

APPENDICES

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APPENDIX A: RAW DATA RESULTS AND FIELD OBSERVATIONS

Table A1: August 3, 2006 Raw Data

SAMPLE DATE / CYCLE	PEAK HIGH TIDE TIME	Site	Enterococci col/100mL	Optical Brightener			Sample Collection Time	Time Past Peak High	Water Temp	Air Temp	Salinity (‰)	DO (ppm)
				Emission Filter		Sample Color						
				410-610 nm	436 nm							
8/3 am	8/3/06 6:13	GR1	<10	32.1	16.5	clear	8/3/06 11:48	5:35	22.5	24.0	27.0	10.5
8/3 am	8/3/06 6:13	GR1 - dup	-	33.5	16.6	clear	8/3/06 11:48	5:35	22.5	24.0	27.0	10.5
8/3 am	8/3/06 6:13	GR2	<10	3.6	0.9	clear	8/3/06 11:25	5:12	18.8	24.0	31.0	10.2
8/3 am	8/3/06 6:13	GR3	<10	3.2	0.4	clear	8/3/06 11:07	4:54	19.2	24.0	31.0	10.0
8/3 am	8/3/06 6:13	GR4	<10	4		clear	8/3/06 10:47	4:34	16.9	23.0	32.0	10.6
8/3 am	8/3/06 6:13	GR5	<10	7.8	3.2	clear	8/3/06 10:21	4:08	16.9	23.0	31.0	9.9
8/3 am	8/3/06 6:13	SB1	<10	4.7	1.8	clear	8/3/06 8:47	2:34	17.7	25.0	28.8	7.5
8/3 am	8/3/06 6:13	SB2a	20	33.9	17.1	clear	8/3/06 9:50	3:37	22.7	26.0	26.3	5.8
8/3 am	8/3/06 6:13	SB2	<10	4.5	1.7	clear	8/3/06 8:12	1:59	17.7	26.0	27.4	7.6
8/3 am	8/3/06 6:13	SB3	30	71.2	36.2	clear	8/3/06 9:30	3:17	25.4	26.0	23.1	4.2
8/3 am	8/3/06 6:13	SB4	31	69.4	35.1	clear	8/3/06 11:45	5:32	27.8	29.0	18.4	6.6
8/3 am	8/3/06 6:13	SB5	31	110.2	51.7	light brown	8/3/06 11:25	5:12	27.2	29.0	2.7	6.8
8/3 am	8/3/06 6:13	SB6	355	81.1	39	light brown	8/3/06 9:45	3:32	21.0	26.5	1.0	5.8
8/3 am	8/3/06 6:13	CG1	10	36.6	18.9	clear	8/3/06 11:20	5:07	24.0	25.0	26.0	-
8/3 am	8/3/06 6:13	GRC1	183	116.2	59.3	light brown	8/3/06 10:50	4:37	22.7	28.0	17.8	3.6
8/3 am	8/3/06 6:13	BR1a	<10	18.1	7.8	clear	8/3/06 10:11	3:58	20.0	25.0	31.0	-
8/3 am	8/3/06 6:13	BR1	<10	15.5	7.2	clear	8/3/06 10:04	3:51	20.0	25.0	30.0	-
8/3 am	8/3/06 6:13	BR1b	10	17.1	8.7	clear	8/3/06 9:51	3:38	25.0	30.0	30.0	-
8/3 am	8/3/06 6:13	BR1c	41	52.1	26.2	clear	8/3/06 8:50	2:37	22.0	23.0	25.0	-
8/3 am	8/3/06 6:13	BR1d	-	-	-	-	8/3/06 9:35	3:22	-	-	-	-
8/3 am	8/3/06 6:13	BR1e	521	133.8	65.2	brown	8/3/06 10:45	4:32	21.0	25.0	0.0	-
8/3 am	8/3/06 6:13	BR2a	52	31.1	16	clear	8/3/06 8:34	2:21	21.5	23.0	13.0	-
8/3 am	8/3/06 6:13	BR3	110	115.2	51.5	brown	8/3/06 11:00	4:47	25.0	25.0	0.0	-
8/3 am	8/3/06 6:13	BR4	259	80.6	37.2	light brown	8/3/06 9:58	3:45	21.5	24.0	0.0	6.4
8/3 am	8/3/06 6:13	TB1a	10	24.1	12	clear	8/3/06 9:18	3:05	21.0	23.0	29.0	-
8/3 am	8/3/06 6:13	TB1	10	143.5	65.6	light brown	8/3/06 11:12	4:59	27	25.0	10.0	-
8/3 am	8/3/06 6:13	BP1	98	60.9	30.8	clear	8/3/06 9:27	3:14				
8/3 am	8/3/06 6:13	BP2	146	138.3	66.4	brown	8/3/06 9:35	3:22				
8/3 am	8/3/06 6:13	BP3	74	123.7	60.8	light brown	8/3/06 9:50	3:37				
8/3 am	8/3/06 6:13	LR1	<10	20.9	10.9	clear	8/3/06 10:21	4:08	-	-	35.0	-
8/3 am	8/3/06 6:13	LR1a	10	9.6	5.2	clear	8/3/06 10:21	4:08	25.2	-	26.5	-
8/3 am	8/3/06 6:13	LR1a-a	31	23.4	11.3	clear	8/3/06 10:33	4:20	25.2	-	26.8	-
8/3 am	8/3/06 6:13	LR1b	111	48.4	24.8	clear	8/3/06 10:45	4:32	23.7	-	23.7	-
8/3 am	8/3/06 6:13	LR1c	10	57	28.9	clear	8/3/06 8:40	2:27	21.9	-	21.1	-
8/3 am	8/3/06 6:13	LR1c-dup		54.9	27.3	clear	8/3/06 8:40	2:27	-	-	21.0	-
8/3 am	8/3/06 6:13	LR2	86	113.8	54.8	light brown	8/3/06 10:12	3:59	22.3	-	22.6	-
8/3 am	8/3/06 6:13	LR2a	63	81.8	41.4	light brown	8/3/06 11:03	4:50	19.8	-	22.2	-
8/3 am	8/3/06 6:13	LR2b	331	109.5	52.7	brown	8/3/06 10:05	3:52	19.4	-	20.1	-
8/3 am	8/3/06 6:13	LR2c-a	63	94.1	46.1	light brown	8/3/06 11:13	5:00	20.1	-	18.0	-
8/3 am	8/3/06 6:13	LR3	121	109.5	51.1	brown	8/3/06 9:57	3:44	21.6	-	0.0	-
8/3 am	8/3/06 6:13	LR4	86	107.9	49.6	light brown	8/3/06 8:18	2:05	24.5	23.0	1.0	4.5
8/3 am	8/3/06 6:13	LR4b	85	124.6	56.2	brown	8/3/06 9:06	2:53	24.6	24.0	1.0	1.2
8/3 am	8/3/06 6:13	LR6	450	40.8	19.5	clear	8/3/06 8:32	2:19	20.1	24.0	1.0	7.9
8/3 am	8/3/06 6:13	LR7	527	43	22	clear	8/3/06 8:44	2:31	21.3	23.0	1.0	7.2
8/3 am	8/3/06 6:13	BB1	269	118.8	53.3	brown	8/3/06 9:29	3:16	22.6	27.0	0.0	1.1

