

Watershed Outlet Monitoring Program

Eagle Creek Station Savage, MN

2nd Quarterly Report *Preliminary Data* April 1 – June 30, 2008



Prepared By:
Scott Soil and Water Conservation District



Prepared For:
Lower Minnesota River Watershed District
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Introduction

The Eagle Creek WOMP site is located in Savage near Hwy 13 and Hwy 101. This report summarizes the results of stage, precipitation, and water quality for the 2nd quarter of 2008. This data is preliminary and is subject to change until the Metropolitan Council submits the final report for this period.

Flow and Precipitation

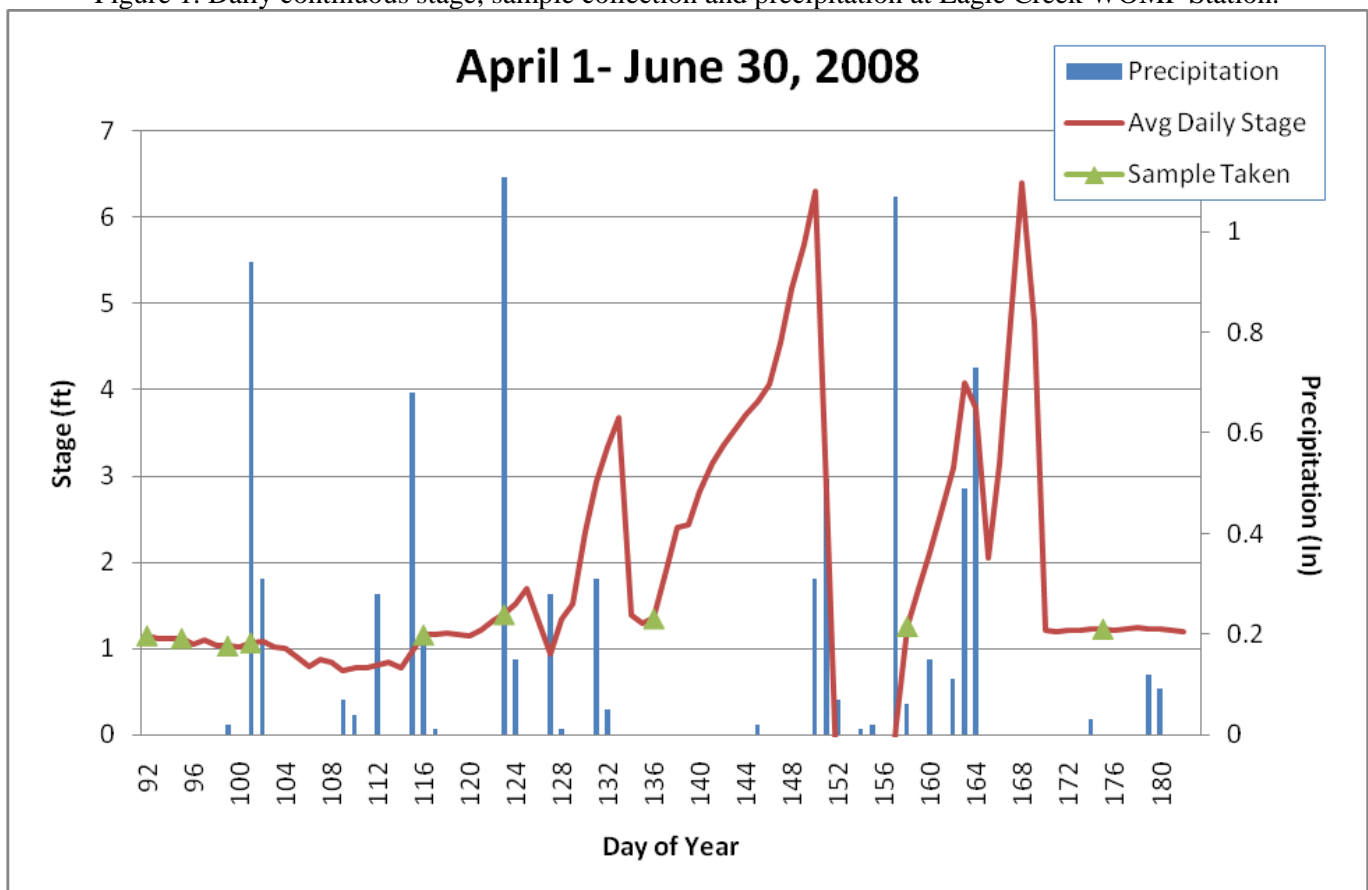
Table 1. Average flow and total precipitation at Eagle Creek WOMP station.

