E. COLI READINGS IN MITCHELL CREEK & SEVENTEEN OTHER AREA CREEKS

AVERAGE* READING AT EACH SITE / -Blue meets Michigan Water Quality Standard of 300

Observation: Of 18 creeks tested, all harbor wildlife while only one - Mitchell Creek - also harbors septage disposal and is the sole creek violating state e.coli standards

*Geometric mean of most recent triplicate samples at each site (e.coli colonies per 100ml)

E-COLI

Pristine Water is Ours by Right

Milton Township Master Plan

"Water quality is central to the definition of community and quality of life"

Yet Mitchell Creek is polluted with E. coli

Mitchell Creek E.coli Test results

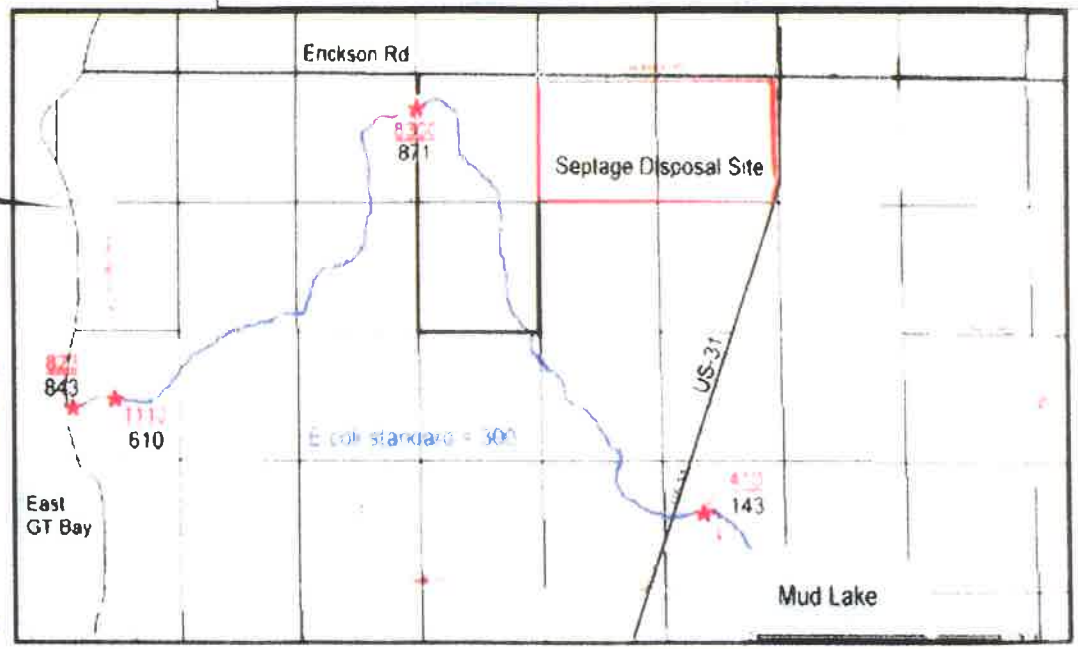
- Per MDEQ - violates State standard in 2007
- E.coli is not primarily from wildlife; 17 other area creeks meet State standards
- E.coli dropped from 8300 to 871 after septage disposal halted January 2007
- E.coli counts remain hazardous in 2007; exceed state standard of 300 cfu/100ml

The maps tell the story

Mitchell Creek - Enlarged

Key: 2006
2007

Geometric mean of weekly triplicate samples at each site repeated for five weeks (e coli colonies per 100ml)
Sources: MDEQ Report - Mitchell Creek e coli monitoring, 2007 TMN Report Mitchell Creek is polluted, 2006



Source Three Lakes Association 2007 Area Creek and Stream Survey - 17 creeks MDEQ Report Mitchell Creek e coli monitoring 2007

