

**CULTURAL AND HISTORIC RESOURCES
IDYLWILDE HYDROELECTRIC PROJECT**



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January 20, 2011

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Figure 1. Site location.

Cultural and Historic Resources

Idylwilde Hydroelectric Project

Introduction

The City of Loveland, Colorado (City) is proposing to relicense Federal Energy Regulatory Commission (FERC) Project No. 2829, Idylwilde Hydroelectric Project (the Project). The Project is owned and operated by the City. Water Consult retained ERO Resources Corporation (ERO) to prepare preapplication materials associated with cultural and historic resources for the proposed relicensing. This report addresses the requirements for a preapplication document described in FERC's Integrated License Application Process (18 CFR 5.6).

Proposed Project

The Project is on the Big Thompson River along U.S. Highway 34 (U.S. 34), 14 miles west of the City (Figure 1). The dam is on National Forest lands managed by the Arapaho-Roosevelt National Forest. A hydroelectric plant was built on municipally owned property, allowing generation and distribution of energy from the Project to begin in 1925. The original dam and hydroelectric plant were destroyed in the Big Thompson River flood on July 31, 1976, and were subsequently rebuilt and returned to full service in 1981.

The dam is 50.5 feet high and has a total length of 239.1 feet. The reservoir has a surface area of 3.67 acres at spillway elevation, and impounds about 45 acre-feet of water. A minimum bypass flow of 7 cubic feet per second (cfs) is maintained through the dam to provide suitable habitat in the stream reach below. The penstock, 9,534 feet in length, originates at the dam and delivers water to two 450-kilowatt turbine-generator units in Loveland's Viestenz-Smith Mountain Park. The penstock crosses Forest Service and privately owned lands, and U.S. 34. Two taps along the penstock provide access to water for fire protection and 15 irrigation services are tapped into the line. The power generated is connected to the City's distribution system through a 22-kilovolt transmission line 1,153 feet in length.

Existing Environment

ERO conducted a file and literature review with the Colorado Historical Society Office of Archaeology and Historic Preservation (CHS OAHP). The legal location of the review area is Sections 1 and 2, Township 5 North, Range 71 West; Section 7, Township 5 North, Range 70 West of the 6th Principal Meridian in Larimer County, Colorado (Figure 1). A shapefile of the Project area was submitted to the OAHP with a request for a file search. Results were electronically submitted to ERO on November 18, 2010.

The review identified one previous cultural resource inventory conducted within the Project area. Survey LR.FS.NR110 was conducted in 1977 for the newly proposed Loveland Dam and associated facilities after the 1976 flood (Weber and Anderson 1977). Facilities and pipeline corridors surveyed during this inventory included a new dam, a new hydroelectric plant, the existing pipeline corridor, and a proposed pipeline corridor between Big Thompson Creek and U.S. 34 that does not appear to have been built after the 1977 inventory. According to Weber and Anderson (1977), most of the 3,200 feet of the existing pipeline from the dam site to the community of Idlewilde was also destroyed by the 1976 flood. In addition to the replacement of almost 3,200 feet of pipeline west of Idlewilde, 1,000 feet of pipe southeast of Idlewilde was replaced due to its antiquity and ongoing deterioration. The dam, hydroelectric plant, and existing pipeline corridor are the same facilities included in the current Project.

While the previous inventory did not record any cultural resources in or near the Project area, several facilities included in the current Project area are historic cultural resources. As stated above, the Idylwilde Hydroelectric Project began energy distribution in 1925. Although the original dam and hydroelectric plant were replaced after their destruction in the 1976 flood, both the reservoir and pipeline are potential historic properties. Neither of these resources has been formally recorded or evaluated for their eligibility to be listed on the National Register of Historic Places (NRHP). The total pipeline length is 9,534 feet. At least a portion of the pipeline was replaced after World War II (Foothills Nature Trail 2011). Based on the previous 1977 inventory report, at least 4,200 feet of this pipeline was replaced after the 1976 flood. No sections of the pipeline have been replaced since 1977 (Howard, pers. comm. 2011). The entire pipeline is now steel, and five of the six wooden trestles have been replaced with steel (Pitts, pers. comm. 2011). Although the pipeline is most likely not eligible for the NRHP, formal documentation is required before an eligibility recommendation is rendered.

The project area also crosses the Round Mountain Trail which was built by the Conservation Civilian Corps (CCC) in the 1930s. Portions of the trail have been rebuilt by the Loveland Ranger Force, a group of teenagers from Loveland (Summit Adventure Trail 2011). Other potential historic resources include some of the facilities at the Viestenz-Smith Mountain Park that were built by the CCC in the 1930s. Formal documentation is necessary before eligibility of these resources can be assessed.

Potential Impacts

The current Project only requires relicensing of the FERC Project No. 2829. No modifications to existing facilities or disturbance within the Project area are anticipated; therefore, there is no direct effect to historic properties.

DIRECT AND INDIRECT IMPACTS

Relicensing and continued operation of the existing Project facilities would not affect any cultural resources.

CUMULATIVE IMPACTS

The proposed Project would have no cumulative impacts on cultural resources.

MITIGATION MEASURES

No mitigation measures are recommended for cultural resources.

Preliminary Issues and Recommended Studies

PRELIMINARY ISSUES

No preliminary issues have been identified for cultural resources.

RECOMMENDED STUDIES

No further cultural resource studies are required in the absence of direct effects. If modifications to the pipeline or reservoir are planned in the future, ERO recommends formal documentation of these historic properties.