Table A2: August 10, 2006 Raw Data

SAMPLE	PEAK HIGH	Site	Enterococci col/100mL	Optical Brightener			Sample Collection Time	Time Past Peak High	Air Temp	Water Temp	Salinity (‰)	DO (ppm)
				Emission Filter 410-610 nm	436 nm	Sample Color						
DATE / CYCLE	TIDE TIME											
8/10 pm	8/10/06 12:38	GR1	120	5.9	3.4	clear	8/10/06 14:16	1:38	26.5	17.5	34.0	10.7
8/10 pm	8/10/06 12:38	GR2	<10	3.7	2.6	clear	8/10/06 15:12	2:34	20.5	18.2	36.0	9.6
8/10 pm	8/10/06 12:38	GR3	<10	3.5	2.5	clear	8/10/06 14:58	2:20	21.5	18.5	35.0	10.7
8/10 pm	8/10/06 12:38	GR4	<10	3.8	2.9	clear	8/10/06 15:37	2:59	25.5	17.7	36.0	9.8
8/10 pm	8/10/06 12:38	GR5	<10	12.4	8.2	clear	8/10/06 16:32	3:54	27.5	27.2	20.1	8.6
8/10 pm	8/10/06 12:38	SB1	75	10.6	7.0	clear	8/10/06 15:53	3:15	26.5	20.1	27.2	8.5
8/10 pm	8/10/06 12:38	SB2a	41	9.2	6.5	clear	8/10/06 15:08	2:30	27.0	19.7	27.1	8.3
8/10 pm	8/10/06 12:38	SB2	98	8.4	5.6	clear	8/10/06 15:20	2:42	26.0	19.5	27.3	8.5
8/10 pm	8/10/06 12:38	SB2str	512	33.1	21.1	clear	8/10/06 15:28	2:50	27.0	24.3	26.8	7.2
8/10 pm	8/10/06 12:38	SB2mar	373	37.5	23.1	clear	8/10/06 15:30	2:52	28.0	24.5	26.8	7.1
8/10 pm	8/10/06 12:38	SBtrib1	-	-	-	-	-	-	-	-	-	-
8/10 pm	8/10/06 12:38	SB3	20	7.8	5.1	clear	8/10/06 14:00	1:22	24.5	18.6	27.2	
8/10 pm	8/10/06 12:38	SB3-dupe		7.3	5.5	clear	8/10/06 14:00	1:22	24.5	18.6	27.2	
8/10 pm	8/10/06 12:38	SB4	187	47.3	29.9	clear	8/10/06 17:10	4:32	27.5	23.6	19.1	6.7
8/10 pm	8/10/06 12:38	SB5	748	74.4	43.1	light brown	8/10/06 17:00	4:22	27.5	23.5	12.3	8.1
8/10 pm	8/10/06 12:38	SB6	94	48.9	31.1	clear	8/10/06 14:10	1:32	27.5	19.0	0.0	6.2
8/10 pm	8/10/06 12:38	CG1	31	20.4	13.6	clear	8/10/06 17:10	4:32	-	-	-	-
8/10 pm	8/10/06 12:38	GRC1	119	30.2	19	clear	8/10/06 14:35	1:57	29.0	21.0	26.2	
8/10 pm	8/10/06 12:38	BR1a	41	10.2	6.4	clear	8/10/06 16:05	3:27	29.5	19.3	29.2	8.8
8/10 pm	8/10/06 12:38	BR1a-dupe	41	10.9	6.9	clear	8/10/06 16:05	3:27	29.5	19.3	29.2	8.8
8/10 pm	8/10/06 12:38	BR1	41	10.6	6.8	clear	8/10/06 16:00	3:22	29.5	19.6	28.9	8.6
8/10 pm	8/10/06 12:38	BR1b	86	11.6	7.3	clear	8/10/06 15:47	3:09	29.5	19.6	28.9	8.6
8/10 pm	8/10/06 12:38	BR1c	175	32.1	20.2	light brown	8/10/06 15:00	2:22	32.0	22.0	27.5	7.4
8/10 pm	8/10/06 12:38	BR1d	-	-	-	-	8/10/06 15:32	2:54	-	-	-	-
8/10 pm	8/10/06 12:38	BR1e	-	-	-	-	8/10/06 13:55	1:17	-	-	-	-
8/10 pm	8/10/06 12:38	BR2a	10	24.4	15.4	light brown	8/10/06 14:55	2:17	33.0	18.6	28.9	8.6
8/10 pm	8/10/06 12:38	BR3	41	93.9	49.8	light brown	8/10/06 14:05	1:27	33.0	22.0	0.0	6.9
8/10 pm	8/10/06 12:38	BR3-dupe	10	94.3	50	light brown	8/10/06 14:05	1:27	33.0	22.0	0.0	6.9
8/10 pm	8/10/06 12:38	BR4	275	57.7	32.3	light brown	8/10/06 14:20	1:42	29.0	18.9	0.0	7.5
8/10 pm	8/10/06 12:38	TB1a	31	11.3	7	clear	8/10/06 15:12	2:34	30.0	19.4	29.2	8.5
8/10 pm	8/10/06 12:38	TB1	75	29.3	17.6	clear	8/10/06 14:25	1:47	33.0	21.6	27.4	7.6
8/10 pm	8/10/06 12:38	BP1	161	46.5	29.4	light brown	8/10/06 16:51	4:13	27.5	24.0	30.0	9.2
8/10 pm	8/10/06 12:38	BP1a	175	31.1	20.2	clear	8/10/06 15:31	2:53	22.0	34.0	-	-
8/10 pm	8/10/06 12:38	BP2	20	154.0	99.2	brown	8/10/06 16:56	4:18	30.0	22.6	4.0	7.2
8/10 pm	8/10/06 12:38	BP2-dupe	-	152.7	95.8	brown						
8/10 pm	8/10/06 12:38	BP3	31	82.1	45.3	light brown	8/11/06 17:07	4:29	27.5	22.5	3.0	6.5
8/10 pm	8/10/06 12:38	LR1	20	14.2	9.4	clear	8/10/06 16:23	3:45	23.5	21.2	35.0	9.4
8/10 pm	8/10/06 12:38	LR1a	63	10.8	7.6	clear	8/10/06 15:04	2:26	23.0	-	36.0	-
8/10 pm	8/10/06 12:38	LR1a-a	109	17.9	11	clear	8/10/06 15:01	2:23	23.0	-	36.0	-
8/10 pm	8/10/06 12:38	LR1b	10	7.7	6	clear	8/10/06 14:55	2:17	23.0	-	35.0	-
8/10 pm	8/10/06 12:38	LR1c	10	11.5	5.4	clear	8/10/06 14:49	2:11	24.0	-	36.0	-
8/10 pm	8/10/06 12:38	LR2	86	20.6	13.2	clear	8/10/06 14:25	1:47	31.0	21.6	35.0	1.6
8/10 pm	8/10/06 12:38	LR2a	31	11.2	6.8	clear	8/10/06 14:37	1:59	29.0	-	33.0	-
8/10 pm	8/10/06 12:38	LR2b	-	-	-	-	-	-	-	-	-	-
8/10 pm	8/10/06 12:38	LR2c	108	28.3	17.4	clear	8/10/06 14:05	1:27	30.5	21.8	34.0	1.3
8/10 pm	8/10/06 12:38	LR2c-a	-	-	-	-	-	-	-	-	-	-
8/10 pm	8/10/06 12:38	LR3	84	79.6	44.8	light brown	8/10/06 16:45	4:07	28.0	22.7	0.0	8.3
8/10 pm	8/10/06 12:38	LR4	85	78.7	43.5	light brown	8/10/06 15:02	2:24	30.0	23.8	0.0	10.8
8/10 pm	8/10/06 12:38	LR4b	30	162.1	95.2	brown	8/10/06 15:47	3:09	29.0	24.1	0.0	3.8
8/10 pm	8/10/06 12:38	LR4b-dupe	-	159	92.8	brown						
8/10 pm	8/10/06 12:38	LR4c	63	192.1	105.6	brown	8/10/06 15:56	3:18	29.0	23.5	0.0	7.0
8/10 pm	8/10/06 12:38	LR5	<10	78.5	43.7	brown	8/10/06 15:18	2:40	26.0	27.9	0.0	6.4
8/10 pm	8/10/06 12:38	LR6	31	25.9	16.4	clear	8/10/06 14:49	2:11	30.5	18.6	0.0	9.6
8/10 pm	8/10/06 12:38	LR7	145	19.6	13.3	clear	8/10/06 14:35	1:57	29.5	18.3	0.0	7.0
8/10 pm	8/10/06 12:38	BB1	5493	98.4	59.1	brown	-	-	30.5	20.6	0.0	8

