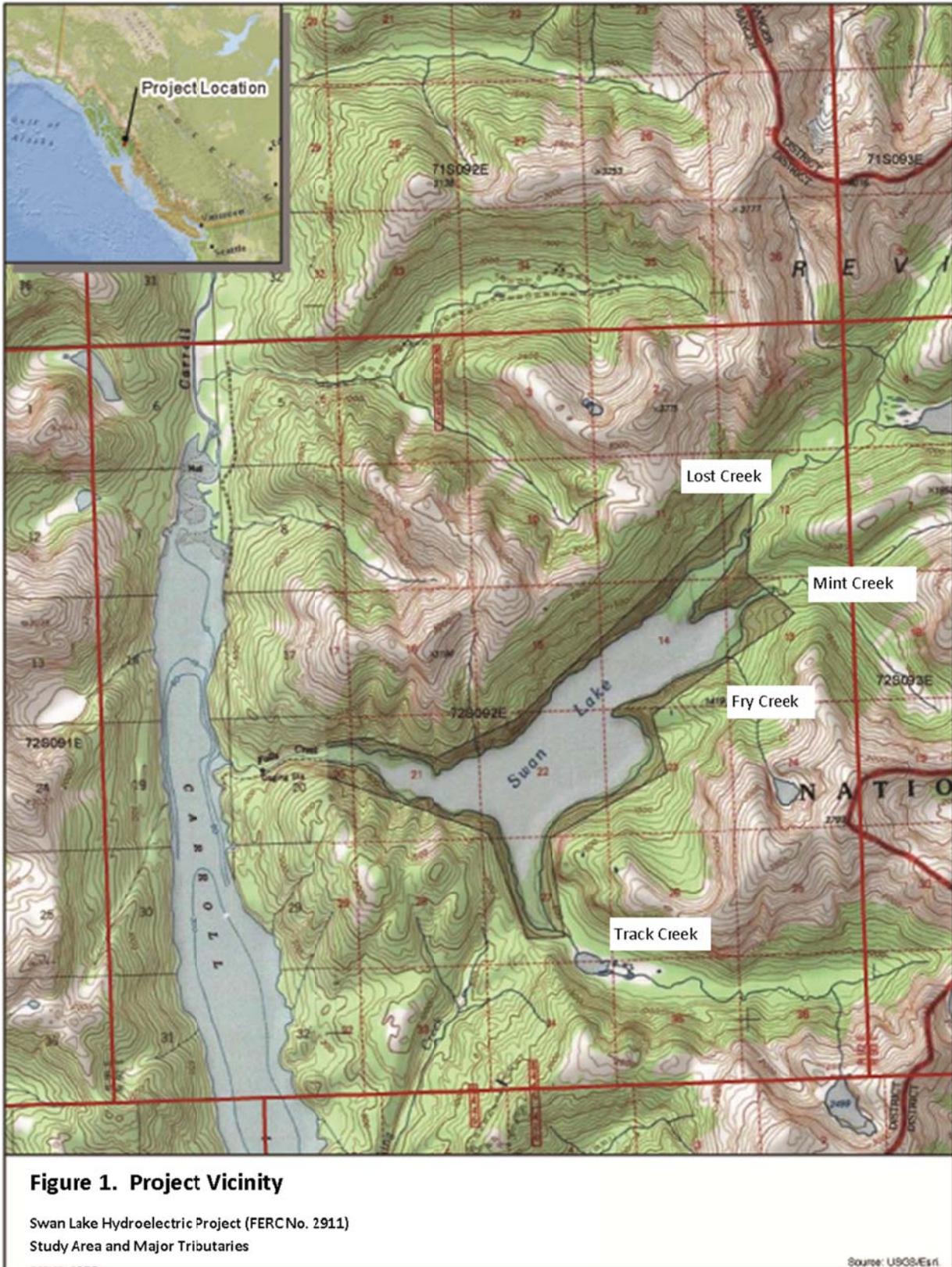
An amendment to modify the Project license, as described above, would be considered by FERC to be a non-capacity amendment since the nameplate capacity of the Project will not change. However, it involves a modification of an existing dam that will result in a significant change in the normal maximum surface area or elevation of an existing impoundment. Therefore, pursuant to 18 CFR §4.38(a)(4)(v), three stage consultation is required. Three stage consultation is generally defined as follows:

Stage 1 – Initiate consultation through the release of an Initial Consultation Document (ICD).

Stage 1 ends when agencies have provided the applicant with a list of study requests. SEAPA is planning to file the ICD with FERC in the late fall or winter of 2012/2013. Copies of the ICD will also be sent to all agencies, Native Villages, and Indian tribes, and made available to the public.

Stage 2 – Develop information (e.g., analysis of existing information, studies, etc.) to address the questions identified in Stage 1. Stage 2 ends when the applicant has filed the amendment request with FERC. SEAPA has elected to start collecting information prior to commencement of the formal amendment process in order to facilitate early discussion about the proposed action.

Stage 3 – FERC conducts post-filing consultation with agencies, pursuant to the National Environmental Policy Act (NEPA). This stage concludes with issuance of an amended license.



This process, from the filing of the ICD to the issuance of the amended license, could take 3 years. It may be possible to skip or truncate certain steps, which SEAPA would like to explore with the agencies, provided sufficient information can be developed in advance to allow all parties to knowledgeably discuss the action and its implications.

