

MYSTIC LAKE PROJECT

Whitewater Working Group

Final Meeting Summary

Bozeman, Montana

April 30, 2008

Meeting Attendees:

PPL Montana – Jon Jourdonnais

PPL Montana – Lance Elias

PPL Montana – Brent Mabbott

PPL Montana – Roscoe Kronfuss

Beartooth Paddlers – Ian McIntosh

MDEQ – Ann Harrie

MDEQ – Randy Apfelbeck

MFWP – Jim Darling

MFWP – Jeremiah Wood

MFWP – Andy Brummond

American Lands – Jeff Frost

American Lands – Bruce Bugbee

American Lands – Nancy Johnson

Participants via conference call:

PPL Montana – Frank Pickett

USFS – Mark Nienow

American Whitewater – Kevin Colburn

The meeting began at 10 am with introductions and a review of the agenda. Nancy provided a chronology of FERC relicensing activities for the Mystic Lake Project that culminated in an Order Issuing New License from the Commission in December 2007. The new license will be effective January 1, 2010. Whitewater studies began in 2004 for relicensing and have continued in following years. The whitewater plan is scheduled for filing with FERC at the end of 2009 as an adaptive management document. The plan will be proposed for update every 5 years thereafter with the Commission.

The group discussed study objectives and strategies for whitewater releases in 2008. There was a general discussion of previous flow measurements during whitewater releases, and the relationship of existing staff gages and the new USGS gaging station at the Emerald Lake bridge. Based on previous years' studies, the optimum flow for whitewater boaters appears to be in the 1.9 ft to 2.0 ft range as measured at the staff gage at the Pine Grove bridge. Frank Pickett said he would be collecting more precise flow measurements based on field work this summer. Caution was suggested about the accuracy of staff gages and the need for serial calibration of gages and bench marking of the Pine Grove gage.

Frank Pickett outlined a study plan for the summer of 2008:

1. Place water level loggers at the Emerald Lake outlet, Pine Grove bridge and Allen Grade bridge.
2. Measure three flows to develop rating curves for different locations.
3. Determine flow time between West Rosebud Dam and the Emerald Lake outlet.
4. Monitor water levels of West Rosebud and Emerald lakes during whitewater releases.
5. Conduct observations of macro invertebrates and fish stranding.

The group identified the following points:

1. Generally, releases that do not substantially increase existing flows are likely to have less impact than releases that substantially increase low flows (similar to releases of July 14-15, 2007).
2. Although PPLM can regulate whitewater releases through manipulation of boards and a valve at West Rosebud dam, no control is possible for flows exiting Emerald Lake.
3. What is the effect on water temperature, bank erosion and channel morphology, particularly at flow rates that approach bank full?
4. Are there potentially significant effects on downstream fishing during release events?
5. Are there impacts on insects and stranded fish? If so, what is the magnitude of these effects?
6. Water quality standards for temperature and turbidity would need to be met during a release.
7. FWP would like instream flow reservations to serve as a guideline for whitewater releases.
8. Smaller releases (50-80 CFS) might provide some level of whitewater floating experience when timed with nearly sufficient natural flow or for paddlers seeking less water.
9. One-day flow augmentations should be investigated to allow a longer recovery time, particularly under low flow conditions.
10. Is there some way of providing a digital readout at the USGS gaging station?
11. Parameters such as thresholds and minimum creek flows might be developed to help guide whitewater releases.
12. PPLM proposed focused studies that would help pin down details while still maintaining flexibility for releases, and learning from the results to build an acceptable level of operation for whitewater releases. Flow rates should optimize overall benefits.
13. The whitewater plan will be adaptive and build on increasing amounts of knowledge about whitewater effects on resources in West Rosebud Creek.

Lance Elias provided the group an initial runoff forecast based on snowpack levels, and noted that the estimate will become more on target in future months. It will take several years to learn about potential whitewater releases relative to various runoff conditions. Different runoff scenarios will dictate what whitewater releases are possible.

Summary

1. Frank Pickett will develop and refine proposed studies for this year, and will distribute a draft study plan to the group.
2. PPLM will hold conference calls in May and June to provide updated runoff forecasts and obtain stakeholder feedback on proposed studies. May 14th is the next scheduled call.
3. On-site evaluation will be necessary to help monitor effects of flow releases this year.

The meeting adjourned at 2:30 PM.