

Gustavus Electric Company

P.O. Box 102 Gustavus Alaska 99826 (907) 697-2299 fax (907) 697-2355

TO:

Pat Regan - Regional Engineer
Office of Energy Projects - FERC
Division of Dam Safety and Inspection
Portland Regional Office
101 Southwest Main Street - Suite 905
Portland, Oregon 97204

SUBJECT:

December Monthly Report for the Falls Creek Hydro-electric Project
FERC # P-11659

DATE SUBMITTED:

1/26/07

DISTRIBUTION LIST:

Project Personnel	Position	Contact E-mail
Richard Levitt	Project Manager	richardlevitt@cs.com
Steve Manchester	Construction Superintendent	sjm1@localaccess.com
Bob Christensen	Environmental Compliance	bob@criterweb.org
Agency Personnel	Agency	Contact E-mail
Ron Wright	FERC	ron.wright@ferc.gov
Jeffrey Esterle	FERC	jeffrey.esterle@ferc.gov
Jim Ferguson	ADF&G	jim_ferguson@fishgame.state.ak.us
Sean Johnson	ADF&G	shawn_johnson@fishgame.state.ak.us
Doug Jenkins	USDARUS	doug.jenkins@wdc.usda.gov
Richard Enriquez	USFWS	richard_enriquez@fws.gov
Tomie Lee	NPS	tomie_lee@nps.gov
Brady Scott	DNR	brady_scott@dnr.state.ak.us
Joe Donahue	DNR	joe_donohue@dnr.state.ak.us
Kathy Prentki	Denali Commission	KPrentki@denali.gov

Dear Mr. Regan,

Please find enclosed the Monthly Construction Report for the Falls Creek Hydroelectric Project, FERC # P-11659.

Gustavus Electric Company (GEC), as the licensee for the above project, submits this report.

Sincerely,
Richard Levitt
GEC President

Contact Richard Levitt (richardlevitt@cs.com) to add names to distribution list.

Falls Creek Hydroelectric Project (P-11659)
MONTHLY CONSTRUCTION REPORT TO FERC
December 2006

1) Progress of Work

Work continued on the intake service road this month. Work consisted of bringing the penstock trench and service road to grade. A reduced work force worked until December 22, when the project was shut down for the beginning of a one month break from construction.

2) Status of Construction

No work was done on the powerhouse road or in the powerhouse area this month.

Work continued on bringing the intake service road and penstock trench to final grade. In several places the alignment was moved into the hillside slightly to reduce the possibility of the road and penstock bed mass wasting into the creek. Blasting occurred on December 1 and drilling started again on December 11 with the last shot on December 14. Overburden, muck and clay were backhauled to the disposal site. Shot rock was used for road base and for the penstock trench where required. Work on the project ceased on December 22 and will resume on January 22, weather permitting.

A draft Final Environmental Design Plan regarding the tailrace location and landslide mitigation was sent to the agencies for comment on December 11. The final plan should be sent to FERC in Wash. DC in late January. See section 12 for more detail.

3) Construction Difficulties

Snowfall and temperatures in December were moderate and presented no difficulties. There were no other difficulties this month.

5) Critical Events and Dates

There were no critical events this month.

8) Sources of Major Construction Material

The only construction material used this month was shot rock for the road bed, which came from the blasting along the road alignment.



Drilling at the Blueberry Hill road cut during the short days of mid-winter.



December 14th shot at Blueberry Hill road cut.



Intake service road and penstock grading. In this picture the equipment is approximately 500 feet from the impoundment site.

11) Photographs

Ten photo vantage points have been established throughout the project area. Very little change occurred at photo points this month but we provided updated photos for all stations to provide the seasonal perspective. See Figure 1 for photo site locations and Appendix 1 for this month's photos.

12) Environmental Compliance Issues

Monitoring of turbidity in Falls Creek occurred sporadically in December. The creek was frozen over during the first week of the month and on some days no construction occurred in the vicinity creek. When turbidity was monitored there were no results of concern. The peak reading was 13.5 NTUs. This event was the result of heavy rainfall and ice breakup.

Additional blasting along the intake service road was conducted this month without causing landslides or otherwise contributing sediment to Falls Creek. Small shots and light loads have continued to be used in this area with great success. Of note - a successful shot in the Blueberry Hill road cut (see photos on previous page). Slides are of high concern in this area so it was considered exemplary that this shot did not result in further mass wasting.

For part of December, public motorized access was provided to community members interested in collecting firewood. This access proved difficult to manage and resulted in the unfortunate loss of several wildlife snags from a wetlands area. Immediately following this action it was decided to restrict motorized access to the work crew only and to postpone public firewood access for the time being.

Several things were done this month in support of developing a modified tailrace design, mitigation and restoration plan:

- 1) The creek length near the powerhouse was surveyed to provide accurate gradient information for engineered logjam designs and the modeling of a no-action alternative.
- 2) Creek profile and substrate data was collected to characterize the morphology of the



Ice thickness after the unusually cold month of November was over 1 foot along the intake service road. Flood conditions in early December flushed most of this ice.



Evidence of wildlife snag removed from wetlands area.



This is a picture of the project manager working with the ECM to survey stream gradient near the powerhouse.

stream.

3) A geomorphologist from Herrera Environmental Consulting visited the site on December 18th to gather additional information for tailrace, mitigation and restoration designs. A draft design was completed.

A separate report on the modified tailrace design, mitigation and restoration plan will be provided to the planning committee and FERC by the end of January.

13) Wildlife Activity

Wildlife activity was generally low during December though there was a noteworthy observation of deer tracks along the road near the gravel pit. Deer sign has been encountered very infrequently in this area.

