

PPLM-Mystic-2636

Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street Washington, D.C. 20426

August 2, 2010

RE: Filing Mystic Lake Project Fisheries Management Plan

Dear Secretary Bose:

Herein attached, per Appendix B USFS Condition 16 of the December 17, 2007 Commission Order Issuing New License (effective January 1, 2010), is the Mystic Lake Project Fisheries Management Plan which PPL Montana has completed in consultation with agencies (USFS, MFWP and MDEQ). Signatures of approval for this Plan from the USFS, MDEQ and MFWP are included on page 2.

Sincerely

Jon Jourdonnais

Manager Hydro Licensing and Compliance

Cc:

Doug Epperly, USFS
Terry Jones, USFS
Darin Watschke, USFS
Randy Apfelbeck, MDEQ
Tom Ring, MDEQ
Jeremiah Woods, MFWP
Ken Frazier, MFWP
Jim Darling, MFWP
Brent Mabbott, PPLM
Frank Pickett, PPLM
Gordon Criswell, PPLM
Dave Kinnard, PPLM
Ginger Gillin, GEI
Kristi Webb, M-M

By signatures below, the USFS, MDEQ and MFWP approve this Mystic Lake Project Fisheries Management Plan filing with the Commission.

Chies Worth
Name
Deputy Forest Supervisor USFS Position
7/23/2010
Date
Roley Soles
Name .
Willed Boiling Starlad Subin Spenisor
INIDEA FOSITION
23 March 2010
Date
- Suce Rich
Name
Chief of Fisheries
MFWP Position
3 24 10
Date
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Fisheries Monitoring Plan

Mystic Lake Hydropower Project FERC Project Number 2301

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Submitted to: Federal Energy Regulatory Commission 888 First Street NE Washington DC 20426

Submitted by: PPL Montana, LCC 45 Basin Creek Road Butte, Montana 59701

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Introduction

On December 17, 2007 the Federal Energy Regulatory Commission (FERC) issued an Order Issuing New License for the Mystic Hydropower Project (Project No. 2301), effective December 31, 2009. Included in this license are Section 4(e) conditions, submitted by the U.S. Forest Service¹ (USFS).

Condition No. 16 of the 4(e) conditions address fisheries management in the Project area,

Within one year of License issuance, the Licensee shall file with the Commission, a Fisheries Monitoring Plan approved by the Mystic Lake Fisheries, Aquatic Habitats and Water Quality Technical Advisory Committee USFS, Montana Division of Environmental Quality [DEQ], and Montana Fish, Wildlife, and Parks [FWP]). The monitoring shall be conducted for the duration of the License term to assess fisheries and aquatic habitat conditions in the project area to ensure that project operations are not adversely affecting aquatic resources. The Fisheries Monitoring Plan is a protective measure designed to detect trends, if any, in fish populations or aquatic habitat conditions that may be related to project activities. The Fisheries Monitoring Plan shall meet the protocol described in Section E.5.3.3.3 of Volume IA – Public, Final License Application, Applicant Prepared Environmental Assessment, Exhibit E (December 15, 2006). The Fisheries Monitoring Plan shall be conducted on a sixyear cycle for the term of the new Mystic Lake project license and encompass Mystic Lake and West Rosebud Creek from Mystic Lake to below Emerald Lake.

PPL Montana meets with the Mystic Lake Fisheries, Aquatic Habitats and Water Quality Technical Advisory Committee (TAC) annually to review data and plan continuing studies. Cooperative efforts to monitor fish populations in the Project area began in 2006, using the Fisheries Monitoring Plan from the Final License Application as the basis of the work plan.

At the January 2010 TAC meeting, the Fisheries Monitoring Plan described in Section E.5.3.3.3 of Volume IA - Public, Final License Application, Applicant Prepared Environmental Assessment, Exhibit E (December 15, 2006) was reviewed. The TAC agreed to the elements of the Fisheries Monitoring Plan to be implemented during the remainder of the Mystic License, as described below.

¹ See Appendix B of License, Section 4(e) Terms and Conditions filed May 3, 2007 and modified by filing of November 30, 2007.

Fisheries Monitoring Plan

Funding

An agreement between PPL Montana, the USFS and the FWP provides funding for fisheries biologists from the USFS and FWP to assist PPL Montana in implementing the Fisheries Monitoring Plan.

