

Stream Gauging Data Collection Sheet Page 1 of 1

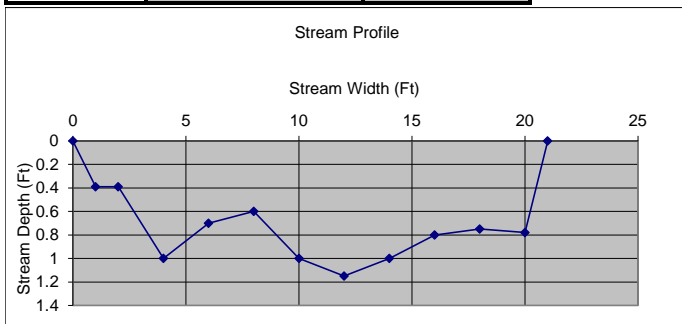
Date: 9/26/2013 **Time :** 13:20

Project Name & Location: Harley-Davidson Codorus Creek Stream Sampling

Collected By: AGM, NAS, JAR,CJS	Station Description (circle all that apply)	
Station ID: Mouth of Millcreek	Stream Bed Description:	Gravelly
Current Weather Conditions: Sunny Mid 70s	Flow Description:	Turbulent
Stream Width (ft): 21'	Water Clarity:	Clear
Instrument Type & ID: Hach 950 82685	Ice:	None
Notes:	Heavy Rain in past 7 days	None
	Carbonate Area	Yes

Distance from Bank (Ft)	Depth (ft)	Velocity (ft/s)	Area (ft ²)	Flow (ft ³ /s)	Comment
			0.195		
1	0.39		0.39		
2	0.39		1.39		
4	1	0.19	1.7	0.323	
6	0.7	0.33	1.3	0.429	
8	0.6	0.04	1.6	0.064	
10	1	0.41	2.15	0.8815	
12	1.15	0.66	2.15	1.419	
14	1	0.2	1.8	0.36	
16	0.8	0.02	1.55	0.031	
18	0.75	0.2	1.53	0.306	
20	0.78	0.01	0.39	0.0039	
21					
Total Flow:			1713.24912 GPM	3.8174 ft ³ /s	

Trapezoidal Area		
Distance	Depth	Area (ft ²)
		0.195
1	0.39	
1	0.39	0.39
2	0.39	
2	0.39	1.39
4	1	
4	1	1.7
6	0.7	
6	0.7	1.3
8	0.6	
8	0.6	1.6
10	1	
10	1	2.15
12	1.15	
12	1.15	2.15
14	1	
14	1	1.8
16	0.8	
16	0.8	1.55
18	0.75	
18	0.75	1.53
20	0.78	
20	0.78	0.39
21		



Notes:

- All shaded boxes are automatically populated from values entered in un-shaded areas.
- Zero values entered will show up as blank cells.
- Average trapezoidal area calculated by following procedures:

<http://www.epa.gov/owow/monitoring/volunteer/stream/vms51.html>

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Date: **9/26/2013** Time: **13:00**

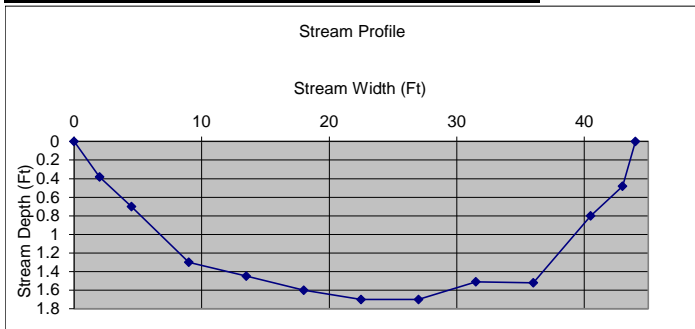
Project Name & Location: **Harley-Davidson Codorus Creek Stream Sampling**

Collected By: AGM, NAS, JAR,CJS	Station Description (circle all that apply)	
Station ID: COD-SW-6/7	Stream Bed Description:	Gravelly
Current Weather Conditions: Sunny Mid 70s	Flow Description:	Turbulent
Stream Width (ft): 44'	Water Clarity:	Cloudy
Instrument Type & ID: Hach 950 82685	Ice:	None
Notes:	Heavy Rain in past 7 days	None
	Carbonate Area	Yes

