



NorthWestern Energy, 1801 South Russell Street, Missoula, Montana 59806

NorthWestern
Energy
Delivering a Bright Future

NWE-Mystic-3376

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

May 12, 2016

RE: NorthWestern Energy files Mystic Lake Project Renewed Six Year (2016-2021) Fisheries Plan and Six Year (2010-2015) Fisheries Monitoring Report

Dear Secretary Bose:

Herein attached, per U.S. Forest Service Appendix B Condition 16 of the December 17, 2007 Commission Order Issuing New License, is NorthWestern Energy's Renewed Six Year (2016-2021) Fisheries Plan and Six Year (2010-2015) Fisheries Monitoring Report for the Mystic Lake Project. Signatures of approval from the U.S Forest Service (USFS), Montana Fish, Wildlife and Parks (MFWP), and Montana Department of Environmental Quality (MDEQ) for this Plan and Report filing appear on page 2.

NorthWestern Energy proposes to file a renewed Fisheries Plan and Report with the Commission every six years for the term of the Mystic Project license. Annual reports under this Plan will continue to be submitted to the USFS, MFWP and MDEQ, and posted to the NorthWestern Mystic Lake Project public website.

Sincerely,

Jon H. Jourdonnais,
Leader, Hydropower License Compliance

Cc: Brent Mabbott, NWE
Andy Welch, NWE
John Tabaracci, NWE
Mary Gail Sullivan, NWE
Ken Coffin, USFS
Clint Sestrich, USFS
Jason Garber, MDEQ
Ken Frazier, FWP
Mike Ruggles, FWP
Jason Rhoten, FWP
Ginger Gillin, GEI
Kristi Webb, New Wave

By signature of approval below, the USFS, MDEQ and MFWP approve the Renewed Six Year (2016-2021) Fisheries Plan and Six Year (2010-2015) Fisheries Monitoring Report for the Mystic Lake Project as filed herein with the Commission.

Mary C Eubank
Name

Forest Supervisor
USFS Position

5/5/16
Date

Custer Gellert

[Signature]
Name

Water Protection Bureau Chief
MDEQ Position

May 6, 2016
Date

[Signature]
Name

Fisheries Div. Admin.
MFWP Position

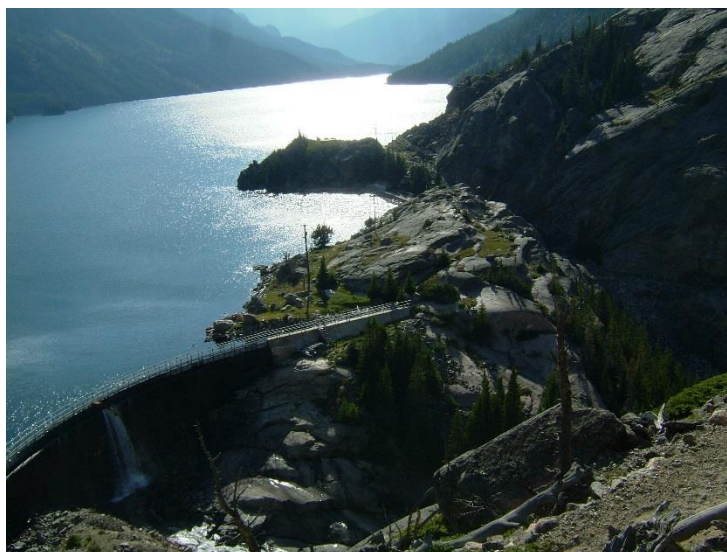
5/12/16
Date



**Mystic Lake Hydroelectric Project
FERC Project Number 2301**

**6-Year Fisheries Monitoring Plan
2016-2021**

**April 2016
Public**



Submitted by:
NorthWestern Energy Corporation
Butte, Montana

With Assistance From:
GEI Consultants, Inc.
Portland, Oregon

New Wave Environmental Consulting, LLC
Missoula, Montana

Table of Contents

Executive Summary	ES-1
1.0 Introduction.....	1
1.1 1.1 Funding	2
1.2 1.2 Operation of the Technical Advisory Committee	2
2.0 Fisheries Monitoring Plan.....	3
3.0 Schedule	5
4.0 Reporting.....	6
5.0 References	7

Executive Summary

The Mystic Lake Hydroelectric Project No. 2301 (Project) is operated and owned by NorthWestern Energy Corporation (NorthWestern, Licensee). On December 17, 2007 the Federal Energy Regulatory Commission (FERC or Commission) issued a new License to PPL Montana, the Licensee (now NorthWestern as of November 18, 2014) for the Mystic Lake Hydroelectric Project No. 2301 effective January 1, 2010. The new License includes US Forest Service (USFS) Section 4(e) Terms and Conditions filed on May 3, 2007. Section 4(e) Condition 16 requires the Licensee to prepare and implement a Fisheries Monitoring Plan that must be approved by the Mystic Lake Fisheries, Aquatic Habitats, and Water Quality Technical Advisory Committee known as the TAC.

On August 2, 2010, the Licensee filed the TAC-approved Fisheries Monitoring Plan for implementation between 2010 and 2015 with the Commission (PPL Montana, 2010). The Commission approved, with modifications, the Fisheries Monitoring Plan on September 30, 2010.

NorthWestern meets with the TAC, represented by Montana Fish, Wildlife and Parks (FWP), Montana Department of Environmental Quality (DEQ), and USFS, annually to review monitoring results and plan continuing studies. Cooperative efforts to monitor fish populations in the Mystic Project area began in 2006, using the Fisheries Monitoring Plan from the Final License Application (PPL Montana, 2006) as the basis of the work plan.