Operation of the Technical Advisory Committee

FWP, USFS, PPL Montana, and other interagency biologists will report on findings and work performed each year at an annual meeting of the Mystic TAC. In addition, annual work plans and budgets for the coming year(s) will be discussed and approved. Annual reports from biologists will describe new adaptive management opportunities for Mystic fisheries management within the context of each fisheries plan.

Adaptive management (change in management direction or scientific method based on monitoring results or emerging technologies) will be accomplished by consultation of PPL Montana and a quorum of resource agencies within the Mystic TAC.

Fisheries Monitoring Plan

The Fisheries Monitoring Plan (Plan) covers fisheries research in Mystic Lake, West Rosebud Creek between the dam and powerhouse, West Rosebud and Emerald lakes, and West Rosebud Creek below the powerhouse. Each of these locations is impacted by PPL Montana operations due to changes that are occurring to the natural hydrograph. The Plan includes a continuous 6-year schedule for implementing the following PM&E measures:

- A. Mystic Lake monitoring will occur every third year to record resident fishery trends and will include:
 - 1. Summer netting with experimental floating and sinking gillnets in two standardized locations. Biological data collected will include number of fish caught by species and length and weight characteristics.
 - **2.** Angling to capture fish in two sections of Mystic Lake. Biological data collected will include catch-per-unit-effort (CPUE), length and weight and physical characteristics.

B. West Rosebud Creek between the dam and powerhouse will be monitored every third year and include:

Electrofishing estimates of fish populations. An August or September estimate will be conducted in two established locations: 200-foot section at the downstream end of the reach and a 350-foot section below the falls. FWP will use a standardized analysis program to estimate and report fish populations. This sampling is the best trend indicator of relative change in the fish community.

C. West Rosebud and Emerald Lakes fish monitoring will occur every second year and will include:

West Rosebud and Emerald Lake fish populations will be sampled biannually using floating and sinking experimental gillnets in standardized locations. Sampling has been conducted by FWP on these lakes as a trend indicator of relative changes to the fish assemblages. Biological data collected includes species, length, weight, and scales for age composition.

Water temperature will be monitored from April to late October at four sites: West Rosebud Creek in the upper bypass (below Mystic Lake), West Rosebud Creek above the powerhouse, West Rosebud Creek below the powerhouse, and West Rosebud Creek below West Rosebud Lake Dam during the summers that fish are monitored in West Rosebud Lake and Emerald Lake.

D. Monitoring of fish populations in West Rosebud Creek downstream of Emerald Lake will occur every third year using electrofishing equipment.

An electrofishing estimate of the fish population will occur at an established location below Emerald Lake. This sampling has been conducted by FWP over the years and is the best trend indicator of relative change in the fish community.

- E. West Rosebud Creek fish habitat monitoring will occur every third year and will include:
 - 1. Core sampling at two established locations to monitor changes in sediment deposition in spawning gravels.
 - 2. Embeddedness measurements at each core sampling location to monitor changes in streambed habitat.
 - 3. Standardized aquatic insect sampling to determine health and changes that maybe occurring in the macroinvertebrate community.

- F. Rainbow and brown trout redd counts will occur every two years in the established electrofishing section in West Rosebud Creek below Emerald Lake.
- G. When a biological problem is identified, PM&E measures will be taken to address the problem.

Schedule

As described above, cooperative fisheries monitoring has been conducted since 2006. Efforts will continue on a 6-year cycle as described below.

Mystic License Proposed Fisheries Monitoring 6-Year Schedule

Sampling Effort									
Year	\mathbf{A}	В	C	D	\mathbf{E}	F	G		
2010			X	X	X		X		
2011		X				X			
2012	X		X				X		
2013				X	X	X			
2014		X	X				X		
2015	X					X			

A= Mystic Lake monitoring

B= West Rosebud Creek between the dam and powerhouse

C= West Rosebud and Emerald lakes fish monitoring

D= West Rosebud Creek below Emerald Lake electrofishing

E= West Rosebud Creek habitat monitoring

F= West Rosebud Creek redd counts

G= Water Temperature monitoring

Reporting

Annual reports will be prepared which summarize the previous year's work and the proposed plan for the next year. Reports will be submitted to the Mystic TAC and posted on the Mystic Hydropower Project website.

PPL Montana proposes to file an updated Mystic Fisheries Plan, including a summary report on progress under the previous Plan, with the Commission in 2016 and every six years thereafter for the term of the Mystic Project License.