Distance from Bank (Ft)	Depth (ft)	Velocity (ft/s)	Area (ft ²)	Flow (ft ³ /s)	Comment
			0.38		
2	0.38		1.35		
4.5	0.7		4.5		
9	1.3	1.3	6.1875	8.04375	
13.5	1.45	2.7	6.8625	18.52875	
18	1.6	3.71	7.425	27.54675	
22.5	1.7	3.8	7.65	29.07	
27	1.7	3.01	7.2225	21.739725	
31.5	1.51	0.83	6.8175	5.658525	
36	1.52	0.27	5.22	1.4094	
40.5	0.8	0.1	1.6	0.16	
43	0.48	0.01	0.24	0.0024	
44					

Trapezoidal Area		
Distance	Depth	Area (ft ²)
		0.38
2	0.38	
2	0.38	1.35
4.5	0.7	
4.5	0.7	4.5
9	1.3	
9	1.3	6.1875
13.5	1.45	
13.5	1.45	6.8625
18	1.6	
18	1.6	7.425
22.5	1.7	
22.5	1.7	7.65
27	1.7	
27	1.7	7.2225
31.5	1.51	
31.5	1.51	6.8175
36	1.52	
36	1.52	5.22
40.5	0.8	
40.5	0.8	1.6
43	0.48	
43	0.48	0.24
44		
44		

Total Flow: 50337.09384 GPM 112.1593 ft³/s



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Date: 9/26/2013 **Time :** 14:10

Project Name & Location: Harley-Davidson Codorus Creek Stream Sampling

Collected By: AGM, NAS, JAR,CJS **Station Description (circle all that apply)**

Station ID: COD-SW-11 (Unnamed Trib) **Stream Bed Description:** Gravelly

Current Weather Conditions: Sunny Mid 70s **Flow Description:** Turblent

Stream Width (ft): 7' **Water Clarity:** Clear

Instrument Type & ID: Hach 950 82685 **Ice:** None

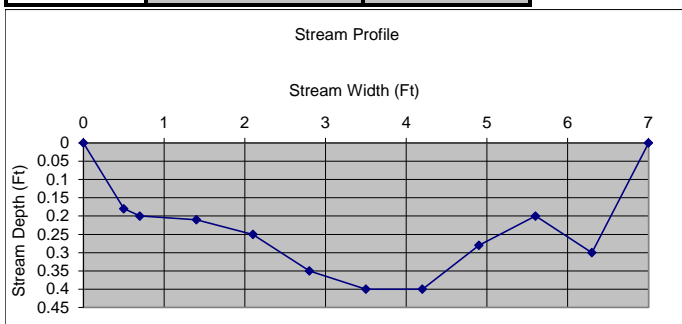
Notes: **Heavy Rain in past 7 days:** None

Carbonate Area: Yes

Distance from Bank (Ft)	Depth (ft)	Velocity (ft/s)	Area (ft ²)	Flow (ft ³ /s)	Comment
			0.045		
0.5	0.18	0.18	0.038	0.00684	
0.7	0.2	0.32	0.1435	0.04592	
1.4	0.21	0.76	0.161	0.12236	
2.1	0.25	0.64	0.21	0.1344	
2.8	0.35	0.95	0.2625	0.249375	
3.5	0.4	1.4	0.28	0.392	
4.2	0.4	1.3	0.238	0.3094	
4.9	0.28	0.4	0.168	0.0672	
5.6	0.2	0.22	0.175	0.0385	
6.3	0.3	0.56	0.105	0.0588	
7					

Total Flow: 639.447996 GPM 1.424795 ft³/s

Trapezoidal Area		
Distance	Depth	Area (ft ²)
		0.045
0.5	0.18	
0.5	0.18	0.038
0.7	0.2	
0.7	0.2	0.1435
1.4	0.21	
1.4	0.21	0.161
2.1	0.25	
2.1	0.25	0.21
2.8	0.35	
2.8	0.35	0.2625
3.5	0.4	
3.5	0.4	0.28
4.2	0.4	
4.2	0.4	0.238
4.9	0.28	
4.9	0.28	0.168
5.6	0.2	
5.6	0.2	0.175
6.3	0.3	
6.3	0.3	0.105
7		
7		



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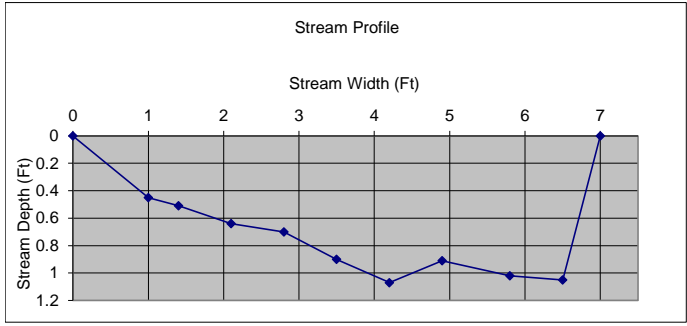
Date: 9/26/2013 **Time :** 13:50