Table A3: August 17, 2006 Raw Data

**weather sunny, light breeze, calm			Optical Brightener									
SAMPLE	PEAK HIGH	Site	Enterococci	Emission Filter		Sample Color	Sample	Time Past	Air	Water	Salinity	DO
DATE / CYCLE	TIDE TIME		col/100mL	410-610 nm	436 nm		Collection Time	Peak High	Temp	Temp	(‰)	(ppm)
8/17 am	8/17/06 6:38	GR1	<10	3.3	2.4	Clear	8/17/06 9:00	2:22	24.0	14.5	32.0	14.4
8/17 am	8/17/06 6:38	GR2	<10	2.3	1.0	Clear	8/17/06 9:30	2:52	25.0	16.9	35.0	13.0
8/17 am	8/17/06 6:38	GR3	<10	3.0	1.4	Clear	8/17/06 9:45	3:07	26.0	16.7	35.0	13.5
8/17 am	8/17/06 6:38	GR4	<10	3.1	1.7	Clear	8/17/06 10:15	3:37	26.0	16.9	34.0	13.6
8/17 am	8/17/06 6:38	GR4-dupe	<10									
8/17 am	8/17/06 6:38	GR5-dupe	<10	9.3	4.8	Clear	8/17/06 8:05	1:27	29.0	17.8	29.5	7.5
8/17 am	8/17/06 6:38	GR5	<10	8.3	4.9	Clear	8/17/06 8:05	1:27	29.0	17.8	29.5	7.5
8/17 am	8/17/06 6:38	SB1	<10	14.7	9.0	Clear	8/17/06 10:05	3:27	28.0	18.6	27.3	7.3
8/17 am	8/17/06 6:38	SB1	<10				8/17/06 10:05	3:27	28.0	18.6	27.3	7.3
8/17 am	8/17/06 6:38	SB2a	<10	23.3	13.1	Clear	8/17/06 9:20	2:42	25.5	18.0	27.0	6.4
8/17 am	8/17/06 6:38	SB2	<10	14.2	8.6	Clear	8/17/06 9:28	2:50	29.0	17.6	27.4	7.1
8/17 am	8/17/06 6:38	SB2str	20	30.4	17.1	Clear	8/17/06 9:32	2:54	26.0	20.7	27.4	5.5
8/17 am	8/17/06 6:38	SB2mar	63	44.0	23.6	Clear	8/17/06 9:40	3:02	26.5	20.8	-	1.1
8/17 am	8/17/06 6:38	SB3	41	55.0	31.9	Clear	8/17/06 8:25	1:47	25.0	19.7	25.2	4.5
8/17 am	8/17/06 6:38	SB4	52	56.9	30.9	Clear	8/17/06 8:25	1:47	24.0	19.3	25.2	4.2
8/17 am	8/17/06 6:38	SB4-dupe	20	55.1	31.7	Clear	8/17/06 8:25	1:47	24.0	19.3	25.2	4.2
8/17 am	8/17/06 6:38	SB5	63	81	49	Light Brown	8/17/06 8:15	1:37	23.0	20.2	10.0	4.3
8/17 am	8/17/06 6:38	SB5-dupe	31									
8/17 am	8/17/06 6:38	SB6	145	53.9	30	Light Brown	8/17/06 8:05	1:27	22.0	16.8	0.0	5.3
8/17 am	8/17/06 6:38	CG1	<10	6.7	4.2	Clear	8/17/06 8:00	1:22	21.5	16.7	27.9	7.1
8/17 am	8/17/06 6:38	GRC1	131	94.8	59	it-Light Brown/C	8/17/06 9:00	2:22	25.0	20.4	22.7	2.1
8/17 am	8/17/06 6:38	BR1a	<10	18.7	10.2	Clear	8/17/06 10:25	3:47	27.0	18.3	27.5	7.3
8/17 am	8/18/06 6:38	BR1a-dupe	31									
8/17 am	8/17/06 6:38	BR1	<10	16.8	8.4	Clear	8/17/06 10:20	3:42	28.0	18.2	27.5	7.3
8/17 am	8/17/06 6:38	BR1b	<10	14.8	7.5	Clear	8/17/06 8:57	2:19	25.0	16.9	29.3	7.3
8/17 am	8/17/06 6:38	BR1c	-	-	-	-	-	-	-	-	-	-
8/17 am	8/17/06 6:38	BR1d	-	-	-	-	-	-	-	-	-	-
8/17 am	8/17/06 6:38	BR1e	-	-	-	-	-	-	-	-	-	-
8/17 am	8/17/06 6:38	BR2a	10	28.5	16.3	Clear	8/17/06 8:21	1:43	22.0	18.1	28.7	5.8
8/17 am	8/17/06 6:38	BR2a-dupe	10									
8/17 am	8/17/06 6:38	BR3	110	95.6	53.4	Light Brown	8/17/06 8:04	1:26	19.0	19.0	0.0	6.2
8/17 am	8/17/06 6:38	BR4	128	56.5	29.3	Light Brown	8/17/06 8:11	1:33	22.5	17.1	0.0	6.4
8/17 am	8/17/06 6:38	TB1a	10	24.7	13.5	Clear	8/17/06 10:45	4:07	29.0	18.2	28.9	6.0
8/17 am	8/17/06 6:38	TB1	<10	60.5	13.5	Clear	8/17/06 8:41	2:03	22.0	19.3	26.2	4.6
8/17 am	8/17/06 6:38	BP1	10	39.8	20.8	Light Brown	8/17/06 10:45	4:07	31.0	20.8	29.0	9.4
8/17 am	8/17/06 6:38	BP1a		53.9	29.1	Clear	8/17/06 10:34	3:56	-	21.3	-	7.3
8/17 am	8/17/06 6:38	BP2	441	65.5	42.5	Light Brown	8/17/06 8:20	1:42	23.0	18.7	5.0	9.5
8/17 am	8/17/06 6:38	BP-outlet	10	24.8	13.7	Clear	-	-	-	19.1	-	7.0
8/17 am	8/17/06 6:38	BP-outlet dupe	10									
8/17 am	8/17/06 6:38	BP3	<10	57	34	Light Brown	8/17/06 8:45	2:07	24.0	14.9	0.0	4.0
8/17 am	8/17/06 6:38	LR1	<10	12.8	7.2	Clear	-	-	-	17.5	36.0	7.3
8/17 am	8/17/06 6:38	LR1a	10	36.2	19.9	Clear	8/17/06 9:28	2:50	-	18.9	35.0	7.3
8/17 am	8/17/06 6:38	LR1b	<10	13.5	7	Clear	8/17/06 9:14	2:36	-	17.1	36.0	6.6
8/17 am	8/17/06 6:38	LR1c		8.6	4.9	Clear	8/17/06 9:06	2:28	-	16.9	37.0	6.6
8/17 am	8/17/06 6:38	LR2		-	-	-	8/17/06 10:54	4:16	-	21.9	-	6.1
8/17 am	8/17/06 6:38	LR2a		27	15.2	Clear	8/17/06 8:45	2:07	-	18.1	34.0	5.4
8/17 am	8/17/06 6:38	LR2-pool	<10	32	16.4	Clear	-	-	-	-	35.0	-
8/17 am	8/17/06 6:38	LR2-pool dupe	10				8/17/06 10:58	4:20	-	22.9	-	5.1
8/17 am	8/17/06 6:38	LR-trib	51	56.5	32.9	Light Brown	8/17/06 8:25	1:47	-	18.6	-	4.3
8/17 am	8/17/06 6:38	LR-pipe	<10	9.5	5.1	Clear	8/17/06 9:47	3:09	-	-	-	-
8/17 am	8/17/06 6:38	LR2b	388	14.3	5.8	Brown	8/17/06 10:12	3:34	30.00	17.90	6	6.25
8/17 am	8/17/06 6:38	LR2c	<10	56.8	32.9	Light Brown	-	-	-	-	24	-
8/17 am	8/17/06 6:38	LR3	20	71.3	41.7	Light Brown	8/17/06 8:31	1:53	22.0	18.9	0	7.5
8/17 am	8/17/06 6:38	LR4	74	74.1	42.7	Light Brown/Clear	8/17/06 8:42	2:04	22.0	18.5	0	6.3
8/17 am	8/17/06 6:38	LR4b	10	106.2	61.7	Brown	8/17/06 9:42	3:04	33.0	18.8	0	0.7
8/17 am	8/17/06 6:38	LR4c	<10	158.4	90.7	Brown	8/17/06 9:48	3:10	34.0	18.6	0	4.8
8/17 am	8/17/06 6:38	LR5	10	87.2	50.7	Light Brown	8/17/06 9:20	2:42	24.0	22.6	0	4.0
8/17 am	8/17/06 6:38	LR6	298	34.4	17.9	Clear	8/17/06 8:54	2:16	22.5	16.7	0	7.9
8/17 am	8/17/06 6:38	LR7	119	11.5	7.2	Light Brown	8/17/06 9:04	2:26	21.0	16.5	0	3.6
8/17 am	8/17/06 6:38	BB1	20	104.8	62	Brown						
8/17 am	8/17/06 6:38	BB1-dupe	20				8/17/06 9:55	3:17	31.5	16.7	0	3.3