Accordingly, SEAPA engaged Long View Associates and Tetra Tech to collect information during the 2012 field season and conduct studies to help evaluate these potential resource impacts and to determine the optimal path forward for developing information for an eventual license amendment.

1.2. Purposes of the 2012 Environmental Field Program

The purpose of the 2012 environmental field program is to collect baseline environmental information and to evaluate the potential for impacts to environmental resources resulting from the proposed 20-foot increase in pool elevation. Results of these studies will help inform discussions about the necessary range of environmental analysis to support the FERC amendment process. Broad areas of environmental question include potential impacts from the proposed action on (1) the fish and aquatic community and associated habitat, and (2) terrestrial vegetation and wildlife and features such as soils and cultural resources.

The 2012 terrestrial studies will collect baseline information between the existing full pool elevation and the proposed additional inundation of 20 feet of upland habitat. In addition to providing information needed to characterize potential project effects, the terrestrial resource inventories listed below will build on and update any previous data collection efforts to help agencies with jurisdiction and management responsibility over these resources meet their respective mandates. Specifically, the proposed terrestrial fieldwork consists of four main components that will inform agency decision-making and permitting:

- a. Cultural (background research, inventory plan, and cultural resources site inventory)
- b. Soils (evaluation of potential impacts to soil productivity, erosion potential, and mass movement)
- c. Vegetation (sensitive and invasive plant surveys including wetland verification)
- d. Wildlife (general wildlife and habitat surveys, including a bald eagle nest survey, as well as specific goshawk surveys, if required)

This document describes Cultural Resources Study. Associated terrestrial studies include soils, wildlife, and vegetation resources evaluations and are addressed in separate study plans.

1.3. Study Goals and Objectives

The goal of the Cultural Resources Study is to provide a current baseline within the upland areas of the Project area as needed to determine the potential impacts of the Project. Specific objectives of this study include:

- a. Conducting background research for information on previously recorded cultural resources sites and previous cultural resources inventories in or near the Project vicinity.
- b. Upon completion of research, preparing an inventory plan and submitting it to the Ketchikan–Misty Fiords Ranger District archaeologist and to the Alaska State Historic Preservation Officer (SHPO) for review.
- c. Obtaining authorization/permit from the Alaska SHPO and/or from the USDA Forest Service (USFS). A meeting is necessary with the Ketchikan–Misty Fiords Ranger District archaeologist to determine whether an Archaeological Resources Protection Act (ARPA) permit from the Tongass National Forest is required.
- d. Conducting a site inventory.

2. BACKGROUND

Cultural resources were addressed during the FERC licensing for Swan Lake. Dam facilities are not 50 years old and are therefore not currently eligible for historic property status. However, data collected during this effort will serve to inform future relicensing.

3. METHODS

The Project research design or inventory plan will define high and low sensitivity zones and the intensity of cultural resources inventory required. Typically, on the Tongass, all high sensitivity areas and a sample of up to 25 percent of low sensitivity areas will need to be inventoried. Ethnographic research and interviews may be needed based on consultation with USFS personnel about contacting Native Indian groups and knowledgeable Native Indian contacts to discuss the identification of potential traditional cultural properties within or near the Project. This work will follow-up on any formal government-to-government consultation conducted by the USFS.

A Cultural Resources Inventory—using the definitions of high and low cultural resource sensitivity zones in the Alaska Region Inventory Strategy included in the Programmatic Agreement and the results of background research—will be carried out according to the approved inventory plan and will include an intensive pedestrian cultural resources survey of up to 12 miles of high sensitivity areas around Swan Lake. Survey transects shall be no more than 20 meters apart and the surveyors will sample the

subsurface with soil probes and/or shovel-excavated test pits for evidence of subsurface features and/or cultural materials every 50 to 100 meters.

Upon completion of the fieldwork, draft archaeological site forms will be prepared for any resources recorded and submitted to the USFS and to the Alaska Heritage Resources Survey (AHRS) for review and assignment of site inventory numbers. A draft and final report will be prepared. The draft report will include the methods and results of the cultural resources assessment, using maps, tables, and photographs where necessary. The draft report will include evaluation of resource significance and potential Project effects. A second volume of the report, to be submitted to the USFS and the Alaska SHPO, will provide site forms and site maps. After addressing any comments, a draft final report will be submitted electronically to the USFS for review and submission to the Alaska SHPO for review.

4. SCHEDULE

The proposed schedule is as follows and will be refined as needed by the contractor in consultation with SEAPA.

July–August 2012	Conduct background research, develop Inventory Plan, and conduct field work
September–October 2012	Develop draft report and review draft report
November 2012	Submit final report to USFS for submission to Alaska SHPO

5. REPORTING

SEAPA will produce a draft report, containing appendices with raw data by September 28, 2012, for review by USFS. A final report that addresses comments will be issued by November 15, 2012. The final report will include SEAPA's recommendations for follow-up activities in 2013, if any, to address outstanding questions, or new questions that arise as a result of the study.

6. REFERENCES

The following information sources were used during preparation of this document:

Alaska Office of History and Archaeology. 2012. Alaska Department of Natural Resources website for Heritage Resources Survey. Online restricted access at:
<http://dnr.alaska.gov/parks/oha/ahrs/ahrs.htm>.

Ketchikan Public Utilities. 1979. *Application for License for the Swan Lake Project, FERC Project No. 2911*. Exhibit V: Statement of the Protection, Enhancement of Natural, Historic and Scenic Features in the Design, Location, Construction and Operation of Project Facilities. February 1979. Ketchikan, Alaska.