This Document Contains Water Quality Data that was Collected by DEQ in the Flathead Lake Watershed in 2013

Nutrient data was collected on two streams and at the Creston Fish Hatchery in July and August of 2013 A summary of the data is presented in cross-tabular format

The data is also available from EPA's STORET (STOrage and RETrieval) database found at: (http://www.epa.gov/storet/)

Download the MS Excel file from the Flathead TMDL Project website (http://montanatmdlflathead.pbworks.com) to view the data in the format it is provided from STORET, which contains all data attributes

You may see a letter or symbol preceding some result values (Example: E 15) in the summary data. Definitions are listed below.

Codes & Abbreviations

CC	Calculated
EE	Estimated
< [value]	This indicates a non-detect sample. The detection limit is populated as the value: "<[detection limit]"

The summary data also contains laboratory data qualifier codes, included after the result value. The following code appears with some of the data:

Laboratory Data Qualifier Codes

	Estimated: The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
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Station (Site) Name	Site ID	Activity Date	Activity ID	Latitude (NAD83)	Longitude (NAD83)	Activity (Sample) Type	Flow (cfs)	Dissolved Oxygen (mg/L)	TSS (mg/L)	Total N (mg/L)	NO2 + NO3 as N (Dissolv ed) (mg/L)	Total P (mg/L)
Sheppard Creek at road crossing near mouth		7/16/2013 12:00		48.3728		Sample-Routine						
Sheppard Creek at road crossing near mouth		7/16/2013 12:00		48.3728		Sample-Routine						
Sheppard Creek at road crossing near mouth	C09SHEPC04	7/16/2013 12:00		48.3728		Sample-Routine						
Sheppard Creek at road crossing near mouth	C09SHEPC04	7/16/2013 12:00		48.3728		Sample-Routine						
Sheppard Creek at road crossing near mouth	C09SHEPC04			48.3728		Field Msr/Obs	10.22	9.74				
Sheppard Creek at road crossing near mouth	C09SHEPC04	7/16/2013 12:00		48.3728		Sample-Routine				0.106	< 0.005	
Sheppard Creek at road crossing near mouth	C09SHEPC04	7/16/2013 12:00		48.3728		Sample-Routine			0.05			0.01
Sheppard Creek at road crossing near mouth	C09SHEPC04	7/16/2013 12:00		48.3728		Sample-Routine			2.25	0.440		
Sheppard Creek at road crossing near mouth	C09SHEPC04	8/13/2013 17:10		48.3728		Sample-Routine				0.142		
Sheppard Creek at road crossing near mouth	C09SHEPC04	8/13/2013 17:10 8/13/2013 17:10		48.3728		Sample-Routine Sample-Routine					< 0.005	0.045 1
Sheppard Creek at road crossing near mouth Sheppard Creek at road crossing near mouth	C09SHEPC04	8/13/2013 17:10		48.3728 48.3728		Sample-Routine Sample-Routine			4.5			0.015 J
Sheppard Creek at road crossing near mouth	C09SHEPC04	8/13/2013 17:30		48.3728		Quality Control Sample-Field Blank			4.5	< 0.01		
Sheppard Creek at road crossing near mouth	C09SHEPC04	8/13/2013 17:30		48.3728		Quality Control Sample-Field Blank				< 0.01	< 0.005	
Sheppard Creek at road crossing hear mouth	C09SHEPC04	8/13/2013 17:30		48.3728		Quality Control Sample-Field Blank					< 0.003	< 0.001
Sheppard Creek at road crossing hear mouth	C09SHEPC04	8/13/2013 17:30		48.3728		Quality Control Sample-Field Blank			< 1			< 0.001
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Sample-Routine			` '			
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Sample-Routine						
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Sample-Routine						
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Sample-Routine						
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Field Msr/Obs	10.88	8.57				
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30	C2864-W	48.3799	-114.7105	Sample-Routine				0.105	< 0.005	
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30	C2864-W	48.3799		Sample-Routine						0.013
Sheppard Creek upstream Sinclair Creek confluence	C09SHEPC05	7/16/2013 15:30		48.3799		Sample-Routine			2.25			
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	7/16/2013 18:20		48.3817		Sample-Routine						
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	7/16/2013 18:20		48.3817		Sample-Routine						
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06			48.3817		Sample-Routine						
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06			48.3817		Sample-Routine						
Sheppard Creek at Griffin Creek Road crossing		7/16/2013 18:15		48.3817		Field Msr/Obs	11.88	8.09				
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06			48.3817	-114.7462	Sample-Routine				0.113	< 0.005	
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	7/16/2013 18:20		48.3817		Sample-Routine			4			0.01
Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	7/16/2013 18:20		48.3817		Sample-Routine Field Msr/Obs	0.00	0.00	< 1			
Sheppard Creek at Griffin Creek Road crossing Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	8/13/2013 16:10		48.3817			6.26	8.86		0.442		
Sheppard Creek at Griffin Creek Road crossing Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	8/13/2013 15:50 8/13/2013 15:50		48.3817 48.3817		Sample-Routine Sample-Routine				0.113		
Sheppard Creek at Griffin Creek Road crossing Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	8/13/2013 15:50		48.3817		Sample-Routine Sample-Routine					< 0.005	0.009 J
Sheppard Creek at Griffin Creek Road crossing Sheppard Creek at Griffin Creek Road crossing	C09SHEPC06	8/13/2013 15:50		48.3817		Sample-Routine Sample-Routine			< 1			0.009 J
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20		48.3706		Sample-Routine Sample-Routine			` 1			
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20		48.3706		Sample-Routine						
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20		48.3706		Sample-Routine						
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:10		48.3706		Field Msr/Obs	3.04	8.75				