Table A4: August 20, 2006 Raw Data

**Rain event				Optical Brightener								
SAMPLE	PEAK HIGH	Site	Enterococci	Emission Filter			Sample	Time Past	Air	Water	Salinity	DO
DATE / CYCLE	TIDE TIME		col/100mL	410-610 nm	436 nm	Sample Color	Collection Time	Peak High	Temp	Temp	(‰)	(ppm)
8/20 pm	8/20/06 10:42	GR1	132	9.1	4.2	Clear	8/20/06 12:30	1:48	-	16.0	32.0	-
8/20 pm	8/20/06 10:42	GR1	31	16.6	8.2	Clear	8/20/06 13:35	2:53	-	17.0	30.0	-
8/20 pm	8/20/06 10:42	GR2	10	4.8	2.2	Clear	8/20/06 12:40	1:58	-	14.0	34.0	-
8/20 pm	8/20/06 10:42	GR2	10	4.6	2.6	Clear	8/20/06 13:45	3:03	-	14.5	34.0	-
8/20 pm	8/20/06 10:42	GR3	<10	3.2	2.7	Clear	8/20/06 12:50	2:08	-	14.0	34.0	-
8/20 pm	8/20/06 10:42	GR3	<10	4.7	2.5	Clear	8/20/06 13:55	3:13	-	14.5	34.0	-
8/20 pm	8/20/06 10:42	GR4	<10	5.0	3.1	Clear	8/20/06 13:00	2:18	-	15.5	34.0	-
8/20 pm	8/20/06 10:42	GR4	<10	4.9	3.5	Clear	8/20/06 14:10	3:28	-	14.5	34.0	-
8/20 pm	8/20/06 10:42	GR5	<10	9.7	4.9	Clear	8/20/06 13:15	2:33	-	14.5	32.0	-
8/20 pm	8/20/06 10:42	GR5	52	28.7	12.6	Clear	8/20/06 14:20	3:38	-	15.5	32	-
8/20 pm	8/20/06 10:42	SB2	86	28.9	13.4	Lt-Lt Brown	8/20/06 13:05	2:23	-	17.4	27.0	6.3
8/20 pm	8/20/06 10:42	SB2	122	50.5	22.2	Lt Brown	8/20/06 14:25	3:43	-	18.5	25.3	5.5
8/20 pm	8/20/06 10:42	SB2str	173	64.5	29.2	Lt Brown	8/20/06 13:10	2:28	-	19.6	18.2	2.6
8/20 pm	8/20/06 10:42	SB2str	355	72.6	32.2	Lt Brown	8/20/06 14:30	3:48	-	19.7	21.2	2.3
8/20 pm	8/20/06 10:42	SB2mar	148	54.3	24.5	Lt Brown	8/20/06 13:15	2:33	-	20.5	28.6	1.0
8/20 pm	8/20/06 10:42	SB2mar	120	52.4	24.1	Lt Brown	8/20/06 14:35	3:53	-	20.6	27.8	1.2
8/20 pm	8/20/06 10:42	SB3	86	76.1	37.1	Lt Brown	8/20/06 12:50	2:08	-	19.9	19.7	4.1
8/20 pm	8/20/06 10:42	SB3	161	94.3	45.2	Lt Brown	8/20/06 14:05	3:23	-	20.0	23.3	3.8
8/20 pm	8/20/06 10:42	SB4	1187	76.7	35.0	Lt Brown	8/20/06 12:40	1:58	-	19.5	19.7	4.1
8/20 pm	8/20/06 10:42	SB4	457	-	-	-	8/20/06 13:55	3:13	-	19.6	11.8	4.3
8/20 pm	8/20/06 10:42	SB5	1333	101.5	46.0	Lt Brown	8/20/06 13:35	2:53	-	20.6	1.9	7.2
8/20 pm	8/20/06 10:42	SB5	1210	96.9	42.2	Lt Brown	8/20/06 12:25	1:43	-	20.7	2.5	6.8
8/20 pm	8/20/06 10:42	BR1b	120	32.9	14.3	Clear	8/20/06 13:45	3:03	19.00	17.30	27.00	8.50
8/20 pm	8/20/06 10:42	BR1b	233	45.5	19.2	Lt Brown	8/20/06 15:05	4:23	17.00	17.60	27.00	8.50
8/20 pm	8/20/06 10:42	BR1c	3130	77.9	36.1	Lt Brown	8/20/06 13:00	2:18	19.00	18.70	11.00	6.20
8/20 pm	8/20/06 10:42	BR1c	6015	99.3	46.8	Lt Brown	8/20/06 14:40	3:58	17.00	18.80	11.00	7.80
8/20 pm	8/20/06 10:42	BR1e	780	85.4	39.8	Lt Brown/Brown	8/20/06 12:27	1:45	19.00	18.40	0.00	6.80
8/20 pm	8/21/06 10:42	BR1e	1723	98.6	48.3	Lt Brown	8/21/06 14:45	4:03	-	-	-	-
8/20 pm	8/20/06 10:42	BR3	504	96.8	42.1	Lt Brown/Brown	8/20/06 12:45	2:03	19.00	19.20	0.00	8.20
8/20 pm	8/20/06 10:42	BR3	909	99.4	42.2	Lt Brown/Brown	8/20/06 14:25	3:43	18.00	19.10	0.00	8.10
8/20 pm	8/20/06 10:42	TB1a	216	61	27.7	Lt Brown	8/20/06 14:00	3:18	19.0	18.9	25.0	6.8
8/20 pm	8/20/06 10:42	TB1a	295	75.4	34.3	Lt Brown	8/20/06 15:15	4:33	17.0	17.2	23.0	6.7
8/20 pm	8/20/06 10:42	TB1	259	88.9	40.8	Lt Brown	8/20/06 13:30	2:48	19.0	20.4	20.0	5.8
8/20 pm	8/20/06 10:42	TB1	327	96.4	44.8	Lt Brown	8/20/06 14:45	4:03	-	20	-	3
8/20 pm	8/20/06 10:42	LR1	455	27.3	11.8	Lt-Lt Brown	8/20/06 12:35	1:53	-	-	34.0	-
8/20 pm	8/20/06 10:42	LR1	464	45.7	20.1	Lt-Lt Brown	8/20/06 14:15	3:33	-	-	31.0	-
8/20 pm	8/20/06 10:42	LR1b	110	33.9	16	Clear	8/20/06 13:10	2:28	-	-	32.0	-
8/20 pm	8/20/06 10:42	LR1b	3130	49.5	22.4	Lt-Lt Brown	8/20/06 14:40	3:58	-	-	30.0	-
8/20 pm	8/20/06 10:42	LR1c	86	23.6	10.4	Lt-Lt Brown	8/20/06 12:45	2:03	-	-	33.0	-
8/20 pm	8/20/06 10:42	LR1c	145	61.4	27.6	Lt Brown	8/20/06 14:30	3:48	-	-	27.0	-
8/20 pm	8/20/06 10:42	LR1c-PAN	-	71.5	33.5	Lt Brown	-	-	-	-	-	-
8/20 pm	8/20/06 10:42	LR2	355	107.9	51.7	Lt Brown	8/20/06 13:15	2:33	-	-	22.0	-
8/20 pm	8/20/06 10:42	LR2	1145	111.3	54.7	Lt Brown	8/20/06 14:40	3:58	-	-	21.0	-
8/20 pm	8/20/06 10:42	LR2a	341	66.6	30.6	Lt Brown	8/20/06 13:30	2:48	-	-	26.0	-
8/20 pm	8/20/06 10:42	LR2a	259	60.4	27.8	Lt Brown	8/20/06 14:50	4:08	-	-	26.0	-
8/20 pm	8/20/06 10:42	LR2c	717	66.2	30.6	Lt Brown	8/20/06 13:45	3:03	-	-	23	-
8/20 pm	8/20/06 10:42	LR2c	767	67.8	31.4	Lt Brown	8/20/06 15:00	4:18	-	-	23	-
8/20 pm	8/20/06 10:42	LR3	473	82.2	37.2	Lt Brown	8/20/06 12:28	1:46	-	19.7	-	-
8/20 pm	8/20/06 10:42	LR3	581	83.1	37.6	Lt Brown	8/20/06 13:30	2:48	-	19.8	-	9.8
8/20 pm	8/20/06 10:42	LR4b	3441	109.7	53.6	Lt Brown	8/20/06 12:50	2:08	-	18.7	-	7.0
8/20 pm	8/20/06 10:42	LR4b	1054	109.9	54.1	Lt Brown	8/20/06 13:53	3:11	-	18.9	-	7.0
8/20 pm	8/20/06 10:42	LR4c	3784	143.3	66.1	Lt Brown/Brown	8/20/06 12:52	2:10	-	18.7	-	7.5
8/20 pm	8/20/06 10:42	LR4c	2282	151.2	75.5	Lt Brown/Brown	8/20/06 13:59	3:17	-	18.7	-	7.5
8/20 pm	8/20/06 10:42	LR6	2489	88.2	38.8	Lt Brown	8/20/06 13:17	2:35	-	16.9	-	10.0
8/20 pm	8/20/06 10:42	LR6	836	88.9	38.7	Lt Brown	8/20/06 14:27	3:45	-	17.0	-	10.0
8/20 pm	8/20/06 10:42	LR7	1722	50.6	23.2	Lt-Lt Brown	8/20/06 13:07	2:25	-	17.7	-	10.1
8/20 pm	8/20/06 10:42	LR7	1565	53.8	24.8	Lt-Lt Brown	8/20/06 14:12	3:30	-	17.5	-	10.7
8/20 pm	8/20/06 10:42	BB1	221	116.8	60.7	Lt Brown	8/20/06 12:40	1:58	-	19.7	-	9.8
8/20 pm	8/20/06 10:42	BB1	41	125.6	66.4	Lt Brown	8/20/06 13:45	3:03	-	19.0	-	5.9