Grand Traverse County 1851

SEPTAGE PLANT In Gallons 10/1/2014

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		YEAR	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	TOTAL
2	Septage Tank	2005	0	0	0	0	107,695	172,844	291,188	350,349	298,271	437,527	264,761	69,809	**1,992,444**
3	Septage Tank	2006	72,595	42,000	135,416	274,278	301,272	318,370	257,433	265,044	277,328	352,199	250,962	94,842	**2,641,739**
4	Septage Tank	2007	76,778	71,334	125,306	256,891	374,005	294,299	309,314	282,660	349,728	458,524	387,142	127,753	**3,113,734**
5	Septage Tank	2008	107,084	62,710	85,056	441,318	510,696	400,846	428,536	339,553	444,167	434,124	238,273	116,318	**3,608,681**
6	Septage Tank	2009	71,333	92,671	101,574	360,316	502,658	387,842	358,556	371,525	392,033	544,070	371,485	155,264	**3,709,327**
7	Septage Tank	2010	59,901	72,164	245,518	439,273	461,764	412,073	359,968	488,854	515,146	554,456	519,597	130,742	**4,259,456**
8	Septage Tank	2011	85,639	124,396	119,662	407,411	594,323	598,776	526,719	588,440	552,582	594,881	431,716	235,418	**4,859,963**
9	Septage Tank	2012	153,211	139,812	265,197	392,532	581,929	510,366	524,616	516,274	466,088	660,225	468,654	381,931	**5,060,835**
10	Septage Tank	2013	238,307	83,953	144,097	335,784	725,211	404,052	514,515	529,006	432,392	628,356	450,342	144,542	**4,630,557**
11	Septage Tank	2014	91,071	95,981	108,082	264,904	670,102	555,354	591,009	549,720	563,490				**3,489,713**
12															
13															
14	Holding Tank	2005	0	0	0	0	86,120	115,197	320,081	339,969	260,060	210,396	201,059	167,571	**1,700,453**
15	Holding Tank	2006	136,918	129,575	185,644	196,668	241,855	272,406	351,104	337,243	233,642	178,945	155,938	163,431	**2,583,369**
16	Holding Tank	2007	148,462	176,896	167,579	256,987	250,348	182,679	331,752	315,784	216,862	208,746	172,080	189,543	**2,617,718**
17	Holding Tank	2008	198,004	214,167	224,448	272,886	233,574	345,319	439,094	330,405	264,770	273,998	227,814	193,139	**3,217,618**
18	Holding Tank	2009	185,785	179,472	210,675	225,704	303,091	341,682	429,706	372,077	278,073	248,642	217,908	169,383	**3,162,198**
19	Holding Tank	2010	134,794	173,870	184,195	224,450	269,272	299,514	400,118	298,878	204,243	155,670	152,262	136,351	**2,633,617**
20	Holding Tank	2011	116,512	185,946	65,221	176,666	171,267	289,109	311,192	268,288	179,709	170,982	132,292	146,706	**2,213,890**
21	Holding Tank	2012	107,453	116,260	129,901	157,375	224,668	276,911	369,929	301,403	161,702	222,193	158,956	161,380	**2,388,131**
22	Holding Tank	2013	158,610	125,457	128,099	198,780	222,052	270,724	355,168	262,412	187,040	184,458	154,961	157,094	**2,404,855**
23	Holding Tank	2014	120,328	99,618	119,317	142,177	306,016	234,922	362,080	278,620	185,510				**1,848,588**
24															
25															
26	Grease	2007	0	0	0	0	0	0	0	20,596	41,939	38,738	60,136	50,276	**211,685**
27	Grease	2008	41,206	30,981	49,857	44,541	52,738	60,620	58,702	56,518	45,126	36,814	36,438	42,198	**555,739**
28	Grease	2009	36,727	39,344	39,352	30,815	52,950	34,555	51,927	37,533	42,056	26,638	57,636	43,530	**493,063**
29	Grease	2010	26,649	25,952	30,785	44,653	46,533	45,140	51,305	73,256	40,996	29,972	52,718	43,707	**511,666**
30	Grease	2011	41,609	43,358	35,627	37,086	70,324	48,868	78,592	44,909	59,712	40,441	72,131	40,999	**613,656**
31	Grease	2012	48,411	43,470	44,353	70,470	48,067	91,678	59,659	72,496	36,410	45,412	66,100	38,742	**665,268**
32	Grease	2013	52,594	35,643	36,566	39,204	68,562	45,737	57,476	72,299	37,874	52,232	37,164	58,951	**594,302**
33	Grease	2014	39,018	33,639	46,309	41,087	56,006	64,487	53,386	59,675	60,621				**454,228**
34	Price Increase 2-01-2013														
35															
36													TOTAL FOR YEAR		**5,792,529**
37															
38													GRAND TOTAL		64,522,695