Station (Site) Name	Site ID	Activity Date	Activity ID	Latitude (NAD83)	Longitude (NAD83)	Activity (Sample) Type	Flow (cfs)	Dissolved Oxygen (mg/L)	TSS (mg/L)	Total N (mg/L)	NO2 + NO3 as N (Dissolv ed) (mg/L)	Total P (mg/L)
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20	C2866-W	48.3706	-114.8178	Sample-Routine				0.111	< 0.005	
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20	C2866-W	48.3706	-114.8178	Sample-Routine						0.012
Sheppard Creek upstream Dunsire Creek confluence	C09SHEPC07	7/17/2013 9:20	C2866-W	48.3706	-114.8178	Sample-Routine			< 1			
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	7/18/2013 18:45	C2873-F	48.19779		Field Msr/Obs	E 4					
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	7/18/2013 18:45		48.19779		Sample-Routine				0.499	0.214	
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	7/18/2013 18:45		48.19779	-114.11811	Sample-Routine						0.021
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	7/18/2013 18:45		48.19779		Sample-Routine			3			
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	8/12/2013 14:40	C2886-F	48.19779		Field Msr/Obs	E 0.8					
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	8/12/2013 14:40		48.19779		Sample-Routine				0.414		
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	8/12/2013 14:40	C2886-W	48.19779		Sample-Routine					0.232	
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	8/12/2013 14:40	C2886-W	48.19779		Sample-Routine						0.013 J
Creston Fish Hatchery Downstream Discharge Pipe, at Mill Creek	C11CFHP01	8/12/2013 14:40		48.19779		Sample-Routine			< 1			
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	7/18/2013 19:05		48.19855		Field Msr/Obs	E 1.5					
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	7/18/2013 19:05		48.19855		Sample-Routine				0.429	0.213	
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	7/18/2013 19:05		48.19855		Sample-Routine						0.018
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	7/18/2013 19:05		48.19855		Sample-Routine			< 1			
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	8/12/2013 14:25		48.19855		Field Msr/Obs	E 0.8					
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	8/12/2013 14:25		48.19855		Sample-Routine				0.352		
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	8/12/2013 14:25		48.19855		Sample-Routine					0.23	
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	8/12/2013 14:25		48.19855		Sample-Routine						0.009 J
Creston Fish Hatchery Upstream Discharge Pipe, at Mill Creek	C11CFHP02	8/12/2013 14:25		48.19855		Sample-Routine			< 1			
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine						
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine						
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine						
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:10		48.1941		Field Msr/Obs	0.48	8.94				
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine				0.06	< 0.005	
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine						0.013
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	7/17/2013 18:15		48.1941		Sample-Routine			< 1			
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	8/13/2013 11:25		48.1941		Field Msr/Obs	0.44	10.09				
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	8/13/2013 11:20		48.1941		Sample-Routine				0.058		
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	8/13/2013 11:20		48.1941		Sample-Routine					< 0.005	
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	8/13/2013 11:20		48.1941		Sample-Routine						0.012 J
Fish Creek about 1 mile upstream Ashley Lake	C11FISHC01	8/13/2013 11:20		48.1941		Sample-Routine	5 0 00	10.00	< 1			
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Field Msr/Obs	E 0.06	10.02				
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Sample-Routine				0.032	0.031	0.04=
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Sample-Routine						0.017
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Sample-Routine			< 1	0.004	0.001	
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Quality Control Sample-Field Replicate				0.034	0.031	0.04.4
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Quality Control Sample-Field Replicate			. 4			0.014
Fish Creek near headwaters	C11FISHC02	7/18/2013 8:45		48.2048		Quality Control Sample-Field Replicate	F 0.05	40.40	< 1			
Fish Creek near headwaters	C11FISHC02	8/13/2013 13:00	C2893-F	48.2048	-114.6851	Field Msr/Obs	E 0.05	10.42				

