



Your Stream Health

Stream samples are collected from six public access areas weekly by the Christian County Health Department EPIS staff, between Memorial Day and Labor Day. This is a community service to our residents and visitors of Christian County. Sites selected are based on their accessibility where people might come in contact with the water. Bacterial monitoring is a method to determine the potential health risk of water exposure. Bacteria are microscopic, single-celled organisms that can be found in virtually any environment. Bacterial indicators of pollution are the species found in the intestines of warm-blooded animals, including humans, where many pathogens originate. Indicator bacteria in a waterway come from many sources, including animal droppings, faulty or leaking septic or sewage systems, stormwater runoff, and disturbed sediments. The most common recreational water illnesses caused by swallowing water contaminated by E. coli, are Shigella, Giardia and Cryptosporidium.

Criteria: Environmental Protection Agency's (EPA) established water quality criteria for monitoring bacteria, which states that no single water sample should have an E. coli count that exceeds 235 CFUs (colony forming units) per 100 ml of water. If a sample result is over 200.5 CFU another sample is collected and if the second sample is over 235 CFUs and advisory is posted and will not be removed until two consecutive samples have results <200 CFU.

Stream	Date	Weather Condition	Nitrate	pH	Air Temp	Water Temp	Dissolved Oxygen (D.O)	D.O % Saturation	Conductivity	Turbidity (NTU)	Chlorides (Res-Sub)	E. coli MPN
Target			< 2 mg/l	6.5 - 9.0	0 - 34° C	5-15 mg/l	> 80% - Healthy	No standards	No standards	< 10	< 25 mg/l	< 235 CFU
Linden												
5/12/2015	Clear		0.5	8.1	15.0	18.0	11.5	148.0	317.0	<10	<29	7.5
5/18/2015	Cloudy		0.5	8.1	16.0	19.1	10.0	108.0	324.0	<5	0.0	42.9
5/27/2015	Clear		1.0	8.0	24.0	20.0	10.6	111.0	295.0	<5	<29	200.5
6/1/2015	Partly Cloudy		1.5	7.8	16.0	15.0	9.0	99.0	281.0	<5	0.0	>200.5
6/3/2015	Cloudy		-	-	-	-	-	-	-	-	-	261.3
6/8/2015	Cloudy		1.0	8.0	27.0	22.0	8.0	92.0	307.0	<10	<29	56.0
6/10/2015	Cloudy		-	-	-	-	-	-	-	-	-	15.0
6/16/2015	Cloudy		1.0	7.9	25.0	22.5	7.0	82.0	263.0	22.0	<29	>200.5
6/17/2015	Cloudy		-	-	-	-	-	-	-	-	-	435.2
6/22/2015	Clear		1.0	7.8	25.0	20.0	6.0	66.0	281.0	<10	<29	104.3
6/25/2015	-		-	-	-	-	-	-	-	-	-	28.8
6/29/2015	Clear		0.5	8.2	28.0	25.0	9.0	121.0	303.0	<5	<29	11.1
7/6/2015	Cloudy		2.0	7.9	28.0	23.0	9.0	105.0	265.0	10.0	<29	125.9
7/13/2015	Clear		<0.25	7.8	35.0	21.0	8.0	90.0	264.0	<10	<29	110.6
7/21/2015	Cloudy		1.0	7.7	28.0	25.0	8.0	97.0	324.0	<10	<29	25.0
7/27/2015	Clear		0.3	7.6	33.0	28.0	8.0	102.0	291.0	<10	<29	28.1
8/3/2015	Partly Cloudy		<0.25	7.7	33	26	8	99	281	<10	<29	7.3