Table A5: July 26 and August 24, 2006 Raw Data

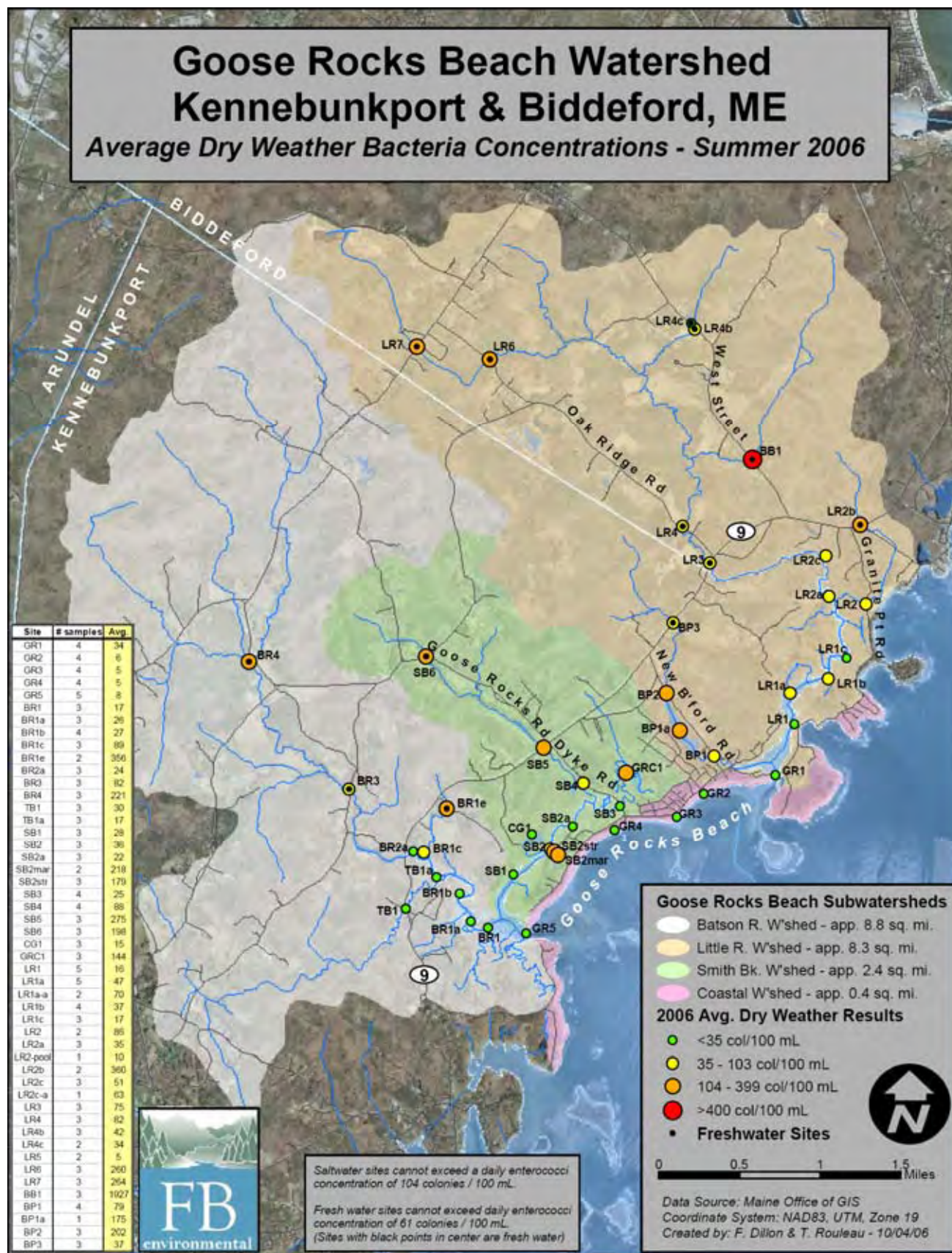
**weather sunny, Lt breeze, calm				Optical Brightener								
SAMPLE	PEAK HIGH	Site	Enterococci	Emission Filter			Sample	Time Past	Air	Water	Salinity	DO
DATE / CYCLE	TIDE TIME		col/100mL	410-610 nm	436 nm	Sample Color	Collection Time	Peak High	Temp	Temp	(‰)	(ppm)
8/24 pm	8/24/06 12:41	GR2	10	-	-	-	8/24/06 18:10	5:29	-	17.0	32.0	-
8/24 pm	8/24/06 12:41	GR3	<10	-	-	-	8/24/06 18:00	5:19	-	17.0	32.0	-
8/24 pm	8/24/06 12:41	GR4	<10	-	-	-	8/24/06 17:40	4:59	-	17.0	32.0	-
8/24 pm	8/24/06 12:41	GR5	20	-	-	-	8/24/06 17:25	4:44	-	17.6	29.2	6.8
8/24 pm	8/24/06 12:41	LR1	41	9.3	6.8	Clear	8/24/06 16:35	3:54	-	17.8	29.0	8.7
8/24 pm	8/24/06 12:41	LR1a	31	12.5	7.6	Clear	8/24/06 18:10	5:29	-	18.0	28.4	8.5
8/24 pm	8/24/06 12:41	LR1b	20	13.6	9.2	Clear	8/24/06 18:11	5:30	-	18.0	28.1	8.5
	8/24/06 12:41	LR1c	30	13.5	9.1	Clear	8/24/06 16:01	3:20	-	18.3	27.4	8.3
8/24 pm	8/24/06 12:41	LR2a	10	31.6	19.8	Lt-Lt brown	8/24/06 15:45	3:04	-	18.9	23.3	8.0
8/24 pm	8/24/06 12:41	LR2c	41	43.4	27.6	Lt-Lt brown	8/24/06 15:32	2:51	-	19.8	17.8	8.0
8/24 pm	8/24/06 12:41	LR2c - spike downstream	73	36.8	23	Lt-Lt brown						
SAMPLE	PEAK HIGH	Site	Enterococci				Sample	Time Past	Water	Air	Salinity	DO
DATE / CYCLE	TIDE TIME		col/100mL				Collection Time	Peak High	Temp	Temp	(‰)	(ppm)
7/26 pm	7/26/06 13:09	GR1	<10				7/26/06 15:52	2:43	21.0	29.0	29.0	-
7/26 pm	7/26/06 13:09	GR5	<10				7/26/06 15:12	2:03	18.0	28.0	29.0	-
7/26 pm	7/26/06 13:09	SB2	<10				7/26/06 15:31	2:22	20.0	29.0	28.0	-
7/26 pm	7/26/06 13:09	SB2str	<10				7/26/06 15:31	2:22	26.5	29.0	30.0	-
7/26 pm	7/26/06 13:09	SB3	10				7/26/06 15:00	1:51	23.0	28.0	20.0	-
7/26 pm	7/26/06 13:09	SB4	97				7/26/06 14:53	1:44	27.0	28.0	6.0	-
7/26 pm	7/26/06 13:09	BR1b	<10				7/26/06 14:00	0:51	19.0	28.0	28.0	-
7/26 pm	7/26/06 13:09	BR1e	191				7/26/06 14:39	1:30	23.0	28.0	0.0	-
7/26 pm	7/26/06 13:09	BR1c	52				7/26/06 14:26	1:17	25.0	28.0	13.0	-
7/26 pm	7/26/06 13:09	TB1	109				7/26/06 13:33	0:24	25	27.5	11.0	-
7/26 pm	7/26/06 13:09	BP1	63				7/26/06 15:44	2:35	27.0	29.0	6.0	-
7/26 pm	7/26/06 13:09	BP1split	31				7/26/06 15:44	2:35	27.0	29.0	6.0	-
7/26 pm	7/26/06 13:09	LR1	10				7/26/06 16:10	3:01	26.0	28.5	29.0	-
7/26 pm	7/26/06 13:09	LR2	122				7/26/06 16:05	2:56	26.0	30.0	9.0	-

