## **Daybreak Monitoring and Evaluation Measures Annual Report for 2013**

MEM-	Closed-loop	Only dry processing is being used at the site and monitoring is proceeding
01	Clarifier	per the NPDES permit as reported under CM-02 as noted below.
MEM- 02	NPDES Monitoring	NPDES monitoring is ongoing. A summary is included with the CM-02 report and raw data is attached. PZ-3 water levels ranged from 39 inches in September to 64 inches in January. Temperatures ranged from 7.1 degrees C in late December to a high of 9.3 degrees in mid-January. pH measurements ranged from 6.91 to 7.31 (see attached data).
MEM- 03	Water Management Plan Monitoring	Flow from Pond 3 into Pond 5 was 3,000 to 5,000 gpm from April into early June. Flows fell to 1,000 to 2,000 gpm through late July and less than 1,000 gpm until late September when flow increased to 1,500 gpm. Temperatures at the Pond 5 outlet ranged from a low of 11.0 to 13.4 degrees C in April and early May. Temperatures increased to 19.3 in late May; 20.0 to 24.1 in early June; and dropped to 17.9 degrees C in late September. Reported DO remained above 10 mg/l with the exception of two short periods when it dropped to 9 plus mg/l. During the same period, Dean Creek temperatures ranged from 13.7 to 15.7 degrees C during April. They peaked at 19.2 degrees C in early May and flow was intermittent in mid-May, and there was no flow from mid-June through September as reported under CM-02. DO was generally above 10 mg/l in Dean Creek when flow was present. Reported transparency ranged from 57 to 66 inches in the reclaimed Ponds. Only dry processing is being used at the site, and no dissolved chemicals or additives employed. (see attached data)
MEM- 04	Pond, Shallow Water, and Shoreline Physical Structure Monitoring	None of the ponds have been fully excavated and reclaimed to date. Only the cells 1 c and d wetlands are complete, as noted under CM-15.
MEM- 05	Vegetation Monitoring	As noted in previous reports, significant mortality after the 2010 planting and approximately 1,000 additional trees were planted in 2011. Planting at cells 1c and d are healthy and the riparian area along Dean Creek has been planted.
MEM- 06	Dean Creek Riparian and Channel Condition Monitoring	Not scheduled to begin until one year after planting, which was completed in the Fall of 2013.
MEM- 07	EFLR Critical Bank Stability Monitoring	WEST Consultants, In. completed their survey in March of 2013 and their report is attached. Their report concludes that "Currently, there are no indications to suggest that the East Fork Lewis river poses a near term avulsion threat to the Daybreak Ponds."
MEM- 08	Pond Fish Use And Limnological Monitoring	Monitoring of fish use and water quality was completed in August 2012, and the R2 Technical Memorandum covering that work was previously provided. The Cell 1C & D wetlands (aka. #1 & 2 New Excavated Pond on the data sheets) have been monitored for transparency and results are included with

		the MEM-03 summary and data sheets.
MEM-	Oregon	To the best of our knowledge, no Oregon spotted frogs have been identified
09	Spotted Frog	in Clark County to date.
	Monitoring	
MEM-	Financial Status	A summary of the financial status of the endowment is included under CM-
10	Of	05 and the year-end bank statement is attached.
	Conservation	
	Endowment	