

TECHNICAL MEMORANDUM BCWA

To: **Bear Creek Watershed Association**
 From: Russell N. Clayshulte, Manager

Re: **TM 2014.09 Evergreen Lake Summary**



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Figure 1 Evergreen Lake 2014, looking east toward sampling site

Table 1 2014 Data Summary EGL

Evergreen Lake, Segment 1d

Site	Parameter (ug/l)	5/14	6/16	7/7	8/20	9/15	10/6	Average
EGL 4a	Total Nitrogen	272	290	288	321	275	191	273
	Nitrate/Nitrite as N, dissolved	49	68	23	42	33	39	42
	Nitrogen, ammonia	29	23	5	28	25	37	25
	Phosphorus, total	19	17	15	14	9	25	17
	Total Dissolved Phosphorus	9	5	2	6	2	8	5
	Residue, Non-Filterable (TSS)	4.0	13.6	7.4	7	14.4	5.6	9
	Chlorophyll a	1.5	1.2	7.7	6	3.2	1.8	4
	Chlorophyll a	1.5	1.5	7.4	7	3.5	2.5	4

Evergreen Lake, Segment 1d

Site	Parameter (ug/l)	5/14	6/16	7/7	8/20	9/15	10/6	Average
	Chlorophyll a Average	1.5	1.4	7.6	6.3	3.4	2.2	4
EGL 4e	Total Nitrogen	241	333	254	292	187	232	257
	Nitrate/Nitrite as N, dissolved	45	65	28	43	39	38	43
	Nitrogen, ammonia	41	31	15	43	34	38	34
	Phosphorus, total	22	21	12	30	21	26	22
	Total Dissolved Phosphorus	7	6	2	2	2	2	4
	Residue, Non-Filterable (TSS)	4.0	11.2	10.6	12	9.2	5.6	9
	Parameter Summary	5/14	6/16	7/7	8/20	9/15	10/6	
Water Column	Dissolved Oxygen 1/2-2m	10.89	9.73	8.31	7.05	9.63	10.00	
	Temperature (C) 1/2-2m	6.98	12.82	17.13	15.43	11.75	9.65	
	pH water column	7.70	7.86	8.00	7.53	7.98	7.75	
	Specific Conductance (us/m)	0.100	0.068	0.074	0.067	0.071	0.072	
	Bear Creek In-Flow (cfs)	30	84	50	46	34	32	

