

# Watershed Outlet Monitoring Program

## Eagle Creek Station Savage, MN

### 3rd Quarterly Report July 1 – September 30, 2008 *Preliminary Data*



Prepared By:  
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## Introduction

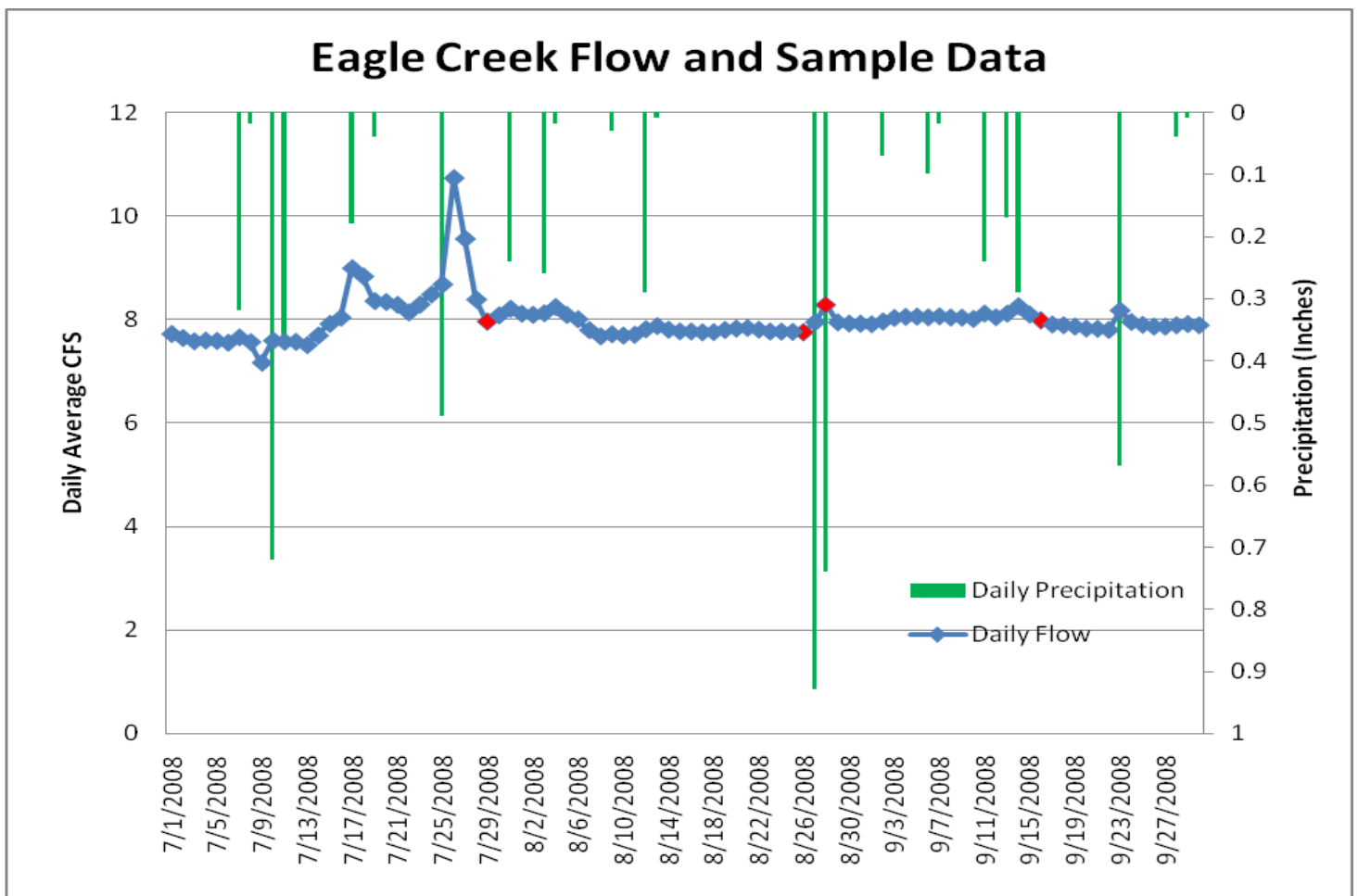
The Eagle Creek WOMP site is located in Savage near Hwy 13 and Hwy 101. This report summarizes the results of flow, precipitation, and water quality for the 3rd quarter of 2008. This data is preliminary and is subject to change until the Metropolitan Council submits the final report for this period.

## 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
July	8.11	2.37	4.09
August	7.88	2.28	4.01
September	7.89	1.51	2.67

\*Precipitation data was obtained from WOMP station rain gauge



Red Points indicate a sample was taken that day.

Table 2. Average concentrations at Eagle Creek WOMP Station

Parameter	1 <sup>st</sup> quarter Avg	2 <sup>nd</sup> Quarter Avg	3 <sup>rd</sup> Quarter Avg	4 <sup>th</sup> Quarter Avg	Unit	Notes – 2 <sup>nd</sup> Quarter Results
Alkalinity	270	266	227		mg/L	No state standard. 20 – 200 mg/L typical. Less than 10 mg/L indicate poor buffer.
BOD5	1.03	1.20	1		mg/L	Ecoregion mean = 2.7 mg/L.
Cadmium	.5	.5	.5		ug/L	State standard = 2.0 ug/L.
Chloride	20	22.57	29.5		mg/L	State standard = 230 mg/L.
Chlorophyll-a	79.5	75.75	54		ug/L	% Pheo-Corrected Average Of Result
Chromium	.7	2.3	4		ug/L	State standard = 365 ug/L.
COD	8.67	10.57	9.25		mg/L	
Conductivity	589	579	599		mMHOs	
Copper	4	13.4	.5		ug/L	State standard = 15 ug/L.
Dissolved Oxygen	8.73	8.05	8.25		mg/L	State standard = 7 mg/L.
<i>Escherichia coli</i> ( <i>E Coli</i> ) Bacteria	200	51	111		CFU/100 mL	State Standard = 126 organisms/100 ml as a geometric mean of not < 5 samples within any calendar month (Apr 1 – Oct 31)
Fecal Coliform Bacteria	142	37.75	101		CFU/100 mL	State standard = 200 CFU/100 ml water as geomean of at least 5 samples/month Apr – Oct.
Hardness	305	319	267		mg/L	No state standard. Water above 180 mg/L considered very hard water.
Lead	.33	0.9	.1		ug/L	State standard = 7.7 ug/L.
Nickel	3.0	2.5	2.5		ug/L	State standard = 283 ug/L.
Nitrogen Ammonia	.08	.08	.04		mg/L	State standard = .016 mg/L.
Nitrate + Nitrite	.22	.17	.13		mg/L	
pH	7.84	8.07	7.99		su	State standard = not less than 6.5 nor greater than 8.5.
Phosphorus, Total	.057	.08	.01		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	3.25		mg/L	Ecoregion mean = 13.7.
Total Kjeldahl Nitrogen	.28	.59	.20		mg/L	
Total Organic Carbon	2.12	2.60	2.65		mg/L	
Turbidity (NTRU)	7.70	4.23	4.25		NTU	State standard for trout waters = 10 NTU, however lab reports in NTRU. Not quite comparable.
Volatile Suspended Solids	N/A	2.43	1		mg/L	
Zinc	17.3	.03	1		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