8/12/2015	Clear		0.5	7.2	25.0	25.0	8.0	97.0	312.0	10.0	29.0	69.7
8/21/2015	Partly Cloudy		0.5	7.7	32.0	26.5	7.0	83.0	318.0	<10	<29	13.7
8/25/2015	Clear		0.5	7.6	20.0	22.0	8.0	92.0	323.0	<10	<29	25.4
8/31/2015	Clear		0.5	8.2	32.0	26.0	10.0	124.0	323.0	10.0	<29	16.4
Bar K												
5/12/2015	Clear		<0.25	7.9	13.0	15.0	22.5	199.0	341.0	10.0	0.0	45.3
5/18/2015	Rainy		<0.25	8.0	14.0	16.0	9.0	91.0	383.0	<10	0.0	53.1
5/26/2015	Cloudy		<0.25	7.9	16.0	17.0	8.0	83.0	395.0	<5	0.0	>200
6/1/2015	Partly Cloudy		0.25	7.9	16.0	17.0	9.0	91.0	399.0	<5	<29	31.1
6/8/2015	Cloudy		0.25	8.1	24.0	21.0	7.0	79.0	563.0	<10	<29	1.0
6/16/2015	Partly Cloudy		0.25	7.8	24.0	22.0	7.8	80.0	372.0	<5	<29	>200.5
6/17/2015	Cloudy		-	-	-	-	-	-	-	-	-	178.9
6/22/2015	Partly Cloudy		<0.25	8.0	25.0	20.0	6.0	66.0	407.0	<10	<29	69.9
6/29/2015	Clear		<0.25	8.0	30.0	25.0	9.0	109.0	395.0	<5	<29	200.5
7/1/2015	-		-	-	-	-	-	-	-	-	-	387.3
7/6/2015	Cloudy		<0.25	7.7	28.0	25.0	9.0	109.0	847.0	<5	<29	36.8
7/13/2015	Clear		<0.25	7.9	33.5	24.0	7.0	83.0	352.0	<10	<29	24.3
7/21/2015	Cloudy		<0.25	7.9	28.0	26.0	8.0	99.0	287.0	<10	<29	24.7
7/27/2015	Clear		0.3	7.5	29.0	26.0	7.5	87.0	418.0	<10	<29	24.9
8/3/2015	Partly Cloudy		<0.25	7.5	34.0	29.0	7.0	91.0	417.0	10.0	<29	7.5
8/12/2015	Clear		0.3	8.0	22.0	23.0	6.0	70.0	404.0	10.0	<29	9.9
Rain-out												
8/25/2015	Clear		<0.25	7.6	21.0	22.0	6.0	69.0	415.0	<10	<29	16.4
9/1/2015	Partly Cloudy		0.3	7.4	24.0	22.0	6.0	69.0	444.0	<10	<29	28.8
Delaware												
3/31/2015	Partly Cloudy		3.0	8.0	14.0	11.0	19.0	172.0	333.0	10.0	29.0	53.1
5/1/2015	Partly Cloudy		4.0	8.4	24.0	20.0	16.0	159.0	478.0	<10	29.0	32.4
5/13/2015	Cloudy		4.0	8.0	21.5	18.0	16.8	159.0	480.0	<10	29.0	15.0
5/18/2015	Clear		4.0	8.0	23.0	20.0	9.0	99.0	482.0	13.0	29.0	45.3
5/27/2015	Partly Cloudy		4.0	7.9	21.5	19.5	11.0	121.0	469.0	<10	29.0	>200.5
6/1/2015	Partly Cloudy		4.0	7.8	22.5	17.0	8.0	83.0	352.0	11.0	<29	>200
6/5/2015	Partly Cloudy		-	-	-	-	-	-	-	-	-	104.8
6/8/2015	Cloudy		3.0	7.9	23.0	22.0	6.0	80.0	451.0	<5	29.0	73.8
6/16/2015	Partly Cloudy		4.0	7.9	25.0	23.0	6.0	70.0	455.0	<10	<29	129.8
6/22/2015	Clear		3.0	7.6	30.0	23.0	10.0	117.0	358.0	20.0	<29	214.2
6/25/2015	-		-	-	-	-	-	-	-	-	-	143.0
6/29/2015	Partly Cloudy		3.0	7.9	25.0	23.0	9.0	105.0	427.0	<5	29.0	46.4
7/6/2015	Cloudy		2.0	7.7	25.0	21.0	8.0	90.0	333.0	16.0	<29	290.9
7/13/2015	Clear		2.0	7.6	28.0	23.0	9.0	105.0	379.0	20.0	<29	344.8
7/16/2015	-		-	-	-	-	-	-	-	-	-	140.8
7/20/2015	Cloudy		6.0	7.5	32.0	27.0	8.0	101.0	409.0	<10	<29	37.9
7/27/2015	Clear		4.0	7.9	29.0	24.0	10.0	119.0	420.0	<10	<29	69.5
8/3/2015	Clear		2.0	8.1	32.0	25.0	9.0	109.0	460.0	<10	<29	20.7
8/11/2015	Clear		2.0	7.8	26.0	24.0	8.0	95.0	397.0	15.0	29.0	435.7
8/21/2015	Partly Cloudy		4.0	7.7	32.0	26.5	9.0	113.0	476.0	<10	29.0	13.7