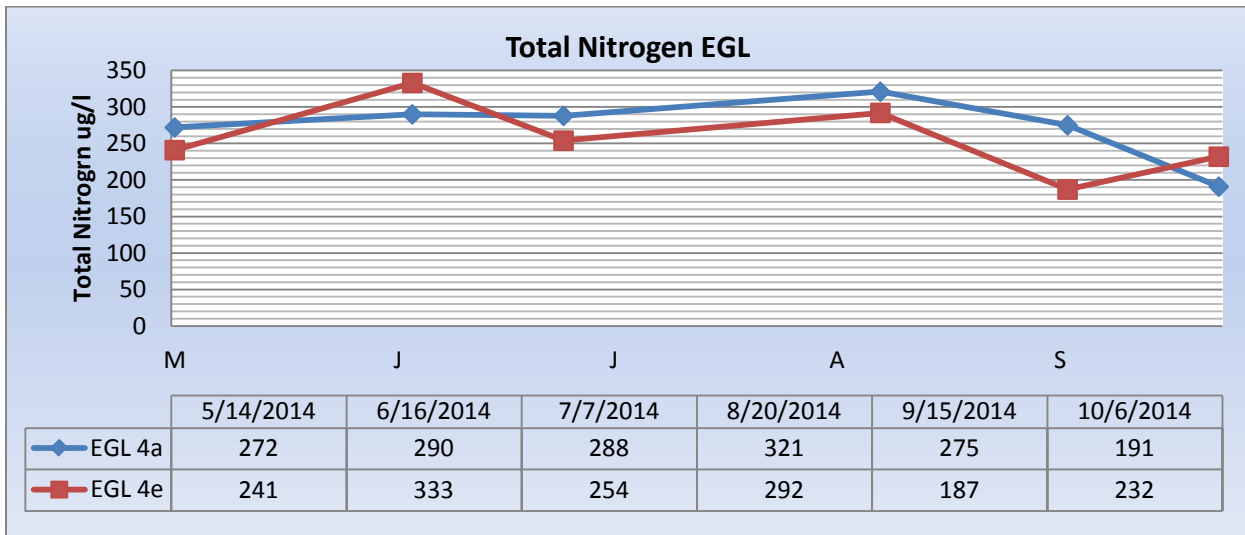


Figure 2 2014 Total Nitrogen in EGL

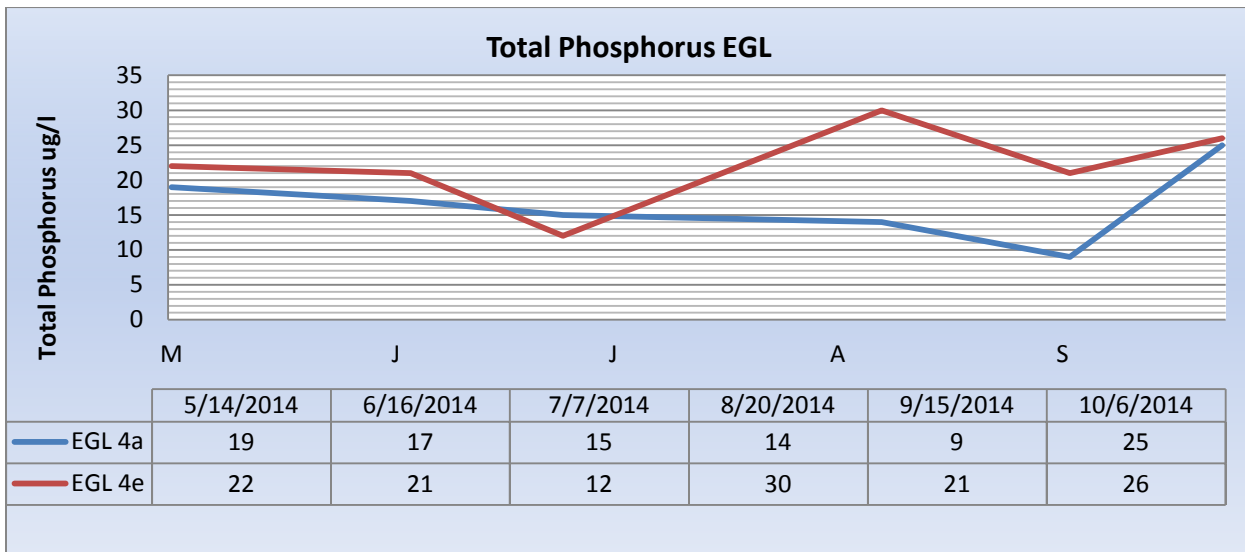


Figure 3 2014 Total Phosphorus in EGL

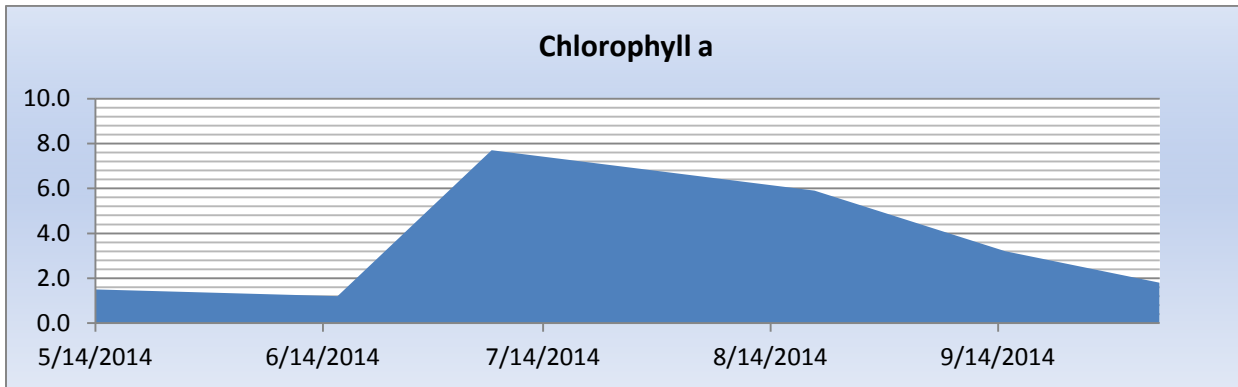


Figure 4 2014 Chlorophyll Trend in EGL

Table 2 Nutrient Loading Estimates for EGL

	Flow cfs	ac-ft/ mo	ug/l		Load Pounds/Mo	
			TN	TP	TN	TP
5/15/2014	49	3,012	272	19	2,231	156
6/12/2014	107	6,365	290	17	5,027	295
7/17/2014	90	5,533	288	15	4,339	226
8/14/2014	54	3,320	321	14	2,902	127
9/16/2014	40	2,362	275	9	1,769	58
10/14/2014	32	1,967	191	25	1,023	134