Station (Site) Name	Site ID	Activity Date	Activity ID	Latitude (NAD83)	Longitude (NAD83)	Activity (Sample) Type	Flow (cfs)	Dissolved Oxygen (mg/L)	TSS (mg/L)	Total N (mg/L)	NO2 + NO3 as N (Dissolv ed) (mg/L)	Total P (mg/L)
Fish Creek near headwaters	C11FISHC02	8/13/2013 12:50	C2893-W	48.2048	-114.6851	Sample-Routine				0.057		
Fish Creek near headwaters	C11FISHC02	8/13/2013 12:50	C2893-W	48.2048	-114.6851	Sample-Routine					0.033	
Fish Creek near headwaters	C11FISHC02	8/13/2013 12:50	C2893-W	48.2048	-114.6851	Sample-Routine						0.015 J
Fish Creek near headwaters	C11FISHC02	8/13/2013 12:50	C2893-W	48.2048	-114.6851	Sample-Routine			1			
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-C	48.191389	-114.646667	Sample-Routine						
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-CT	48.191389	-114.646667	Sample-Routine						
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-CT	48.191389	-114.646667	Sample-Routine						
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:20	C2867-F	48.191389	-114.646667	Field Msr/Obs	0.66	8.74				
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-W	48.191389	-114.646667	Sample-Routine				0.058	< 0.005	
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-W	48.191389	-114.646667	Sample-Routine						0.013
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	7/17/2013 15:10	C2867-W	48.191389	-114.646667	Sample-Routine			< 1			
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	8/13/2013 9:55	C2892-F	48.191389	-114.646667	Field Msr/Obs	0.42	9.16				
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	8/13/2013 9:50	C2892-W	48.191389	-114.646667	Sample-Routine				0.086		
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	8/13/2013 9:50	C2892-W	48.191389		Sample-Routine					< 0.005	
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	8/13/2013 9:50	C2892-W	48.191389	-114.646667	Sample-Routine						0.015 J
Fish Creek 100 yards upstream from Ashley Lake Road crossing	C11FISHC10	8/13/2013 9:50	C2892-W			Sample-Routine			< 1			

