Friends of the Shenandoah River's Summer 2018 Quantitative *E. coli* Test Results at public recreational use sites on the main-stem, South Fork and North Fork of the Shenandoah River

These results provide a snapshot of the *E. coli* bacteria concentrations at the designated sites on the date, time, and under the conditions that the water samples were collected.

SITE ID	SITE DESCRIPTION	5/2	5/9	5/16	5/23	5/30	6/1	6/7	6/13	6/20	6/27	7/5	7/11	7/19	7/26	7/27	8/2	8/9	8/15	8/22	8/28	9/4	9/11	9/20
FC08	Shenandoah River mainstem Castleman's Ferry public boat ramp @ Route 7 bridge	31.5	48.0	387.3	1119.9	156.5		209.8	547.5	90.8	325.5	117.8	10.8	9.8	410.6		131.4	325.5	344.8	410.6	20.3	60.2	627.0	379.0
FC08 Split	Shenandoah River mainstem Castleman's Ferry public boat ramp @ Route 7 bridge																152.9							
FC05	Shenandoah River mainstem @ Lockes Landing public boat landing	39.3	43.5	387.3	727.0	117.8		228.2	866.4	111.2	285.1	62.7	24.1	23.5	247.2		151.5	122.3	99.0	260.3	81.3	30.9	932.0	292.0
FC01	Shenandoah River mainstem Berry's public boat ramp @ Route 50 bridge	15.8	25.9	224.7	>2419.6	151.5		214.2	1553.1	275.5	260.3	57.6	32.7	37.4	275.5		115.3	135.4	83.3	201.4	101.7	52.1	1153.0	355.0
FW35	Shenandoah River mainstem public boat landing @ Morgan's Ford low H2O bridge below confluence with Manassas Run	29.2	18.5	579.4	>2419.6	365.4		209.8	2419.6	410.6	261.3	686.7	50.4	61.3	821.2		>2419.6	419.6	142.1	238.2	410.6	88.2	565.0	
FW35MID	Shenandoah River mainstem public boat landing @ Morgan's Ford low H2O bridge further into mid width of river												17.3	18.5	730.8		248.1	85.7	77.6	290.9	27.9	49.6	1050.0	345.0
FW36	Manassas Run upstream of confluence with Shenandoah River																		178.5	248.1	816.4	261.3	379.0	
FW14	FW14: Shenandoah River SF Front Royal public boat landing @ Luray Ave.	63.7	24.3	307.6	261.3	1299.7		186.0	>2419.6	198.9	201.4	39.3	17.1	32.3	298.7		105.0	161.6	90.9	125.9	22.8	52.9	857.0	432.0
FWRAGSRSP	Shenandoah River SF at Raymond R. "Andy" Guest Jr., Shenandoah River State Park	26.2	13.2	238.2	686.7	1119.9		167.0	>2419.6	55.6	145.0	13.2	6.3	14.6	410.6		214.3	115.3	59.1	45.7	19.9	65.0	906.0	364.0
FWIH Indian Hollow PBL	Shenandoah River SF at Indian Hollow Public Boat Launch off Indian Hollow Road					1299.7	>2419.6				148.3	9.7	9.6	25.9	522.6		547.5	147.6	58.6	71.2	26.2	95.9	987.0	384.0
FP03	Shenandoah River SF at White House Public Boat Landing	12.0	16.0	344.8	>2419.6	866.4		178.5	>2419.6	137.6	172.3	37.3	18.5	32.3	307.6		104.3	1732.9	224.7	178.5	18.7	146.7	1401.0	399.0
FP02	Shenandoah River SF at Newport Public Boat Ramp downstream of Riverside Campground/ Kite's		33.1	275.5	>2419.6	1119.9		228.2	>2419.6	>2419.6	201.4	81.6	12.2	10.8	488.4		275.5	1046.2	1732.9	248.9	24.9	344.8	1014.0	369.0
FSMB	Shenandoah River NF at Meems Bottom	58.3	43.5	>2419.6	1119.9	461.1		193.5	387.3	344.8	410.6	435.2	98.8	127.4	615.2		>2419.6	>4839.2	218.7	727.0	77.1	101.4	345.0	305.0
FSMB Duplicate	Shenandoah River NF at Meems Bottom							172.3																
FSDR	Shenandoah River NF at Public Boat Landing @ Deer Rapids	3.0	7.4	53.7	>2419.6	235.9		365.4	1299.7	35.5	248.9	770.1	67.7	No Access			365.4	457.5	488.4	488.4	37.9	57.3	1658.0	487.0
FSSP	Shenandoah River NF at Strasburg Park Public Boat Landing	6.2	25.9	224.7	>2419.6	186.0	1046.2	209.8	1046.2	228.2	218.7	>2419.6	24.6	39.5	203.4		>2419.6	437.4	461.1	544.6	71.2	69.7	1664.0	313.0
FCOC	Opequon Creek @ Neill Road ford			686.7	178.5	547.5		206.4	325.5	410.6	228.2	>2419.6	111.9	167		272.3	>2419.6	215.2	238.2	1553.0	261.3	148.3	813.0	
FSPCEF	USFS Freshwater Snorkeling Education Program: Passage Creek at Elizabeth furnace Day Use area					435.2																	364.0	1046.2

STATE WATER CONTROL BOARD 9 VAC 25-260 Virginia
Water Quality Standards. Statutory
Authority: § 62.1-44.15 3a of the Code of Virginia. WITH AMENDMENTS EFFECTIVE January 6, 2011

A. The following bacteria criteria (colony forming units (CFU)/100 ml) shall apply to protect primary contact recreational uses in surface waters, except waters identified in subsection B of this section: E.coli bacteria shall not exceed a monthly geometric mean of 126 CFU/100 ml in freshwater. Enterococci bacteria shall not exceed a monthly geometric mean of 35 CFU/100 ml in transition and saltwater.

1. See 9VAC25-260-140 C for boundary delineations for freshwater, transition and saltwater.
2. Geometric means shall be calculated using all data collected during any calendar month with a minimum of four weekly samples.
3. If there are insufficient data to calculate monthly geometric means in freshwater, no more than 10% of the total samples in the assessment period shall exceed 235 E.coli CFU/100 ml.
4. If there are insufficient data to calculate monthly geometric means in transition and saltwater, no more than 10% of the total samples in the assessment period shall exceed enterococci 104 CFU/100 ml.
5. For beach advisories or closures, a single sample maximum of 235 E.coli CFU/100 ml in freshwater and a single sample maximum of 104 enterococci CFU/100 ml in saltwater and transition zones shall apply.

Red indicates that the Standard criteria, no more than 10% of the total samples in the assessment period shall exceed 235 E.coli CFU/100 ml, has been exceeded.
http://law.lis.virginia.gov/admincode/title9/agency25/chapter260/section170/