

MEMORANDUM OF AGREEMENT

RECITALS

A. The City of Loveland ("City") has operated the Idylwilde Hydropower Facility ("Facility") since 1925 on the Big Thompson River below the Town of Drake. Major features of the Facility include Idylwilde Dam and Reservoir, turbines and generators at Viestenz-Smith Mountain Park, and a pipeline approximately 1.6 miles long connecting the reservoir and the turbines.

B. The Big Thompson Flood in 1976 destroyed the original dam, part of the pipeline, and the turbines and generators. The facility was subsequently rebuilt and brought back into service in the early 1980's.

C. The City's current 50-year Federal Energy Regulatory Commission ("FERC") license, which expires in the year 2016, requires a minimum bypass flow through Idylwilde Dam of 3.0 cubic feet per second (cfs).

D. At the verbal request of the Colorado Division of Wildlife ("CDOW"), since the early 1980's the City has voluntarily bypassed a minimum flow of 6.0 cfs except during infrequent emergency periods of extreme low flow in the Big Thompson River. Historically this has occurred about two or three times annually, during winter months.

E. *A Minimum Flow Study of the Big Thompson River Between Idylwilde Dam and Viestenz-Smith Park* was done with US Forest Service input by W.J. Miller & Associates in 1992 and 93. The final report was submitted on February 26, 1993. The conclusions state in part that, "The current trout populations in the bypass reach are in good condition with the current 6 cfs minimum flow regime based on a limited sampling of those populations."

F. A primary benefit of the Facility to the City is its use to decrease power consumption peaks ("Peaks") for purchased power. These Peaks are used to calculate future costs of power used by the City.

G. The City desires to operate its facility in a manner which will protect the fisheries habitat of the affected reach of the Big Thompson River as much as possible without seriously affecting the benefit of the facility to the City or increasing the cost of operating the facility.

H. CDOW has concluded that historic operations under which the City has bypassed 6 cfs have been sufficient to maintain aquatic habitat to a reasonable degree. However, the CDOW also believes that operational refinements designed to increase bypass flows from 6 to 7 cfs, minimize flow changes and rates of decrease, and avoid siltation problems downstream of the hydropower facility will serve to further protect and stabilize aquatic wildlife values.

CITY OF LOVELAND
CITY CLERK'S OFFICE
500 E. 3RD ST.
LOVELAND CO 80537

AGREEMENT

In light of the foregoing recitals, the City and the CDOW agree as follows:

1. The City will release a minimum flow of 7.0 cfs through Idylwilde Dam except during emergency periods of extreme low flow in the Big Thompson River during the winter. At no time will flow drop below 3 cfs, as required by the City's current FERC license for the Facility. Flows will drop below 7 cfs only when it is anticipated that power consumption will establish a Peak which could increase future power rates.
2. When it is deemed necessary by the City to decrease the bypass flow through Idylwilde Dam below the 7.0 cfs minimum for power generation purposes, the City will "ramp" the bypass flow so that the decrease in flow occurs at a rate of 1.0 cfs per hour or less.
3. The City will avoid silting the riverbed below Idylwilde Dam through its sluicing operations at the dam by performing those operations only during periods of high river flow during the spring runoff. The CDOW will be notified prior to this operation.
4. CDOW will report to the City the results of any fish population studies conducted on the bypass reach of the river, to evaluate the impact of this operational agreement.
5. This Agreement shall remain in effect until the parties hereto mutually agree in writing to amend it. In addition, should either party to the Agreement wish to terminate it, that party shall convey its desire to the other party at least 90 days prior to the effective date of termination.

Done this 9th day of June, 1994.

COLORADO DIVISION OF WILDLIFE

by: Walt Graul
Walt Graul, Regional Manager
Colorado Division of Wildlife

CITY OF LOVELAND

by: Ralph Mullinix
Ralph Mullinix, Director
Loveland Water & Power Department

APPROVED AS TO FORM:

Caroline Blackwell
Caroline Blackwell,
Assistant City Attorney
CITY OF LOVELAND
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15160

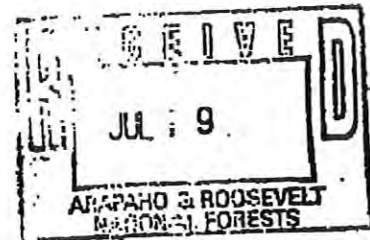


CITY OF LOVELAND

DEPARTMENT OF WATER & POWER

200 North Wilson, Bldg. #1 • Loveland, Colorado 80537
(303) 962-3000 • (303) 962-3400 FAX • (303) 962-2620 TDD

Wednesday, July 13, 1994



Mr. M. M. Underwood, Jr., Forest Supervisor
Arapaho and Roosevelt National Forests
240 West Prospect Road
Fort Collins, CO 80526

RE: Clarification of Memorandum of Understanding on Idylwilde Dam Operations

Dear Skip:

Jean Thomas has requested clarification on two questions concerning the June 9, 1994 *Memorandum of Understanding* between the Colorado Division of Wildlife and the City of Loveland. This letter may help explain those points for your office. A copy of the document is attached for your convenience. Jean's questions and our answers follow:

- 1) *Do the flow rates in the document refer to instantaneous or average daily flows?*

As we signed it, the flow values in the 'Agreement' portion of the *Memorandum* were intended to be instantaneous flow rates, including the 7.0 cfs in numbered Paragraph 1 of page 2.

- 2) *How often are flows expected to drop below 7.0 cfs, as anticipated in the last sentence of numbered Paragraph '1'?*

The last sentence of Paragraph 'D' in the 'Recitals' portion of the *Memorandum* says, "historically this has occurred about two or three times annually, during winter months", referring to how often flows dropped below the City's historical voluntary 6.0 cfs minimum flow rate. This sentence was intended to indicate how often that occurrence might be expected to happen in the future. We did not specifically limit ourselves to two or three annual occurrences in numbered Paragraph '1' because of the variability of conditions from year to year, but we do not expect to normally exceed that amount.



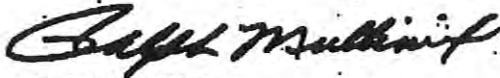
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M. M. Underwood, Jr., ARNF Forest Supervisor
Wednesday, July 13, 1994
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If additional clarification or information is needed, please call Larry Howard at 962-3703.
Thank you.

Sincerely,



Ralph Mullinix,
Water & Power Director

cc: Jean Thomas, USFS
File - Idylwilde Hydropower Facility

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