MYSTIC LAKE PROJECT

Whitewater Working Group

Conference Call Summary June 13, 2008

All participated via conference line:

PPL Montana – Jon Jourdonnais MFWP – Jim Darling
PPL Montana – Lance Elias MFWP – Jeremiah Wood
PPL Montana – Frank Pickett MFWP – Andy Brummond

PPL Montana – Brent Mabbott MDEQ – Ann Harrie

American Whitewater – Kevin Colburn
Beartooth Paddlers – Ian McIntosh
American Lands – Jeff Frost
American Lands – Nancy Johnson
No Forest Service representatives

The conference call began at 1:30 PM with a roll call. Jon noted that Helen Mackay with the Lazy EL Ranch would be joining the group with an interest in the upcoming studies and their potential effect on ranch activities. Nancy reviewed the agenda.

Brent Mabbott summarized feedback gained from agencies on whitewater studies and goals for this year. He noted that several years may be needed to gain a full understanding of effects of whitewater releases due to high variability of flow conditions from year to year. Brent described three areas of study to determine an acceptable range of flow manipulation for releases:

- 1. Mechanical and operational considerations:
 - Water availability, including ability of the re-reg reservoir and re-reg dam to provide target flows
 - Refill requirements of the re-reg reservoir
 - Flow attenuation limitations imposed by Emerald Lake
 - Instream flow requirements of West Rosebud Creek
 - Water availability on the descending limb of the hydrograph
- 2. Biological effects, including fish flushing or stranding and impacts to the recreational fishery;
- 3. Safety considerations associated with rapid flow increases in recreational camping areas at Pine Grove and Emerald Lake campgrounds.

Brent noted that PPLM was working with agencies to identify stream reaches to monitor during releases, and people to help monitor. Monitoring would occur both during increasing and decreasing flows.

Frank Pickett reported on preliminary data downloaded from the data loggers. Preliminary data indicates that with a flow of approximately 270 cfs measured at the Pine Grove staff gage, it took about 2.5 hours for peak flow to exit Emerald Lake and an additional 1 hour 5 minutes for peak flow to be recorded at the Pine Grove staff gage. Frank also noted that this peak flow was barely

discernible to observers, but was recorded on the data loggers. He noted that these flow times will change with discharge; at higher discharges flow times will be shorter. Frank also reported that he and Brent measured a flow of about 205 cfs that was equal to a measurement of 1.38 to 1.40 on the Pine Grove staff gage. Note: This discharge measurement was taken at a different cross section that is wider and safer at higher discharges. With data now available from three flows, Frank will begin building a rating curve. Frank also noted that he may be installing more data loggers. On June 9th the lake was approximately 45 feet below full pool. Additional note from Frank: I plotted the three discharge measurements that we have so far and was not able to extrapolate to the 2.0 area with any accuracy. We need another discharge measurement at approximately 350-400 cfs. We will be watching the flow and will be able to get that discharge measurement as the flow builds in West Rosebud.

Jeremiah Wood, MFWP, reported that staff gages had been installed in a stream reach with side channels between the Pine Grove Bridge and Mackay Bridge, which is about 1 mile below Pine Grove.

Jon asked if there might be resource information that would not be gathered this year due to flow conditions. Agencies noted the possibility for study of fish stranding and flushing in later years. Jon noted that the whitewater plan would be filed with FERC at the end of 2009 as an adaptive management plan, and any draft flow protocols should be included in the plan with future refinement as needed.

Brent thought it would be possible to identify some operational 'windows' for whitewater releases this year. Kevin commented that habitat changes due to varying flows in side channels could likely be identified this year. He noted the importance of whitewater input into the study process, including the angling assessment survey, and the need for identification of study hypotheses up front for testing, rather than value calls on data later in the process. Kevin offered to provide information to the group on past angling studies. Jim Darling also noted the need for well-defined standards for study, and the benefit gained from whitewater studies sent previously by American Whitewater.

Lance provided a current water availability forecast of 55 1000-acre-feet for the West Rosebud drainage. He noted that 17 1000-acre-feet would be needed to fill Mystic Lake. Lance reported a NRCS forecast for peak flow in West Rosebud Creek in mid-June that hadn't occurred, and his prediction for a peak flow in mid to late July, similar to flow years in 1978 and 1995. Nancy noted that based on this information, the second half of July would be the likely time period for whitewater study this year.

Kevin asked whether both the ascending and descending limbs of the hydrograph could be studied for whitewater releases. Both PPLM and agencies relayed that this was an option to consider, with possible constraints due to Mystic operations.

Jeremiah reported that local angling groups had been approached about studying effects on stream fishability during whitewater releases, and the groups had expressed interest in participating. Kevin indicated that he would share previous studies on stream fishability with the group. MFWP also questioned whether refill of West Rosebud Lake following a whitewater

release, and a decrease in streamflow, could affect access at the confluence of Rosebud Creek and the Stillwater River. Fishing guides using this area would note any access change following a release.

Lastly, Kevin asked which free-flowing streams in the area could be compared to West Rosebud Creek to help identify similarities and differences. Agencies indicated that the Boulder River would be the best choice.

Kevin Colburn asked to be included in the angling assessment survey and has forwarded links of past studies to the group.

A date of Tuesday, July 15^{th} from 1:30 to 3:00 PM was set for the next conference call. The call adjourned at 2:30.