Station (Site) Name	Activity Date	Medium	Chlorophyll-a	Ash Free Dry Weight	Result Comments
					Total Site Length: 150 m; Average Wetted Width: 3.8 m; Transect Length: 15
					m Weighted average of 11 transects: 6 cores, 2 templates, 3-100%
Sheppard Creek at road crossing near mouth	7/16/2013 12:00	Other	C 9.92 mg/m2	C 5.92 g/m2	macrophytes/moss.
					Total Site Length: 150 m; Average Wetted Width: 3.8 m; Transect Length: 15
Sheppard Creek at road crossing near mouth	7/16/2013 12:00	Sediment	11.7 mg/m2		m 6 core samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 3.8 m; Transect Length: 15
Sheppard Creek at road crossing near mouth	7/16/2013 12:00	Other	19.4 mg/m2		m 2 template samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 3.8 m; Transect Length: 15
Sheppard Creek at road crossing near mouth	7/16/2013 12:00	Other		14.8 g/m2	m 2 template samples composited at lab.
					Total Site Length: 240 m; Average Wetted Width: 6 m; Transect Length: 24
					m Weighted average of 11 transects: 7 cores, 1 template, 1-100%
Sheppard Creek upstream Sinclair Creek confluence	7/16/2013 15:30	Other	C 5.47 mg/m2	C 1.32 g/m2	macrophytes, 2-100% macrophytes/moss.
					Total Site Length: 240 m; Average Wetted Width: 6 m; Transect Length: 24
Sheppard Creek upstream Sinclair Creek confluence	7/16/2013 15:30	Sediment	7.98 mg/m2		m 7 core samples composited at lab.
					Total Site Length: 240 m; Average Wetted Width: 6 m; Transect Length: 24
Sheppard Creek upstream Sinclair Creek confluence	7/16/2013 15:30	Other	4.12 mg/m2		m 1 template sample collected.
					Total Site Length: 240 m; Average Wetted Width: 6 m; Transect Length: 24
Sheppard Creek upstream Sinclair Creek confluence	7/16/2013 15:30	Other		5.28 g/m2	m 1 template sample collected.
					Total Site Length: 300 m; Average Wetted Width: 7.5 m; Transect Length: 30
					m Weighted average of 8 transects: 1 core, 7 templates (Transects I-K not
Sheppard Creek at Griffin Creek Road crossing	7/16/2013 18:20	Other	C 16.91 mg/m2	C 13.6 g/m2	wadeable).
					Total Site Length: 300 m; Average Wetted Width: 7.5 m; Transect Length: 30
Sheppard Creek at Griffin Creek Road crossing	7/16/2013 18:20	Sediment	20.5 mg/m2		m 1 core sample collected.
					Total Site Length: 300 m; Average Wetted Width: 7.5 m; Transect Length: 30
Sheppard Creek at Griffin Creek Road crossing	7/16/2013 18:20	Other	16.4 mg/m2		m 7 template samples composited at lab.
			_		Total Site Length: 300 m; Average Wetted Width: 7.5 m; Transect Length: 30
Sheppard Creek at Griffin Creek Road crossing	7/16/2013 18:20	Other		13.6 g/m2	m 7 template samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 3.5 m; Transect Length: 15
Sheppard Creek upstream Dunsire Creek confluence	7/17/2013 9:20	Other	C 42.3 mg/m2	C 24 g/m2	m Weighted average of 11 transects: 11 templates.
				J	Total Site Length: 150 m; Average Wetted Width: 3.5 m; Transect Length: 15
Sheppard Creek upstream Dunsire Creek confluence	7/17/2013 9:20	Other	42.3 mg/m2		m 11 template samples composited at lab.
			J		Total Site Length: 150 m; Average Wetted Width: 3.5 m; Transect Length: 15
Sheppard Creek upstream Dunsire Creek confluence	7/17/2013 9:20	Other		24 g/m2	m 11 template samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 1 m; Transect Length: 15
					m Weighted average of 11 transects: 6 templates, 5-100%
Fish Creek about 1 mile upstream Ashley Lake	7/17/2013 18:15	Other	C 7.33 mg/m2	C 2.53 g/m2	macrophytes/moss.
· · ·					Total Site Length: 150 m; Average Wetted Width: 1 m; Transect Length: 15
Fish Creek about 1 mile upstream Ashley Lake	7/17/2013 18:15	Other	13.4 mg/m2		m 6 template samples composited at lab.

Station (Site) Name	Activity Date	Medium	Chlorophyll-a	Ash Free Dry Weight	Result Comments
					Total Site Length: 150 m; Average Wetted Width: 1 m; Transect Length: 15
Fish Creek about 1 mile upstream Ashley Lake	7/17/2013 18:15	Other			m 6 template samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 2.4 m; Transect Length: 15
Fish Creek 100 yards upstream from Ashley Lake Road crossing	7/17/2013 15:10	Other	C 13.6 mg/m2		m Weighted average of 11 transects: 11 templates.
					Total Site Length: 150 m; Average Wetted Width: 2.4 m; Transect Length: 15
Fish Creek 100 yards upstream from Ashley Lake Road crossing	7/17/2013 15:10	Other	13.6 mg/m2		m 11 template samples composited at lab.
					Total Site Length: 150 m; Average Wetted Width: 2.4 m; Transect Length: 15
Fish Creek 100 yards upstream from Ashley Lake Road crossing	7/17/2013 15:10	Other		5.06 g/m2	m 11 template samples composited at lab.