14) Biotic Monitoring

Opportunistic observations for the frazzle ice model were made in the first few days of December. Fairly violent flood conditions near the end of the first week flushed most ice from the stream. In some locations, ice blocks were lodged in banks and logjams over six feet above normal stream level!

Digital instream flow monitoring began again on December 20 with the reinstallation of the transducer. Manual discharge measurements were collected to supplement and calibrate the transducer data.

A weather station was installed along the road just above the transducer pool. This station is collecting air temp, precipitation, wind speed and wind direction data for use in predictive modeling of frazzle ice formation. Data is being collected every fifteen minutes.

The following sections are not yet applicable to the date of this report:

- 4) Contract Status
- 6) Reservoir Filling
- 7) Foundations
- 9) Materials Testing and Results
- 10) Instrumentation



Tim Abbe of Herrera Environmental Consulting shown taking notes for modified tailrace design, mitigation and restoration of fish habitat.

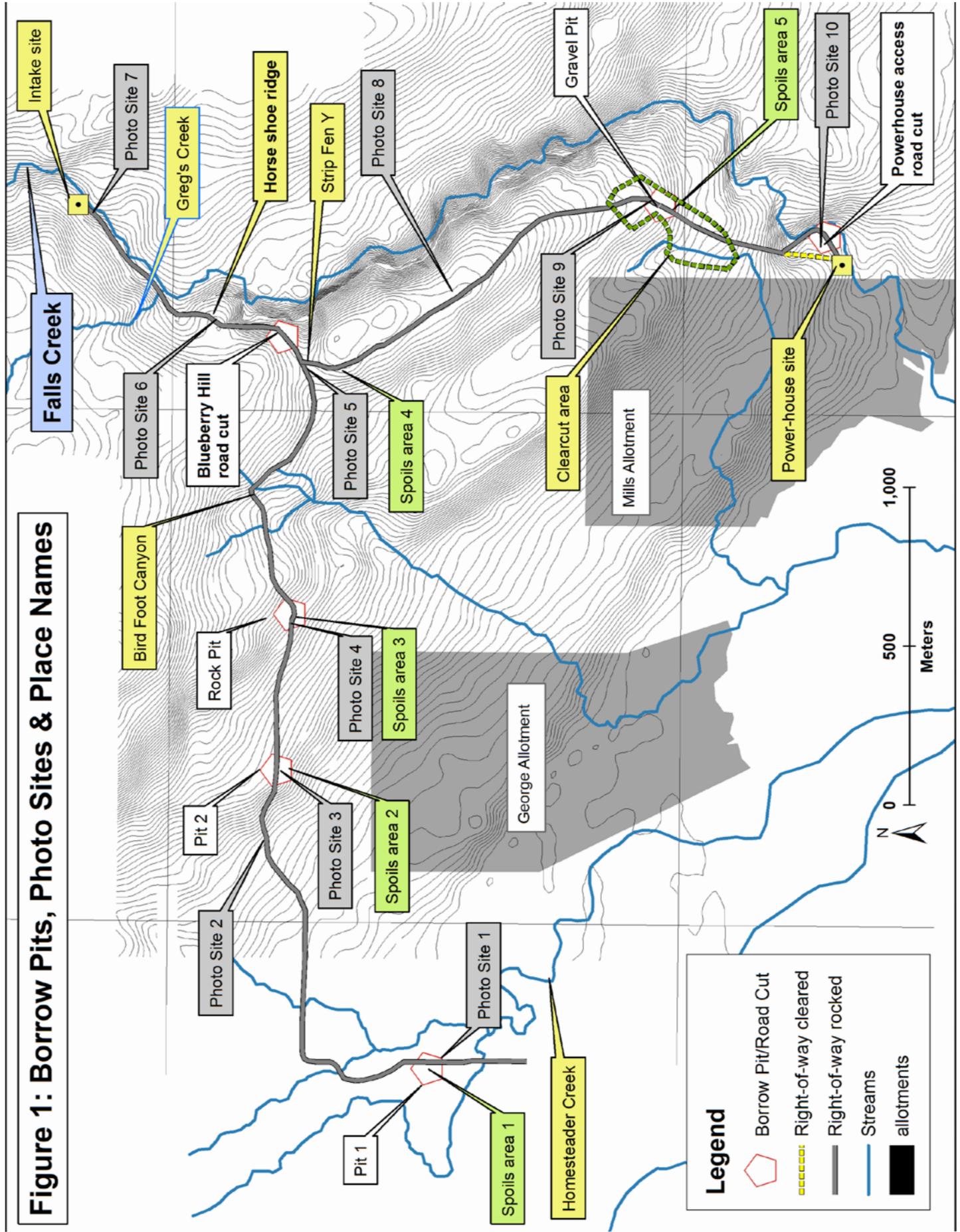


Stream width and substrate data were collected along several transects across the creek.



Weather station installed near transducer pool. This station collects air temp, wind direction, wind speed & precip data.

Figure 1: Borrow Pits, Photo Sites & Place Names



Legend

- ▭ Borrow Pit/Road Cut
- - - - - Right-of-way cleared
- Right-of-way rocked
- Streams
- allotments

APPENDIX 1: DECEMBER PHOTOS FROM VANTAGE POINTS



01_photo_site.jpg



02_photo_site.jpg



03_photo_site.jpg



04_photo_site.jpg



05_photo_site.jpg



06_photo_site.jpg



07_photo_site.JPG



08_photo_site.jpg



09_photo_site.jpg



10_photo_site.jpg

Photo taken from here



Current report photo (10). Photo above indicating photo 10 location.