

Technical Memorandum BCWA



Date: January 27, 2016
To: Bear Creek Watershed Association
From: Russell N. Clayshulte, Manager
Re: BCWA TM 2015.09 EGL Summary

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Figure 1 EGL New Stabilized Shoreline 2015



Figure 2 EGL May Runoff Period



Figure 3 EGL Sediment Bar

Table 1 EGL Data Summary

		Evergreen Lake, Segment 1d						
Site	Parameter (ug/l)	5/26/2015	6/18/2015	7/15/2015	8/20/2015	9/17/2015	10/28/2015	Average
EGL 4a	Total Nitrogen	407	436	455	278	252	281	352
	Nitrate/Nitrite as N, dissolved	79	62	61	42	34	52	55
	Nitrogen, ammonia	35	36	44	38	43	58	42
	Phosphorus, total	28	28	31	18	15	11	22
	Total Dissolved Phosphorus	8.1	4	10	2	2	2	5
	Residue, Non-Filterable (TSS)	4	9.0	11.0	8	4.3	4.0	6.7
	Chlorophyll a	0.3	0.3	1.5	3.7	3.6	2.4	2.0
	Chlorophyll a Average	0.3	0.3	1.5	4.4	3.6	3.5	2.3
EGL 4e	Total Nitrogen	406	386	323	311	303	208	323
	Nitrate/Nitrite as N, dissolved	77	60	58	41	31	49	53
	Nitrogen, ammonia	33	38	31	49	143	59	59
	Phosphorus, total	34	31	36	20	19	12	25
	Total Dissolved Phosphorus	4	6	8	2	2	2	4
	Residue, Non-Filterable (TSS)	8.5	10.2	10.8	8.8	5.2	4.0	7.9
	Parameter Summary	5/26/2015	6/18/2015	7/15/2015	8/20/2015	9/17/2015	10/28/2015	
	Water Column	Dissolved Oxygen 1/2-2m	13.36	7.89	7.40	6.93	7.24	9.97
Temperature (C) 1/2-2m		6.00	9.72	11.43	13.90	12.78	5.45	
pH water column		8.01	8.17	8.84	7.98	7.80	8.17	
Specific Conductance (us/m)		93.0	55.0	73.7	83.6	83.1	98.4	
Flows	Bear Creek Keys (cfs) Monthly Avg	286	302	144	54	25	24	
	Bear Creek EGL (cfs) daily	319	359	162	43	20	25	

Table 2 **EGL Nutrient Load Summary**

	Monthly Avg in-Flow cfs	ac-ft/ mo	ug/l			Load Pounds		
			TN	TP	NO3	Total Nitrogen Pounds	Total Phosphorus Pounds	NO3
May-15	286	17,581	407	28	79	19,485	1340	3782
June-15	302	17,966	436	28	62	21,330	1370	3033
July-15	144	8,852	455	31	61	10,967	747	1470
August-15	54	3,320	278	18	42	2,513	163	380
September-15	25	1,487	252	15	34	1,021	61	138
October-15	24	1,475	281	11	52	1,129	44	209
		50,682				56,444	3,725	9,012