Table A6: Notable Comments

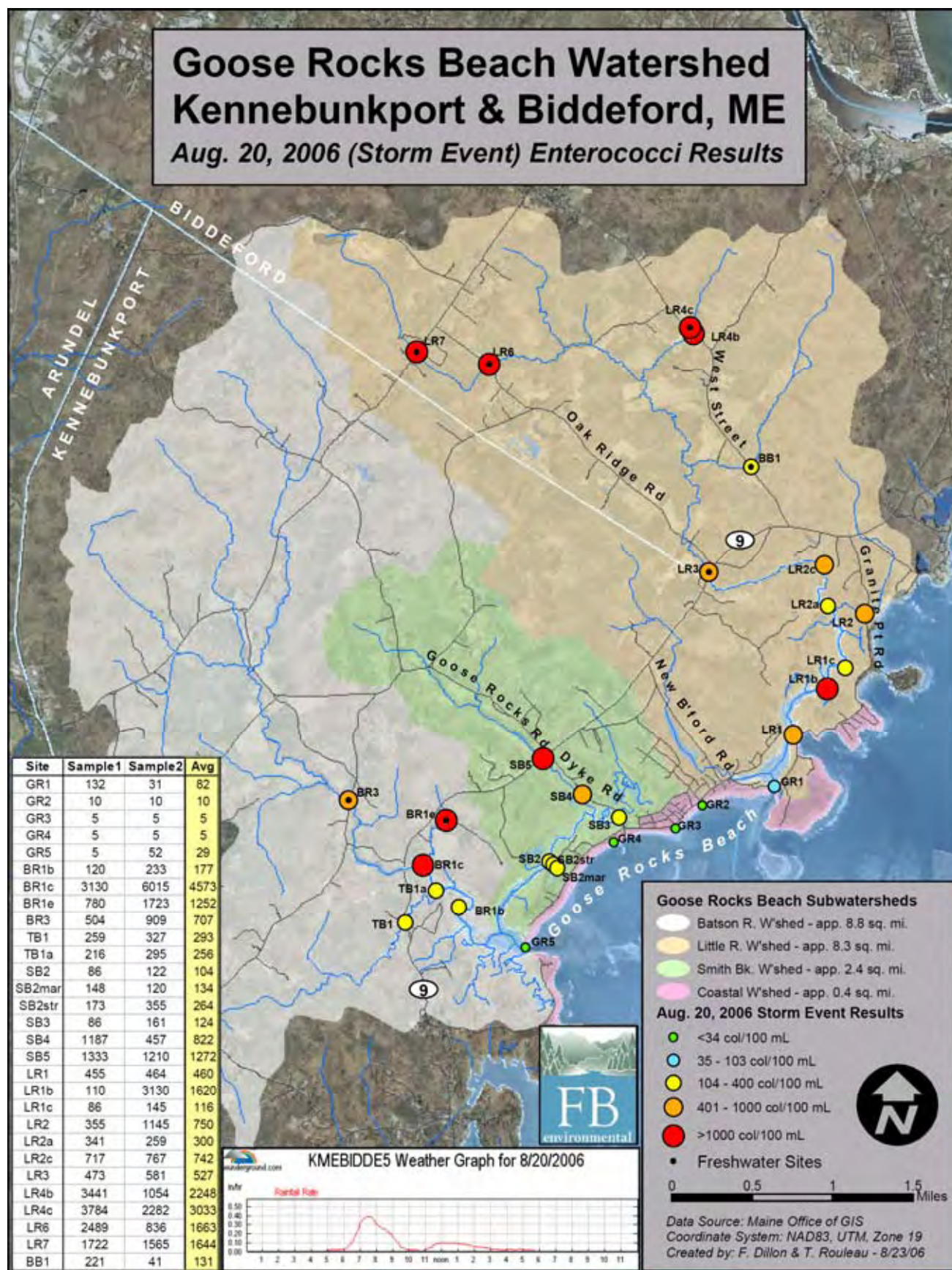
Site	Date	Comments
GR1	8/17/2006	some gulls, fly fishermen, strong current
GR5	08/03/06	birds
SB1	08/10/06	man kayaking with dog in channel - dog up on refuge.
SB2str	07/26/06	Very low flows
SB2str	08/10/06	Lots of snails!
SB2mar	08/17/06	small critter prints leading up to marsh. Small scat dropping (old) next to site.
SB5	08/17/06	Taken just below culvert. Human PCR split collected. Salinity fluctuates greatly due to freshwater input from culvert.
SB6	08/10/06	iron-colored, stagnant, small flow out of culvert
SB6	08/17/06	stagnant, light brown, light tea color
GRC1	08/03/06	Photos 23 & 24. Dead crab. Put in stake. Accessed by lan - lots of poison ivy. Access by boat next time!
GRC1	08/10/06	2 dead crabs. DO=87.9%. Foam. Photo taken.
BR1c	08/03/06	DO meter not working; geese in water
BR1c	08/20/06	sheep out on field
BR1d	08/03/06	Not sampled - could not locate site. Many deer tracks on marsh.
BR3	08/03/06	Rust-colored water. Sampled just above large culvert.
BR3	08/10/06	Slow moving/stagnant
BR3	08/17/06	stagnant, orange algae/slime, lots of vegetaion in water
BR3	08/20/06	lots of sediment coming in from side channel (photo)
BR4	08/10/06	iron-colored, stagnant, small flow out of culvert
TB1a	08/17/06	can see sheep across Batson River
LR1	08/10/06	pipe noted on opposite side of river (Kport side)
LR2b	08/17/06	stagnant, very shallow - 3" at deepest, sample brown in color - bottom sediment present in sample, channel approx. 1.5' wide
LR4	08/10/06	very stagnant, mucky, light brown color, sample taken very shallow