Agencies Contacted

The agency contacted for this report was:

Sarah Rothwell
Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway
Denver, CO 80203-2137

References

Foothills Nature Trail. 2011. City of Loveland Parks and Recreation Website. Available at: <http://www.ci.loveland.co.us/parksrec/SAT.htm>. Last accessed: January 17.

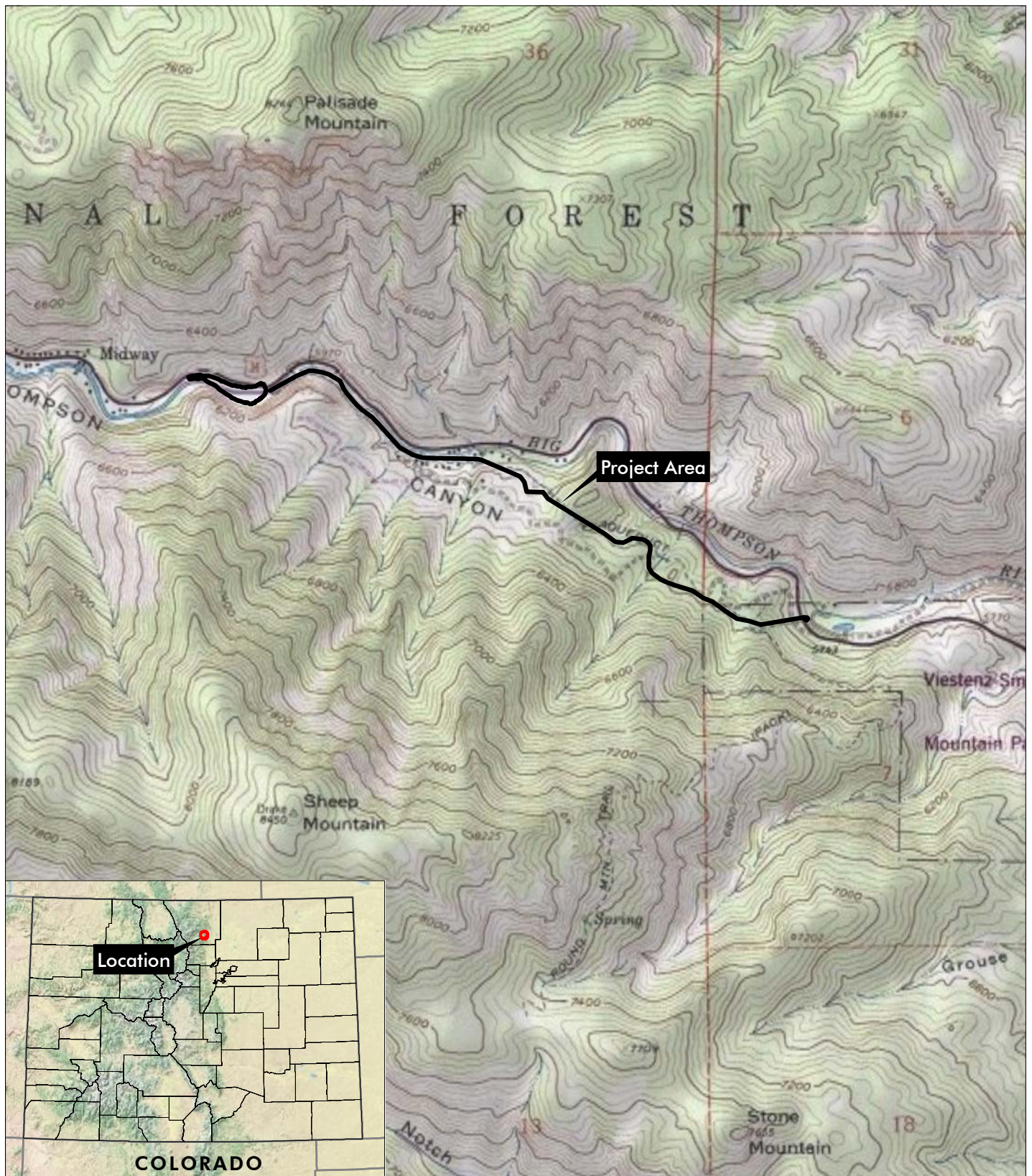
Howard, Larry. 2011. Personal communication with Tom Pitts.

Pitts, Tom. 2011. Personal communication with ERO Resources Corporation.

Summit Adventure Trail. 2011. City of Loveland Parks and Recreation website. Available at: <http://www.ci.loveland.co.us/parksrec/SAT.htm>. Last accessed: January 17.

Weber, D. and C.J. Anderson. 1977. Archaeological Reconnaissance of the Loveland Dam, Pipeline and Power Plant Site. Reports of the Laboratory of Public Archaeology

No. 7. Prepared for L.J. Green & Associates. On file, Colorado Historical Society,
Office of Archaeology and Historic Preservation.



Idylwilde Hydroelectric Project

Sections 1 and 2, T5N, R71W; Section 7, T5N, R70W; 6th PM

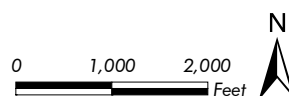
UTM NAD 83: Zone 13N; 474730mE, 4474958mN

Latitude, Longitude: 40.424874°N, 105.297895°W

USGS Drake, CO Quadrangle

Larimer County, Colorado

Figure 1
Site Location



Prepared for: Water Consult
File: 4872 figure 1.mxd [WH]
December 2010

ERO
ERO Resources Corp.