

FRIENDS OF THE MAD RIVER



-- FOR IMMEDIATE RELEASE --
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Bacteria on the Move - rain moves *E. coli* from land to water

Sampling results from the sixth and final round of Friends of the Mad River's Mad River Watch water quality monitoring show four sites with highly unfavorable *E. coli* levels as of last Wednesday morning, August 23. Sites between Tremblay Rd and Ward Swimhole demonstrated high *E. coli* values. This sampling, we switched sampling from our regular Monday schedule to Wednesday to try and capture data during a higher river flow than previously captured this summer (which caused us to miss last week's Valley Reporter!). After many beautiful days of sun over the weekend, an evening of steady rain began last Tuesday afternoon. The came up from 112 cubic feet per second (cfs) to top out at 355 cfs at the US Geological Service flow gage in Moretown in the wee hours of Wednesday morning (3:30 am).

The flow condition of the Mad River at the time of sampling Wednesday morning was High and Declining (HD), measuring approximately 290 cfs. The mean flow for this date in the last 89 years is 80 cfs.

Four sites showed highly unfavorable swimming conditions as of Tuesday morning. Moretown Village results showed 1046 colonies of *E. coli* per 100 ML of water, well over the DOH/EPA accepted "swimmable" *E. coli* level of 235 colonies/100ML, while Meadow Road Bridge in Waitsfield was a close second with 980 colonies/100ML. Elevated *E. coli* levels in Moretown are not surprising as there had been rain just prior to sampling. Rain carries pollutants off the land and into the streams. Sampling during or after a rain can give us a sense of where pollutants originate on the landscape. We hope that this week's sampling results can evidence just how much rains can cause *E. coli* levels to fluctuate, even on a daily basis, as water carrying pathogens moves down the watershed. When weather across the watershed varies from hill to hollow, swimming safety varies too! FMR's *E. coli* sampling results are only a snapshot in time intended to give you a sense of the conditions that lead to high pathogen levels in the water so you can be informed. **You** are your best protector - use common sense and don't swim for several days after a rain or in water that is cloudy or "turbid." It is estimated that at the level of 235 colonies *E.coli* per 100 mL water, approximately 8 out of every 1,000 swimmers are likely to contract a water borne illness related to fecal contamination.

Many thanks to this week's Mad River Watch samplers: Charlie Baldwin, Richard Czaplinski, Susy Deane, Annie & Hazel Macmillan, and Mike Ware. Larger than normal thanks this week go out to Charlie Baldwin who covered two sampling routes – he went above and beyond! Thanks also this week to Susanne Schaefer who drove water samples to the DEC's lab in Burlington for phosphorus, nitrogen, and turbidity analysis and to Sally Boudreau for posting data at swimholes across the watershed. The Mad River Watch Program would not be possible without these dedicated volunteers! Our Lab Coordinator, Paula Baldwin, did the labwork.

The river connects our Mad River Valley community and its clean water is a measure of our success as stewards of the land. For more information about *E. coli* and the Mad River Watch program and to view our most recent complete data report please visit the *Friends of the Mad River* website at www.FriendsoftheMadRiver.org. Results are also available on Facebook ("[Friends of the Mad River](#)") and on sign posts at swimholes across the Valley. *Friends* is a community-supported organization, and depends on the generous contributions of its members to continue the Mad River Watch and other important programs; learn how to become a member and [donate securely online](#) at our website.

See Results below.

August 23, 2017

SITE LOCATION	SITE #	Water Temp. °F	<i>E.coli</i> per 100ml *
Blueberry Lake	BBL	71	29.8
Warren Falls (Mad River)	1	62	34.5
Warren Store (Freeman Brook)	4	62	74.8
Warren Riverside Park (Mad River)	7	64	45.5
Lareau Swimhole (Mad River)	19	65	102.6
Couples Club Field (Mad River)	19	66	51.2
Waitsfield Covered Bridge (Mad River)	20	64	46.0
Tremblay Road (Mad River)	22	65	547.5*
Meadow Road Bridge (Mad River)	23	66	980.4*
Moretown Village Swim Access (Mad River)	27	63	1046.2*
Ward Swimhole (Mad River)	29	68	686.7*

* > 235 *E.coli* / 100ml = Not suitable for recreation, according VT Department of Health and EPA

Flow and Weather Analysis

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River Flow

HD - high and declining: After reaching a peak flow, dry weather has returned and the flow is falling.

Thanks to this week's volunteers!

Samplers - Charlie Baldwin, Richard Czaplinski, Susy Deane, Annie Macmillan, Hazel Macmillan, Mike Ware

E. coli Lab Coordinator - Paula Baldwin

Posting Results - Sally Boudreau

Transporting Samples - Susanne Schaefer