LR4b	08/03/06	algae/decomposition odor/ talked to Crepeau (406 West St)/ trench dug from campground/ leach field issues(Shamrick RV Park pond drains to stream)
LR4b	08/10/06	stagnant, iridescent film (not oil - looks natural) on top of water
LR4b	08/17/06	stagnant, yellow/brown color, film on water surface, sample area recently excavated, culvert coroded
LR4b	08/20/06	turbid- someone had altered stream to improve flow
LR4c	08/10/06	****New site: GPS coord: N43.44.264, W70.40.981; Sampled from man-made ditch coming from RV park pond. Stagnant, dark-colored water, algae, slimy, very shallow
LR5	08/10/06	dark-colored, stagnant, "sort of a pond", opening of the river?, mucky floor. Saw 4 deer, heron. ***Park - path straight ahead @ end of road. Collected sample on "pond" just to the right of the path. Access "pond" just left of tall tree. GP coord - N43.44.145, W70.42.205
LR5	08/17/06	beaver pond, light yellow in color, film on water surface, some algal growth on dam edge, minimal sususpended materials
LR6	08/10/06	Stagnant - mucky - debris on bottom of stream
LR7	08/03/06	iron bacteria blanketing bottom of stream/septic system nearby/ 18" of water
LR7	08/10/06	iron-orange bacteria/film - stagnant. Used to receive water from "man-made" pond on Proctor Rd. Spoke to man @ 361 Guinea Rd.
LR7	08/17/06	double culvert-one on right is dry, suspended soils present, soft sandy bottom, Fe bacteria on sand surface
LR7	08/20/06	iron bacteria - decent flow (photo)

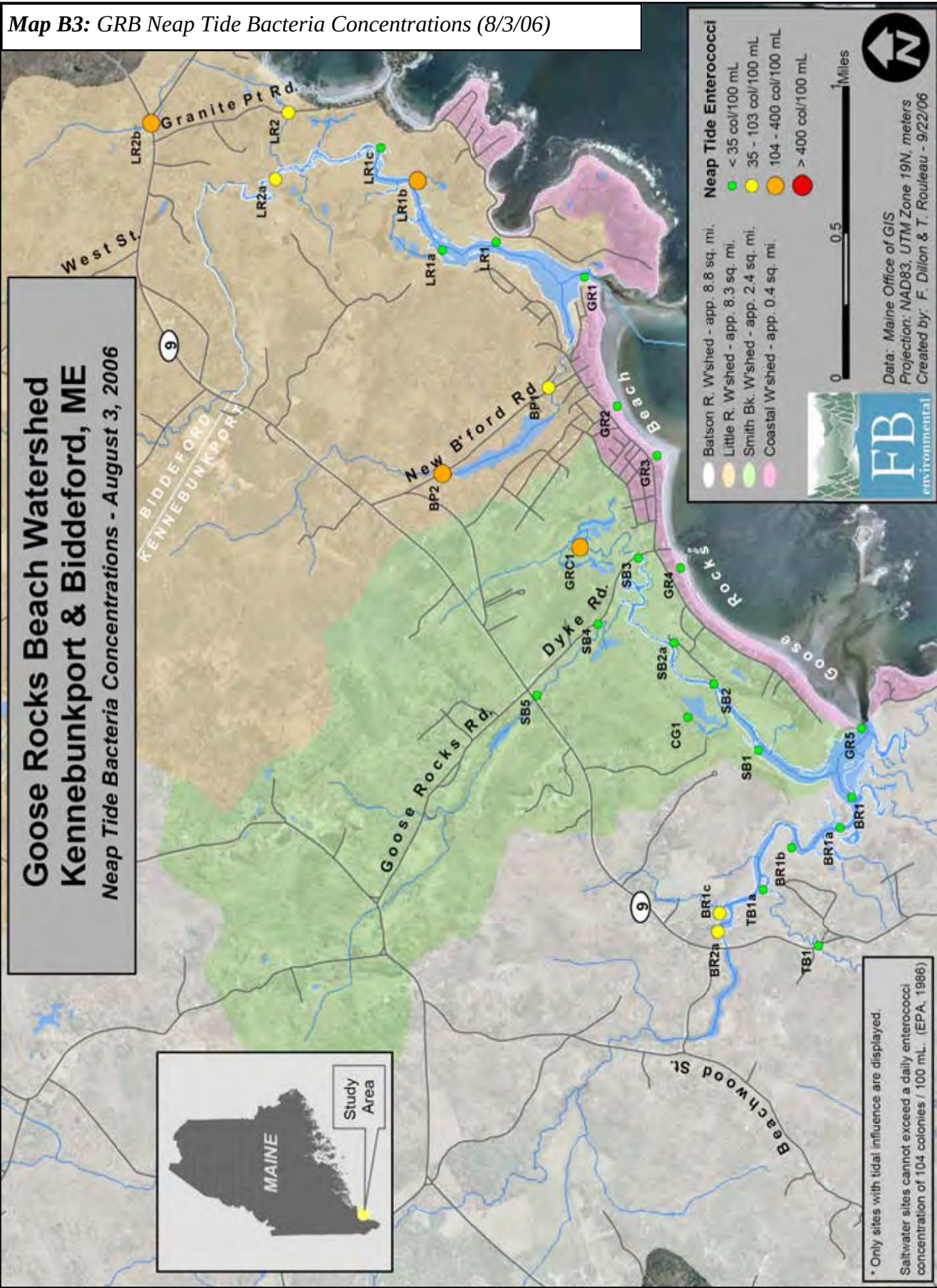
APPENDIX B: GOOSE ROCKS BEACH WATERSHED MAPS