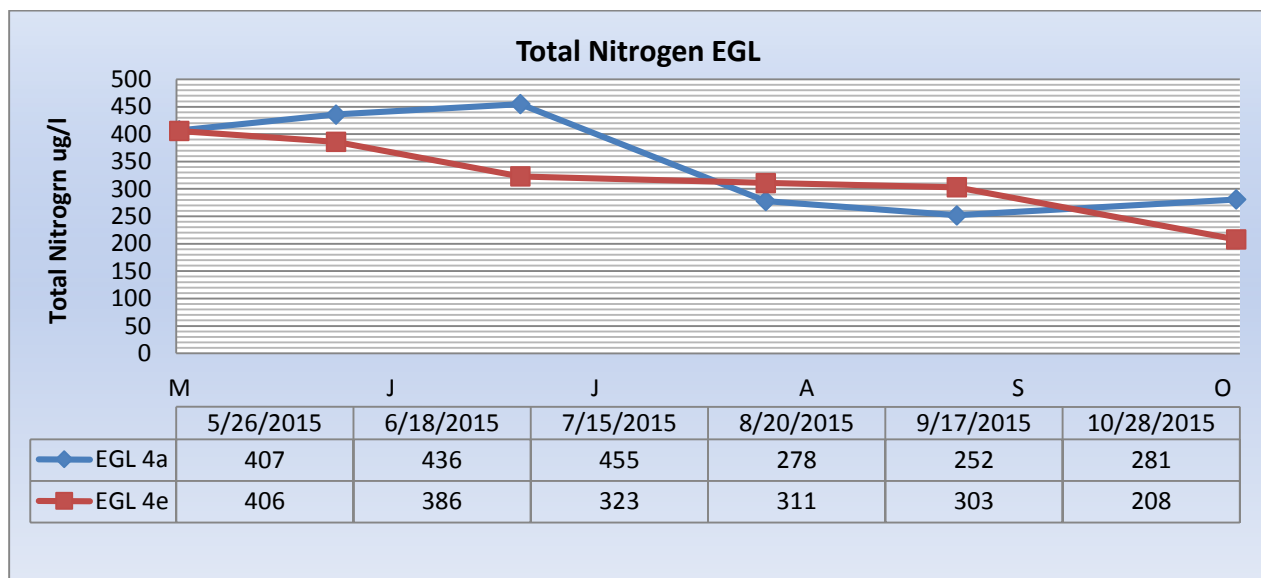


Figure 4 **EGL Total Nitrogen**

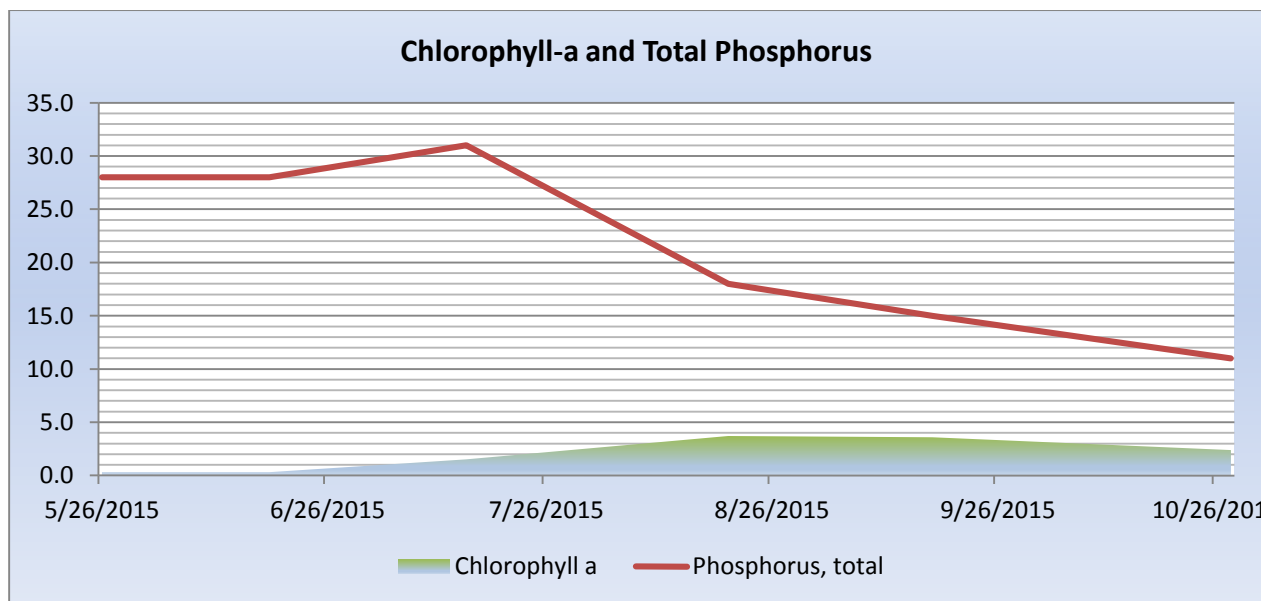


Figure 5 **EGL Chlorophyll-a Compared with Total Phosphorus Loading**

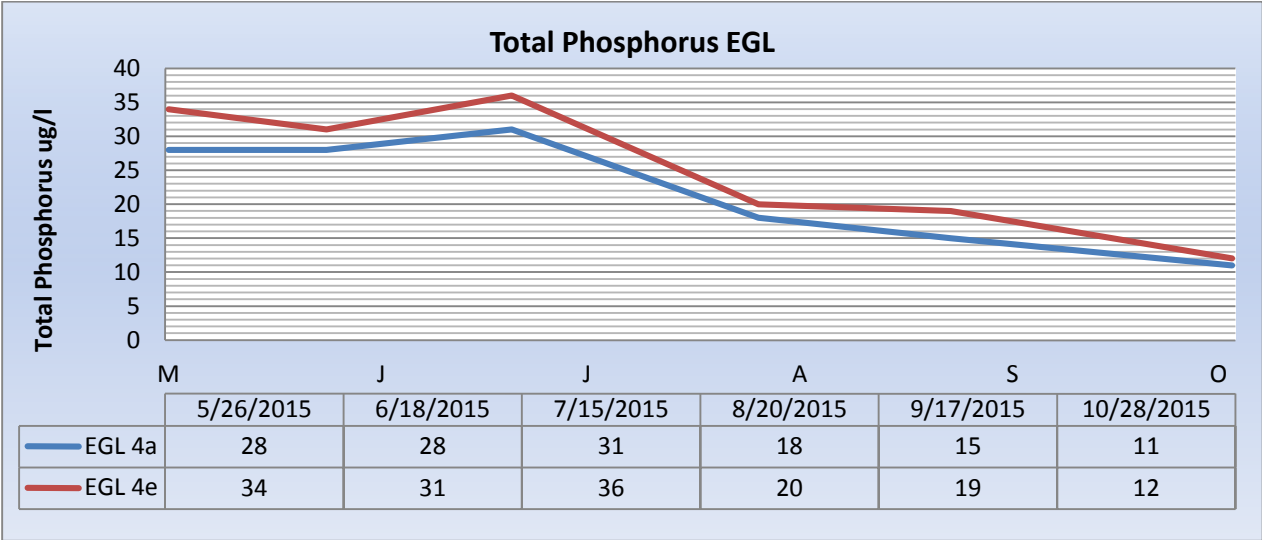


