

UNITED STATES OF AMERICA 131 FERC ¶ 62,038  
FEDERAL ENERGY REGULATORY COMMISSION

PPL Montana

Project No. 2301-022

ORDER MODIFYING AND APPROVING RIPARIAN VEGETATION  
MONITORING PLAN PURSUANT TO ARTICLE 401

(Issued April 12, 2010)

1. On December 7, 2009, PPL Montana (licensee) filed a riparian vegetation monitoring plan (plan) for the Mystic Lake Hydroelectric Project (FERC No. 2301), pursuant to article 401 and 4(e) condition no. 18 of the license.<sup>1</sup> The project is located on West Rosebud Creek, in Stillwater and Carbon counties, Montana. The entire project is located on U.S. Forest Service (FS) lands within the Custer National Forest and occupies 673.54 acres of federal lands.

BACKGROUND

2. Condition no. 18 requires the licensee to file a plan approved by the FS, that meets the protocol described in Appendix B of Volume IA – Public, Final License Application, Applicant Prepared Environmental Assessment, Exhibit E (December 15, 2006). The plan should be designed to detect changes in the riparian vegetation, if any, as a result of changes in fluvial processes caused by operation of the Mystic Lake Hydroelectric Plant for the duration the license term. The licensee is to establish permanent riparian transects along West Rosebud Creek in order to quantify riparian habitat and monitor trends. Subsequent readings would be conducted every five years.

3. If the riparian vegetation recovery trend is upward for the 20-year period, monitoring is to be discontinued. If the trend is downward for the 20-year period as a result of project operations, the licensee is to prepare a revised plan to improve the condition of the riparian vegetation. The revised plan is to include monitoring over an additional 20-year period to ensure vegetation conditions are improving. The revised plan is to be filed with the Commission after review and approval by the FS. Article 401 requires the original plan to be filed with the Commission for approval.

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<sup>1</sup> 121 FERC ¶62,198 (2007).

## LICENSEE'S PLAN

4. In the summer of 2009, the licensee established permanent monitoring transects along West Rosebud Creek in collaboration with FS staff. Due to site limitations identified during the 2009 site inspection, it was determined by the licensee and the FS that the modified Daubenmire methodology the licensee proposed to utilize in its license application would not be effective for monitoring at the selected site. Specifically, the width of the riparian corridor is limited by natural slopes and topographic breaks/contours. Therefore, through coordination with the FS, the original Daubenmire methodology was modified to suit the selected monitoring area.
5. The location of the four transects established for long-term riparian vegetation monitoring efforts only include one stream channel type (B). Other potential monitoring locations (as identified in the 2006 Riparian Vegetation Monitoring Plan), were limited due to the influence of other hydrologic features and influences such as cattle grazing. The stream reach associated with the selected monitoring site is characterized by large substrate consisting of predominantly boulder and cobble, stable banks, and a stream gradient of approximately 3.5 to 4 percent. The existing stream characteristics will likely limit the hydrologic influence that project operations (e.g., augmenting river flows for whitewater recreation) have on the vegetation due to the confined stream channel and narrow floodplain width. Monitoring in Type C channel reaches (less than 2 percent stream gradients, entrenchment ratio of greater than 2.2, and wider floodplain widths) would be more effective to assess riparian vegetation changes resulting from project operations, however, no suitable Channel Type C study sites are available on FS lands.
6. Based on the above, the licensee and FS have determined that the implemented monitoring effort may not provide beneficial information for long-term monitoring of impacts/modification to riparian vegetation due to project operations. The following factors were identified to be limitations to the quality of data collected and the benefits for future comparisons: only one site (and one stream channel type) was determined to be adequate for sampling; shorter transects (with less vegetation) were sampled; the narrow floodplain width at the monitoring location; variance of hydrologic influence to the riparian vegetation due to stream channel morphology is likely minimal; and a small number of species (e.g., cottonwoods) that are reliable indicators of modifications in the hydrologic regime are present at the monitoring site.
7. Although the current license requires future riparian vegetation monitoring efforts to be completed once every five years throughout the duration of the 40-year license, the licensee recommends that future monitoring efforts be completed once every 10 years based on the limitations of physical site characteristics. The 10-year monitoring intervals would continue for the duration of the 40-year license and the next monitoring effort would be conducted in 2019.

## AGENCY CONSULTATION

8. The licensee received written concurrence from the FS, dated November 19, 2009, that the plan was adequate. The FS agrees that future monitoring efforts should be completed once every 10 years, based on the limitations of the physical site characteristics.

## DISCUSSION

9. The current plan includes all of the elements required by 4(e) condition no. 18 and article 401, and should allow the licensee to adequately monitor the condition of the riparian vegetation along West Rosebud Creek. However, should a revised plan be necessary to improve the condition of the riparian vegetation after 20 years of monitoring, the licensee should file the revised plan with the Commission, for approval, after review and approval by the FS. With the above modification, the riparian vegetation monitoring plan should be approved.

### The Director orders:

(A) The riparian vegetation monitoring plan, filed on December 7, 2009, pursuant to article 401 and 4(e) condition no. 18 of license for the Mystic Lake Hydroelectric Project, is approved.

(B) If at the end of the 20-year monitoring period, a revised riparian vegetation monitoring plan is necessary to improve the condition of the riparian vegetation along West Rosebud Creek, the licensee shall file the revised plan with the Commission for approval, after review and approval by the U.S. Forest Service.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days from the date of issuance of this order, pursuant to 18 CFR § 385.713.

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Administration and Compliance