8/24/2015	Clear		3.0	8.1	21.0	22.0	6.0	69.0	447.0	10.0	<29.0	83.1
9/1/2015	Clear		4.0	7.7	486.0	30.0	27.0	113.0	486.0	<10	29.0	32.4
Shelvin Rock												
3/31/2015	Cloudy		3.0	7.8	15.0	12.0	13.0	123.0	414.0	15.0	29.0	69.7
5/12/2015	Clear		4.0	8.2	24.0	18.0	12.5	138.0	478.0	<10	29.0	32.4
5/18/2015	Partly Cloudy		4.0	8.0	17.5	17.5	12.8	132.0	504.0	<10	29.0	200.5
5/27/2015	Partly Cloudy		4.0	7.9	21.5	19.0	13.0	140.0	481.0	<10	29.0	165.2
6/1/2015	Partly Cloudy		2.0	7.7	23.5	17.0	9.0	93.0	370.0	11.5	<29	>200.5
6/3/2015	Partly Cloudy		-	-	-	-	-	-	-	-	-	144.5
6/8/2015	Cloudy		4.0	7.9	24.0	22.0	7.0	92.0	431.0	<5	29.0	73.8
6/16/2015	Partly Cloudy		4.0	8.0	25.0	23.0	8.0	70.0	451.0	<10	<29	34.4
6/22/2015	Clear		3.0	7.4	28.0	23.0	9.0	105.0	554.0	28.0	29.0	238.2
6/25/2015	-		-	-	-	-	-	-	-	-	-	128.1
6/29/2015	Partly Cloudy		3.0	7.9	25.0	23.0	9.0	105.0	452.0	<5	29.0	41.5
7/6/2015	Cloudy		1.0	7.9	24.0	20.0	8.0	99.0	326.0	17.0	<29	387.3
7/13/2015	Clear		3.0	7.7	30.0	23.0	9.0	105.0	385.0	10.0	<29	133.4
7/20/2015	Cloudy		6.0	8.0	30.0	25.0	7.0	85.0	444.0	<10	<29	29.9
7/27/2015	Clear		1.0	8.0	31.0	26.0	8.0	99.0	410.0	<10	<29	66.5
8/3/2015	Clear		3.0	8.0	33.0	24.0	5.0	60.0	473.0	10.0	29.0	30.7
8/11/2015	Clear		4.0	7.8	26.0	24.0	7.0	83.0	293.0	10.0	29.0	307.6
8/17/2015	Partly Cloudy		4.0	7.8	33.0	27.0	8.0	103.0	468.0	<10	29.0	16.4
8/24/2015	Clear		2.0	8.0	20.0	22.0	8.0	103.0	453.0	10.0	<29	101.3
9/1/2015	Partly Cloudy		5.0	7.8	30.0	28.0	8.0	102.0	502.0	<10	33.0	27.1
Busiek												
3/30/2015	Clear		0.5	9.6	15.0	9.0	18.5	160.0	176.0	10.0	0.0	6.3
5/4/2015	Clear		0.3	7.6	25.0	13.0	11.2	105.0	345.0	10.0	<29	>200.5
5/11/2015	Clear		0.3	7.7	15.0	21.0	4	95.0	236.0	<10	<29	178.5
5/28/2015	Cloudy		0.3	7.8	20.0	18.0	9	97.0	377.0	<5	<29	30.7
6/1/2015	Partly Cloudy		0.5	7.9	17.0	15.0	9.0	89.0	367.0	<10	<29	45.3
6/8/2015	Partly Cloudy		0.3	7.7	26.0	17.0	7.0	73.0	342.0	<10	<29	20.3
6/16/2015	Cloudy		0.3	7.6	24.0	22.0	7.0	80.0	326.0	10.0	<29	>200.5
6/17/2015	Cloudy		-	-	-	-	-	-	-	-	-	41.4
6/22/2015	Clear		0.5	7.7	30.0	24.5	9.0	109.0	342.0	<10	<29	54.6
6/25/2015	Cloudy		<0.25	7.7	27.0	20.0	6.0	77.0	337.0	<10	<29	11.0
7/6/2015	Cloudy		<0.25	7.7	27.0	20.0	7.7	90.0	324.0	<10	<29	96.0
Park Closed												
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8/5/2015	Rainy		2.0	7.6	21.0	22.0	7.0	80.0	346.0	15.0	<29	>435
8/11/2015	Partly Cloudy		0.5	7.0	22.0	24.0	6.0	71.0	356.0	10.0	<29	57.3
Rain-out												
8/31/2015	Clear		0.3	8.0	30.0	23.0	9.0	105.0	355.0	10.0	<29	34.4
Jim Turner												
3/30/2015	Clear		2.0	8.2	15.0	5.0	18.8	147.0	199.0	10.0	0.0	65.9
5/12/2015	Clear		0.5	8.5	13.0	18.0	13.5	159.0	320.0	<10	<29	25.4
5/18/2015	Clear		0.3	8.0	24.0	21.0	13.5	146.0	326.0	<10	<29	40.6
6/1/2015	Clear		1.5	7.8	22.0	21.0	9.8	112.0	274.0	35.0	<29	>200.5
6/3/2015	Partly Cloudy		-	-	-	-						