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Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 6D – Medicine Lake TMDL Update & TAC Recommendations
Date: July 9, 2009
Project: 23/27 051 2009 003

6D. Medicine Lake TMDL Update & TAC Recommendations

Recommended/requested Commission action:

1. TAC recommendations will be provided to the Commission as soon as possible after the July 13 TAC meeting.

Medicine Lake TMDL Update & TAC Recommendations

As directed by the Commission at the June 18 meeting, staff obtained and reviewed the P8 model and data used for the Medicine Lake TMDL because of concerns over the large difference in predicted phosphorus removal for the proposed West Medicine Lake Park Pond (50 lb/year current estimate versus 350 lb/year previous estimate). In reviewing the 2005 model results, staff found that the model showed pollutant loads and flows at the outlet of Plymouth Creek that were lower than loads and flows upstream of 26th Avenue, which seems unlikely. Based on other data obtained from Plymouth staff, staff also believes it is likely that there are issues with other monitoring data used in the modeling (2006). The data will need to be reviewed and modified and the models may need to be recalibrated. The previous model (which estimated 350 lb/year phosphorus removal) was based on an earlier set of monitoring data (2001 – 2004).

Staff requested additional information (flow rating curves) from Plymouth staff or LimnoTech that we hope to receive before the TAC meeting.

The Technical Advisory Committee will be meeting Monday, July 13 to discuss the Medicine Lake TMDL modeling and the options for assigning waste load allocations. Staff will discuss their review of the model and our discussions with LimnoTech. The TAC will report to the Commission on its deliberations and determinations at the Commission meeting.