At the January 2016 TAC meeting, the TAC reviewed results from the previous 6 years of data collection and monitoring (2010 through 2015) and updated and agreed to the elements of the revised 6-Year (2016-2021) Fisheries Monitoring Plan to be implemented for the next 6-year cycle.

NorthWestern will summarize and present the results of the fisheries monitoring activities to the TAC annually. NorthWestern will prepare a 6-year comprehensive report summarizing fisheries activities completed between 2016 and 2021 along with an updated 6-Year Fisheries Monitoring Plan for implementation between 2022 and 2027. These two documents will be submitted to the TAC for review and approval prior to filing with the Commission no later than December 31, 2022.

1.0 Introduction

On December 17, 2007 the Federal Energy Regulatory Commission (FERC or Commission) issued an Order Issuing New License for the Mystic Hydropower Project (Project No. 2301), effective January 1, 2010. 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 six-year 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.

NorthWestern Energy Corporation (NorthWestern, Licensee) meets with the Mystic Lake Fisheries, Aquatic Habitats and Water Quality Technical Advisory Committee (TAC) annually to review monitoring results 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 dated December 15, 2006 (PPL Montana, 2006) as the basis of the work plan.

The Licensee filed the 2013 Annual Fisheries Monitoring Report with FERC on June 20, 2014. In the 2013 annual report, the Licensee proposed filing annual reports with the TAC, and a 6-year summary report with FERC by June 1, 2016, and every 6 years thereafter (PPL Montana, 2014). The 2013 annual report included concurrence with this request, from the USFS, DEQ, and FWP.

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

On July 30, 2014 FERC issued a letter stating that,

...while FERC remains interested in your fisheries monitoring results, the request to discontinue filing annual reports with FERC is reasonable. The 2010 through 2013 reports demonstrated acceptable results, as well as a commitment to accurately representing fish populations in the project area and ensuring collaboration with the TAC. Additionally, you have not deviated from the requirements of the Fisheries Monitoring Plan since its implementation, and provided documentation of the TAC's concurrence with the modified reporting schedule. As such, we find the proposed reporting schedule acceptable.

The July 30, 2014 FERC letter stated that the 6-year summary report and updated Fisheries Monitoring Plan is due to FERC on June 1, 2016.

At the January 2016 TAC meeting, the TAC reviewed results from the previous 6 years of data collection and monitoring (2010-2015) and updated and agreed to the elements of the revised 6-Year (2016-2021) Fisheries Monitoring Plan. The details for the 2016-2021 Fisheries Monitoring Plan scheduled for implementation for the next 6-year cycle are provided in Section 2.0.

1.1 1.1 Funding

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

1.2 1.2 Operation of the Technical Advisory Committee

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

Adaptive management (change in management direction or scientific method based on monitoring results or emerging technologies) will be accomplished by consultation of NorthWestern and a quorum of resource agencies within the TAC. When a biological problem is identified, Protection, Mitigation, and Enhancement measures will be taken to address the problem.

2.0 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 NorthWestern operations due to changes that are occurring to the natural hydrograph. The Plan includes a continuous 6-year (2016-2021) schedule for implementing the following PM&E measures:

A. Mystic Lake monitoring will occur every third year (2018, 2021) 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 (2017, 2020) 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 Lake and Emerald Lake fish monitoring will occur every third year (2017, 2020) and will include:

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

D. Monitoring of fish populations in West Rosebud Creek downstream of Emerald Lake will occur every third year (2016, 2019) using electrofishing equipment.

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

- E. Brown trout redd counts will occur every other year (2017, 2019, 2021) in the established electrofishing section in West Rosebud Creek below Emerald Lake.**
- F. Water temperature will be monitored in 2016 and 2018 from April to 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 Re-Regulation Dam.**

3.0 Schedule

The following outlines the schedule for continuation of fisheries monitoring activities between 2016 and 2021. Details of each activity is provided in the previous section.

**Mystic License
Proposed Fisheries Monitoring
6-Year Schedule**

Year	A	B	C	D	E	F
2016				X		X
2017		X	X		X	
2018	X					X
2019				X	X	
2020		X	X			
2021	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 fall redd counts

F = Water temperature monitoring

4.0 Reporting

Annual reports will be prepared that summarize the previous year's work and the proposed plan for the next year. The annual reports will be submitted to the TAC and posted on the Mystic Lake Project Coordination website (mysticlakeproject.com).

In 2022, a 6-year comprehensive report summarizing activities between 2016 and 2021 will be prepared along with an updated 6-Year (2022-2027) Mystic Fisheries Monitoring Plan. The comprehensive report and updated Fisheries Monitoring Plan will be submitted to the TAC for review and approval prior to filing with the Commission. The two reports will be filed with the Commission no later than December 31, 2022 and posted on the Mystic Lake Project Coordination website.

5.0 References

PPL Montana, LLC. 2014. Mystic Lake Hydropower Project, FERC Project Number 2301. 2013 Annual Fisheries Monitoring Report, Public. Submitted to FERC on June 20, 2014. Available: <http://www.mysticlakeproject.com>

PPL Montana, LLC. 2010. Fisheries Monitoring Plan, Mystic Lake Hydropower Project, FERC Project Number 2301. Submitted to FERC on August 2, 2010. Available: <http://www.mysticlakeproject.com>

PPL Montana, LLC. 2006. Mystic Lake Hydroelectric Project FERC No. 2301. Volume IA – Public Final License Application, Applicant Prepared Environmental Assessment (APEA) Exhibit E. Submitted to FERC on December 15, 2006. Available: <http://www.mysticlakeproject.com>