Watershed Outlet Monitoring Program

Eagle Creek Station

Savage, MN

4th Quarterly Report

October 1 – December 31, 2008

Preliminary Data

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Prepared For:

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Introduction

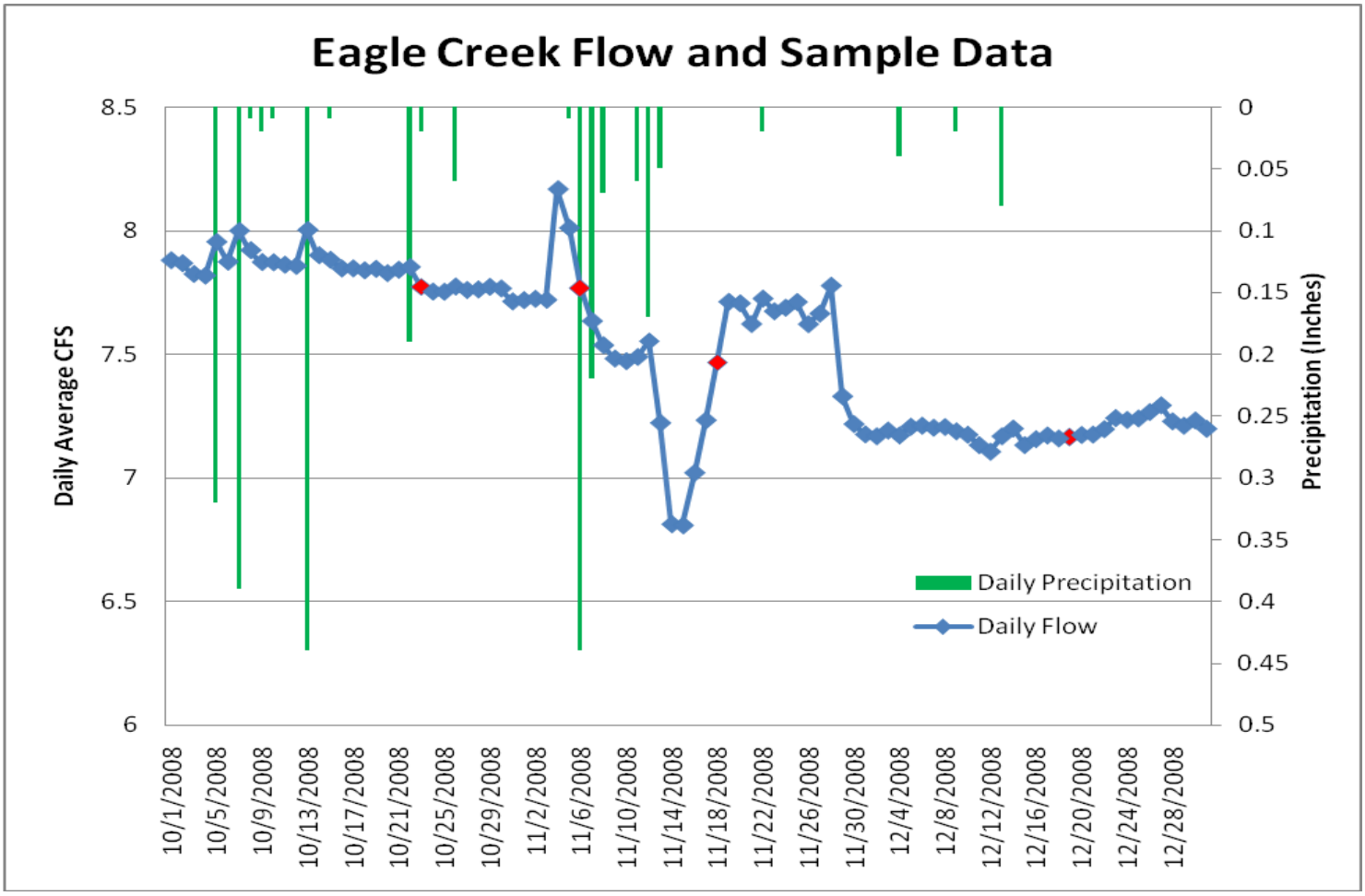
The Eagle Creek WOMP site is located in Savage near Hwy 13 and Hwy 101. This report summarizes the results of flow, precipitation, and water quality for the 4th quarter of 2008. This data is preliminary and is subject to change until the Metropolitan Council submits the final report for this period.

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
Oct	7.4	1.25	1.92
Nov	8.86	1.49	1.17
Dec	7.48	1.54	.77

*Precipitation data was obtained from volunteer rain gauge monitor in Shakopee
**Average flow from when samples were taken



Red Points indicate a sample was taken that day.

Table 2. Average concentrations at Eagle Creek WOMP Station

Parameter	1st quarter Avg	2nd Quarter Avg	3rd Quarter Avg	4th Quarter Avg	Unit	Notes – 2nd Quarter Results
Alkalinity	270	266	227	256	mg/L	No state standard. 20 – 200 mg/L typical. Less than 10 mg/L indicate poor buffer.
BOD5	1.03	1.20	1	1	mg/L	Ecoregion mean = 2.7 mg/L.
Cadmium	.5	.5	.5	.5	ug/L	State standard = 2.0 ug/L.
Chloride	20	22.57	29.5	29.7	mg/L	State standard = 230 mg/L.
Chlorophyll-a	79.5	75.75	54	86	ug/L	% Pheo-Corrected Average Of Result
Chromium	.7	2.3	4	3	ug/L	State standard = 365 ug/L.
COD	8.67	10.57	9.25	6.25	mg/L	
Conductivity	589	579	599	602	mMHOs	
Copper	4	13.4	.5	.5	ug/L	State standard = 15 ug/L.
Dissolved Oxygen	8.73	8.05	8.25	8.55	mg/L	State standared = 7 mg/L.
*Escherichia coli (E Coli)*Bacteria	200	51	111	350	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) 1203 organisms in December, but doesn't matter since it is not within Apr 1 – Dec 31 window. Most likely due to waterfowl.
Fecal Coliform Bacteria	142	37.75	101	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	310	mg/L	No state standard. Water above 180 mg/L considered very hard water.
Lead	.33	0.9	.1	.1	ug/L	State standard = 7.7 ug/L.
Nickel	3.0	2.5	2.5	3.1	ug/L	State standard = 283 ug/L.
Nitrogen Ammonia	.08	.08	.04	.03	mg/L	State standard = .016 mg/L.
Nitrate + Nitrite	.22	.17	.13	.13	mg/L	
pH	7.84	8.07	7.99	7.81	su	State standard = not less than 6.5 nor greater than 8.5.
Phosphorus, Total	.057	.08	.01	.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	7.5	mg/L	Ecoregion mean = 13.7.
Total Kjeldahl Nitrogen	.28	.59	.20	.19	mg/L	
Total Organic Carbon	2.12	2.60	2.65	2.7	mg/L	
Turbidity (NTRU)	7.70	4.23	4.25	8.75 (Max 18)	NTU	State standard for trout waters = 10 NTU, however lab reports in NTRU. Not quite comparable.
Volatile Suspended Solids	N/A	2.43	1	2.5	mg/L	
Zinc	17.3	.03	1	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