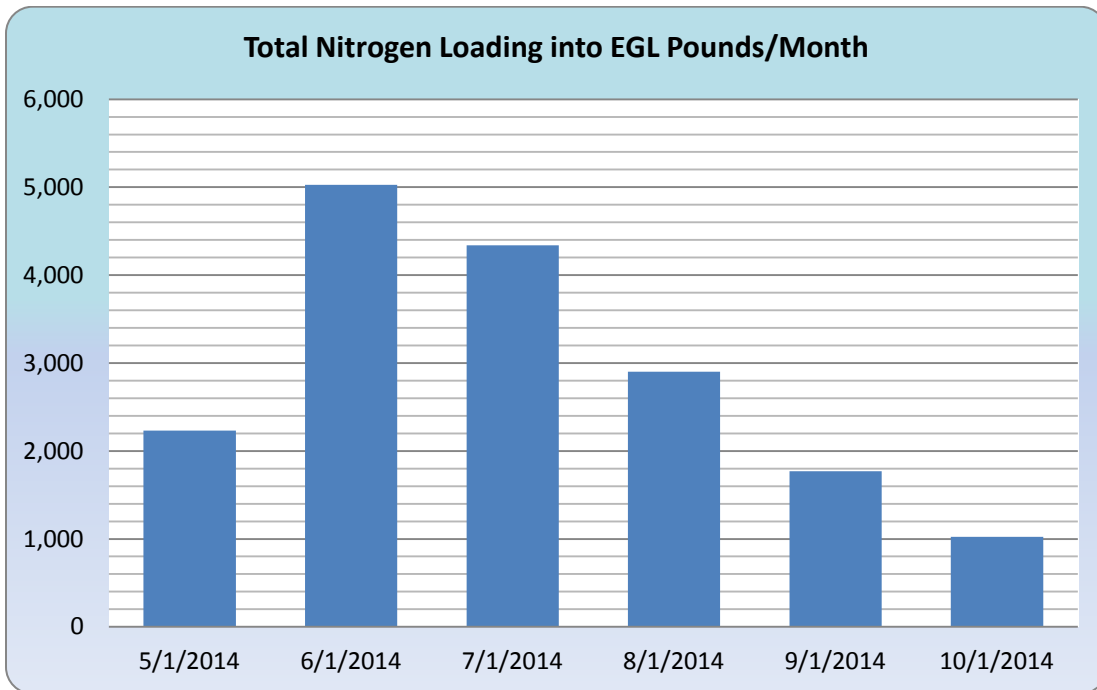


Figure 5 Total Nitrogen Loading into EGL

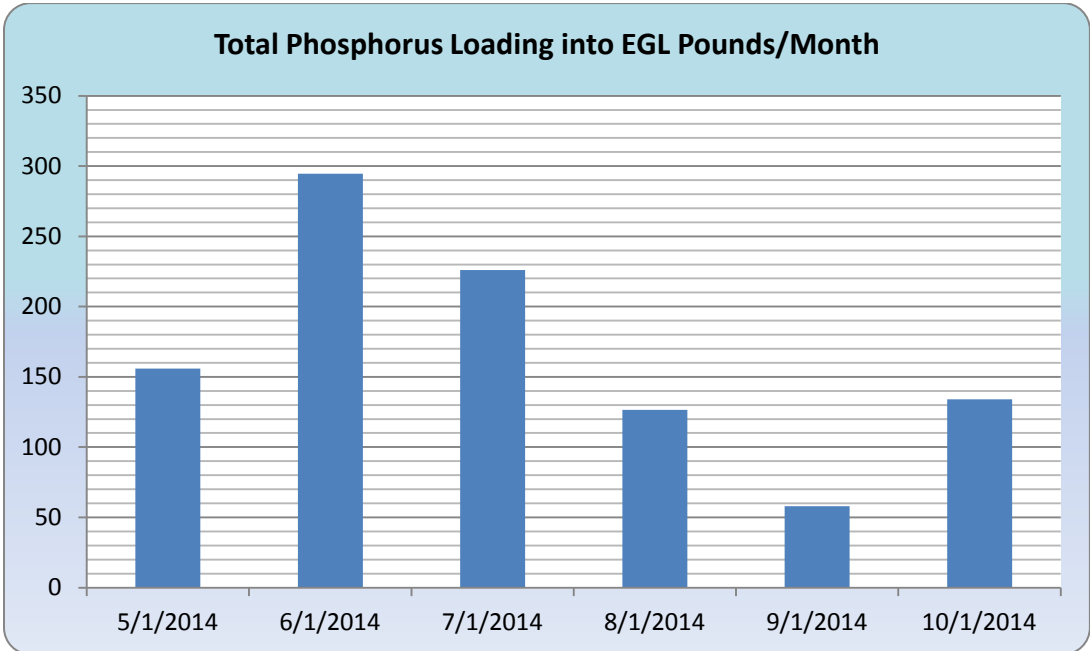


