

APPENDIX K – BACTERIA USE ATTAINMENT (OEPA, 2004, A127-A129)
- ANALYSIS OF PRIMARY CONTACT RECREATION STANDARDS (PCR)

Unit	Geometric Mean			90 th Percentile		
	FC	EC		FC	EC	
<i>Recreation Standard</i>	<i>1000</i>	<i>126_a</i>	<i>336_b</i>	<i>2000</i>	<i>298_a</i>	<i>626_b</i>
Upper Big Darby (Headwaters to downstream Sugar Run) [05060001 190] (FC n=167, EC n=139)	850.2	1131.9	1131.9	6901	8802	8802
Upper Big Darby Creek RM 82.5-52.0 (mainstem only) (FC n=52, EC n=43)	855.4	1282.1	1282.1	7844	12250	12250
Flat Branch and tribs incl. Little Darby (Logan Co.) (FC n=30, EC n=24)	906.9	1475.8	1475.8	22000	30027	30027
Flat Branch and tribs. (FC n=20, EC n=16)	1418.9	2810.1	2810.1	22616	35986	35986
Little Darby (Logan Co.) (FC n=10, EC n=8)	370.4	407.1	407.1	1231	1265	1265
Spain Creek incl. Pleasant Run and U.T. to BDC at RM 74.91 (FC n=30, EC n=24)	1058.8	994.1	994.1	3936	4612	4612
Spain Creek (FC n=15, EC n=12)	1208.4	1249.8	1249.8	4692	4736	4736
Pleasant Run (FC n=10, EC n=8)	902.4	754.9	754.9	3010	2586	2586
Hay Run incl. U.T. to BDC at RM 69.40 (FC n=10, EC n=8)	780.4	618.1	618.1	2209	1726	1726
Buck Run (FC n=20, EC n=16)	684.1	1133.3	1133.3	8009	6970	6970
Robinson Run incl. Sweeney Run (FC n=14, EC n=12)	655.8	825.1	825.1	3843	5963	5963
Sugar Run (n=16)	405	361	361	1470	740	740
Middle Big Darby (Sugar Run to Little Darby Creek) [050600001 200] (n=28)	324.6	300.5	300.5	1704	790	790
Middle Big Darby Creek RM 49.5-34.1 (mainstem) (n=12)	138.4	146.5	146.5	494	562	562
Ballenger-Jones Ditch and Worthington Ditch (n=8)	368.3	301.9	301.9	1858	704	704
Fitzgerald Ditch and Yutzy Ditch (n=8)	659.9	609.0	609.0	2274	3749	3749
Ballenger-Jones, Worthington, Fitzgerald, and Yutzy Ditches (n=16)	493.0	428.8	428.8	1897	1810	1810
Little Darby Creek (headwaters to Big Darby Creek) [050600001 210] (n=132)	476.5	430.0	430.0	3790	3723	3723

Unit	Geometric Mean			90 th Percentile		
	FC	EC		FC	EC	
Recreation Standard	1000	126 _a	336 _b	2000	298 _a	626 _b
Little Darby Creek (mainstem) (n=49)	207.5	158.6	158.6	967	928	928
Clover Run, Lake Run, Jumping Run (n=15)	782.1	842.6	842.6	4282	3363	3363
Treacle Creek incl. Howard Run and Proctor Run (n=40)	641.0	522.3	522.3	3329	2708	2708
Howard Run and Proctor Run (n=20)	600.0	530.5	530.5	4029	4273	4273
Howard Run (n=5)	833.9	806.7	806.7	1097	1720	1720
Proctor Run (n=15)	537.6	461.3	461.3	7075	6750	6750
Treacle Creek (n=20)	684.8	514.3	514.3	1864	2300	2300
Spring Fork incl. Bales Ditch and Barron Creek (n=28)	1025.0	988.0	988.0	17108	12741	12741
Spring Fork incl. Bales Ditch (n=23)	526.3	553.5	553.5	4733	5258	5258
Barron Creek (n=5)	21999.7	14203.1	14203.1	40166	39952	39952
Lower Big Darby Creek (Little Darby Creek to the Mouth) [05060001 220] (n=122)	340.6	315.3	315.3	1690	1202	1202
Lower Big Darby Creek RM 27.0-3.1 (mainstem) (n=30)	104.3	116.6	116.6	292	221	221
Smith Ditch and tribs. (n=10)	377.1	352.1	352.1	955	851	851
Hellbranch Run and tribs. incl. Springwater Run (n=54)	602.2	514.0	514.0	2200	2606	2606
Hellbranch Run and tribs. (n=49)	541.8	506.3	506.3	2038	2457	2457
Springwater Run (n=5)	1694.6	382.3	382.3	6534	1565	1565
Unnamed Trib. at RM 20.20 (n=5)	606.1	548.1	548.1	1739	1477	1477
Georges Run and Greenbrier Creek (n=13)	335.3	280.6	280.6	730	679	679

FC = Fecal Coliform bacterial standard found in the Ohio Water Quality Standards (WQS), (OAC 3745 -1)

EC = *E. coli* bacteria

a = The current *E. coli* primary contact recreation (PCR) standard found in the Ohio WQS

b = A target *E. coli* value under evaluation as a more appropriate concentration for streams designated PCR

n = # of observations

boldface type indicates non-attainment of the recreational use, or a value exceeding the target