Figure 6 EGL Total Phosphorus

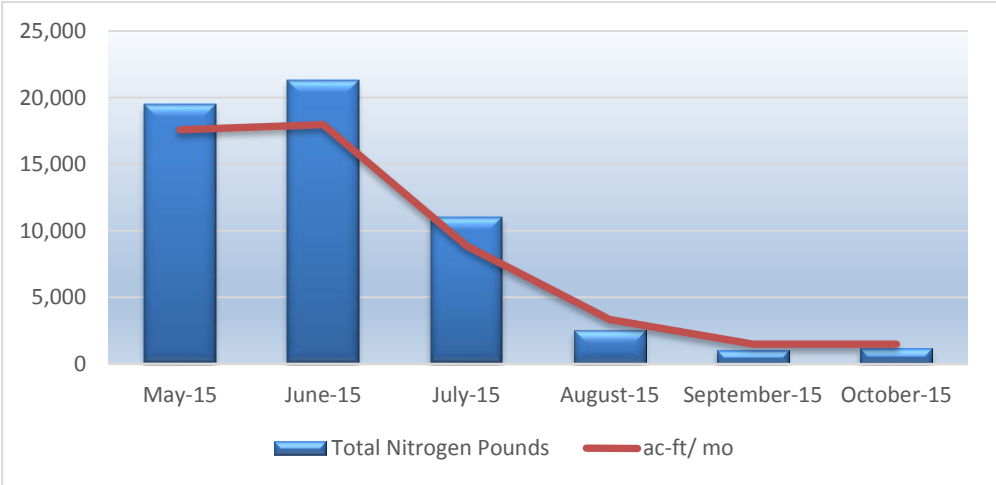


Figure 7 Total Nitrogen Seasonal Load

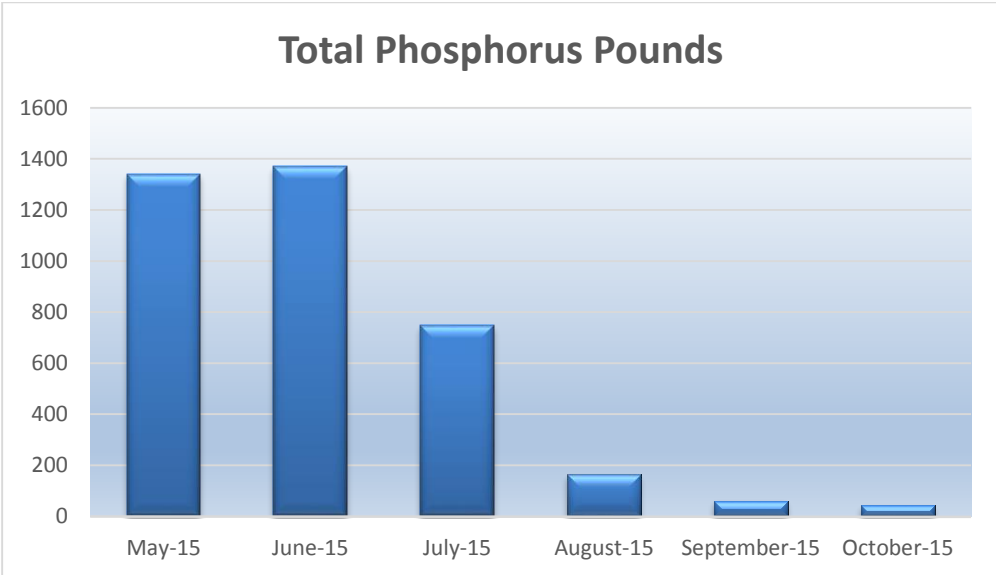


Figure 8 EGL Total Phosphorus Seasonal Load