Project Name & Location: Harley-Davidson Codorus Creek Stream Sampling

Collected By: <u>AGM, NAS, JAR,CJS</u>	Station Description (circle all that apply)
Station ID: <u>Johnson Creek (Prior to Levee)</u>	Stream Bed Description: <u>Gravelly</u>
Current Weather Conditions: <u>Sunny Mid 70s</u>	Flow Description: <u>Smooth</u>
Stream Width (ft): <u>7'</u>	Water Clarity: <u>Clear</u>
Instrument Type & ID: <u>Hach 950 82685</u>	Ice: <u>None</u>
Notes:	Heavy Rain in past 7 days: <u>None</u>
	Carbonate Area: <u>Yes</u>

Distance from Bank (Ft)	Depth (ft)	Velocity (ft/s)	Area (ft ²)	Flow (ft ³ /s)	Comment
			0.225		
1	0.45	0.08	0.192	0.01536	
1.4	0.51	0.11	0.4025	0.044275	
2.1	0.64	0.07	0.469	0.03283	
2.8	0.7	0.04	0.56	0.0224	
3.5	0.9	0.09	0.6895	0.062055	
4.2	1.07	0.12	0.693	0.08316	
4.9	0.91	0.13	0.8685	0.112905	
5.8	1.02	0.06	0.7245	0.04347	
6.5	1.05	0.02	0.2625	0.00525	
7					
Total Flow:	189.261204	GPM	0.421705	ft³/s	

Trapezoidal Area		
Distance	Depth	Area (ft ²)
		0.225
1	0.45	
1	0.45	0.192
1.4	0.51	
1.4	0.51	0.4025
2.1	0.64	
2.1	0.64	0.469
2.8	0.7	
2.8	0.7	0.56
3.5	0.9	
3.5	0.9	0.6895
4.2	1.07	
4.2	1.07	0.693
4.9	0.91	
4.9	0.91	0.8685
5.8	1.02	
5.8	1.02	0.7245
6.5	1.05	
6.5	1.05	0.2625
7		
7		



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Stream Gauging Data Collection Sheet

Date: 9/26/2013 **Time:** 14:35

Project Name & Location: Harley-Davidson Codorus Creek Stream Sampling

Collected By: AGM, NAS, JAR,CJS **Station Description (circle all that apply)**

Station ID: COD-SW-8/9 (Downstream Location) **Stream Bed Description:** Gravelly

Current Weather Conditions: Sunny Mid 70s **Flow Description:** Turblent

Stream Width (ft): 104' **Water Clarity:** Clear

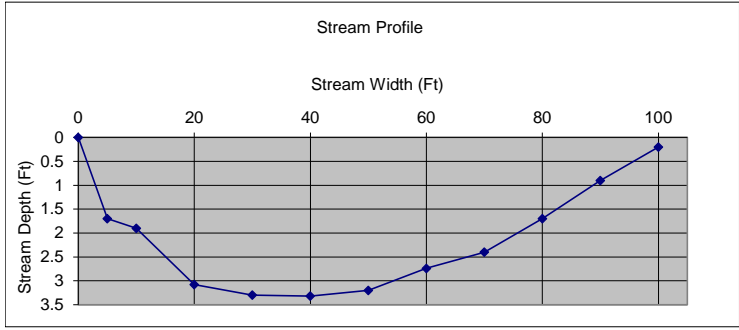
Instrument Type & ID: Hach 950 82685 **Ice:** None

Notes: **Heavy Rain in past 7 days:** None

Carbonate Area: Yes

Distance from Bank (Ft)	Depth (ft)	Velocity (ft/s)	Area (ft ²)	Flow (ft ³ /s)	Comment
			4.25		
5	1.7	0.39	9	3.51	
10	1.9	0.43	24.9	10.707	
20	3.08	0.9	31.9	28.71	
30	3.3	0.64	33.1	21.184	
40	3.32	0.46	32.6	14.996	
50	3.2	0.36	29.7	10.692	
60	2.74	0.56	25.7	14.392	
70	2.4	0.36	20.5	7.38	
80	1.7	0.4	13	5.2	
90	0.9	0.1	5.5	0.55	
100	0.2	0.1	0.4	0.04	
104					
Total Flow:			52671.6168 GPM	117.361 ft ³ /s	

Trapezoidal Area		
Distance	Depth	Area (ft ²)
		4.25
5	1.7	9
10	1.9	
20	3.08	24.9
30	3.3	
40	3.32	31.9
50	3.2	
60	2.74	25.7
70	2.4	
80	1.7	13
90	0.9	
100	0.2	5.5
104		0.4



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