Period	Average Flow (cfs)	*Precipitation (inches)	30 year precipitation average from state climatology office
April	N/A**	3.33	2.13
May	N/A**	3.89	3.68
June	N/A**	1.63	4.76

*Precipitation data was obtained from volunteer rain gauge monitor in Shakopee

**Equipment malfunctions and a shift in the rating curve make flow data inaccurate for this period at this time

Figure 1. Daily continuous stage, sample collection and precipitation at Eagle Creek WOMP Station.



Average daily stage in this graph is misrepresented because of equipment malfunctions.

Water Quality:

Table 2. Average concentrations at Eagle Creek WOMP Station

Parameter	1 st quarter Avg Conc.	2 nd Quarter Avg Conc.	3 rd Quarter Avg. Conc.	4 th Quarter Avg. Conc.	Unit	Notes – 2 nd Quarter Results
Alkalinity	270	266			mg/L	No state standard. 20 – 200 mg/L typical. Less than 10 mg/L indicate poor buffer.
Biological Oxygen Demand (BOD5)	1.03	1.20			mg/L	Ecoregion mean = 2.7 mg/L.
Cadmium	.5	.5			ug/L	State standard = 2.0 ug/L.
Chloride	20	22.57			mg/L	State standard = 230 mg/L.
Chlorophyll-a	79.5	75.75			ug/L	% Pheo-Corrected Average Of Result
Chromium	.7	2.3			ug/L	State standard = 365 ug/L.
COD	8.67	10.57			mg/L	
Conductivity	589	579			mMHOs	
Copper	4	13.4			ug/L	State standard = 15 ug/L.
Dissolved Oxygen	8.73	8.05			mg/L	State standard = 7 mg/L.
Fecal Coliform Bacteria	142	37.75			CFU/100 mL	State standard = 200 CFU/100 ml water as geomean of at least 5 samples per month Apr – Oct.
Hardness	305	319			mg/L	No state standard. Water above 180 mg/L considered very hard water.
Lead	.33	0.9			ug/L	State standard = 7.7 ug/L.
Nickel	3.0	2.5			ug/L	State standard = 283 ug/L.
Nitrogen Ammonia	.08	.08			mg/L	State standard = .016 mg/L.
Nitrate + Nitrite	.22	.17			mg/L	
pH	7.84	8.07			su	State standard = not less than 6.5 nor greater than 8.5.
Phosphorus, Total	.057	.08			mg/L	Ecoregion mean = 0.13 mg/L. EPA recommends less than 0.1 mg/L. These results are the unfiltered average of result.
Suspended Solids	7.83	7.71			mg/L	Ecoregion mean = 13.7.
Total Kjeldahl Nitrogen	.28	.59			mg/L	
Total Organic Carbon	2.12	2.60			mg/L	
Turbidity	7.70	4.23			NTU	State standard for trout waters = 10 NTU
Volatile Suspended Solids	N/A	2.43			mg/L	
Zinc	17.3	.03			ug/L	State standard = 191 ug/L

mg/L = milligrams per liter
 mMHO = micromhos or micorseimens
 NTU = nephelometric turbidity units
 su = standard units

ug/L = micrograms per liter
 CFU = colony forming units
 Highlighted areas indicate areas of concern.
 State standard = state standard for Class 2A waters, hardness greater than 200

Appendix A - Watershed and land use information provided by Metropolitan Council Environmental Services.

Figure 1.EA. Eagle Creek Monitoring Station Location and Watershed Characteristics