Figure 6 Total Phosphorus Loading into EGL

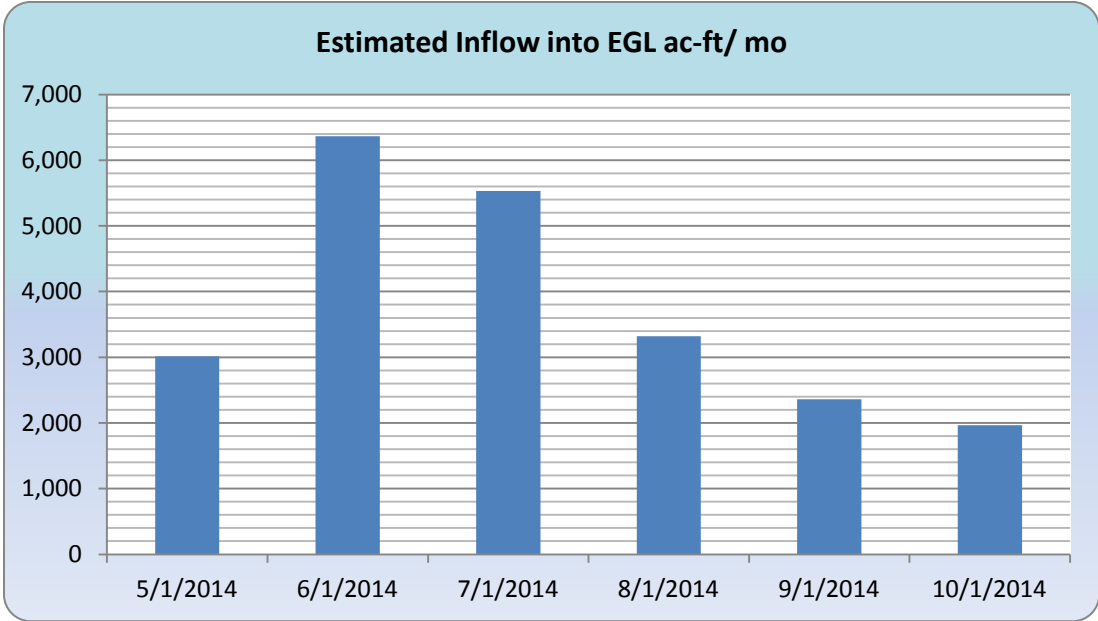


Figure 7 Estimated monthly Inflow into EGL Ac-Ft/Mo