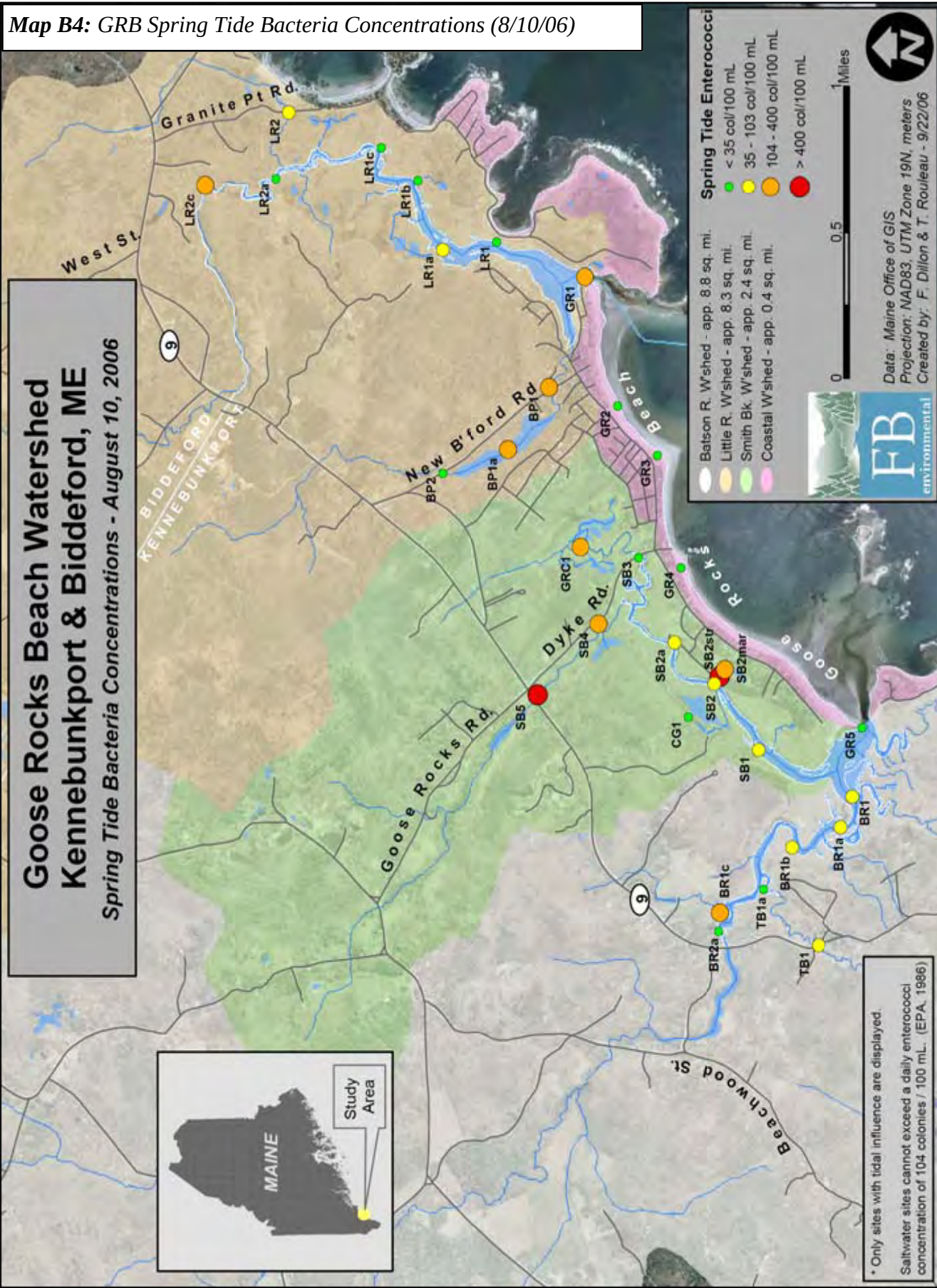
Map B1: GRB Average Dry Weather Bacteria Concentrations



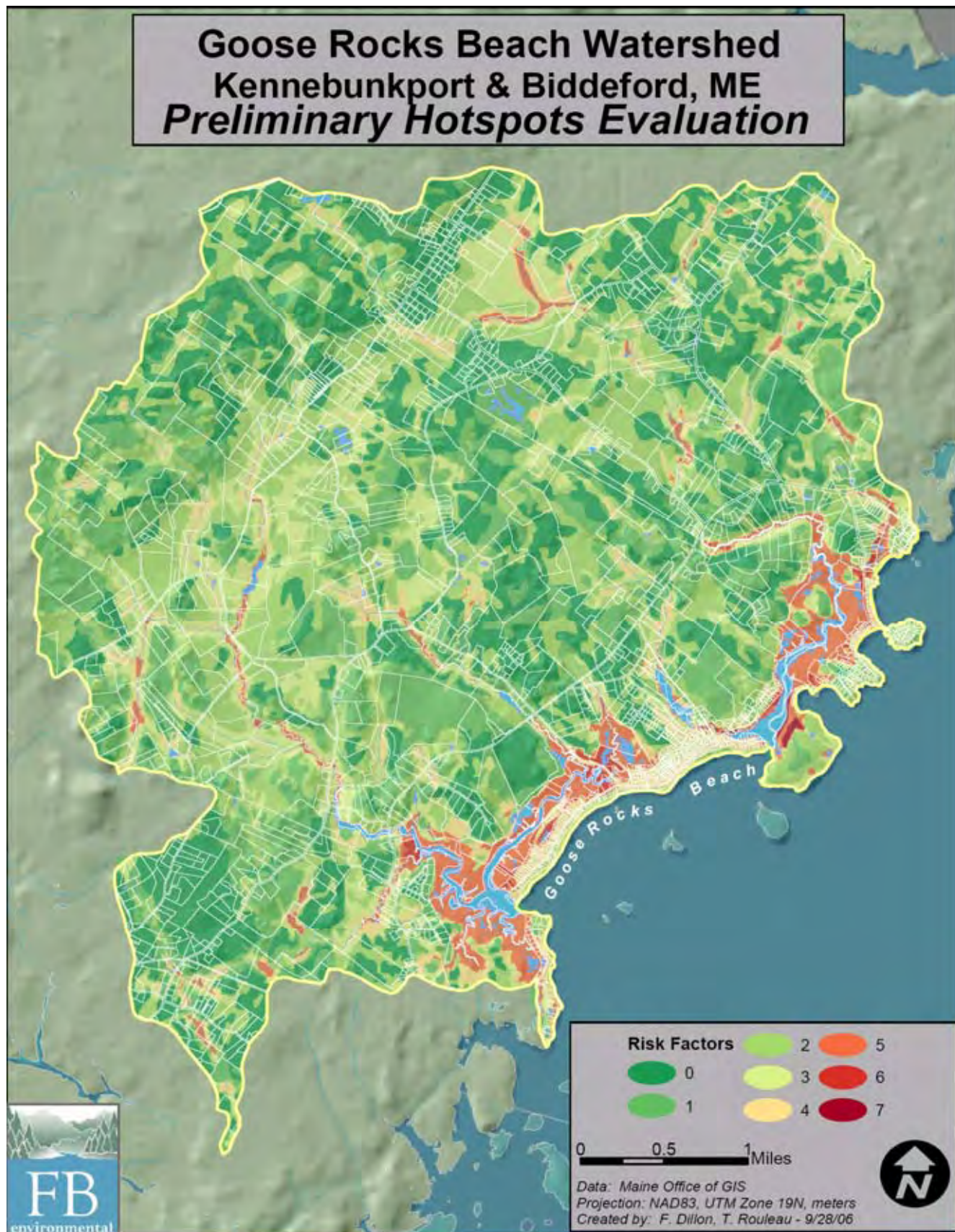
Map B2: GRB 2006 Wet Weather Enterococci Averages



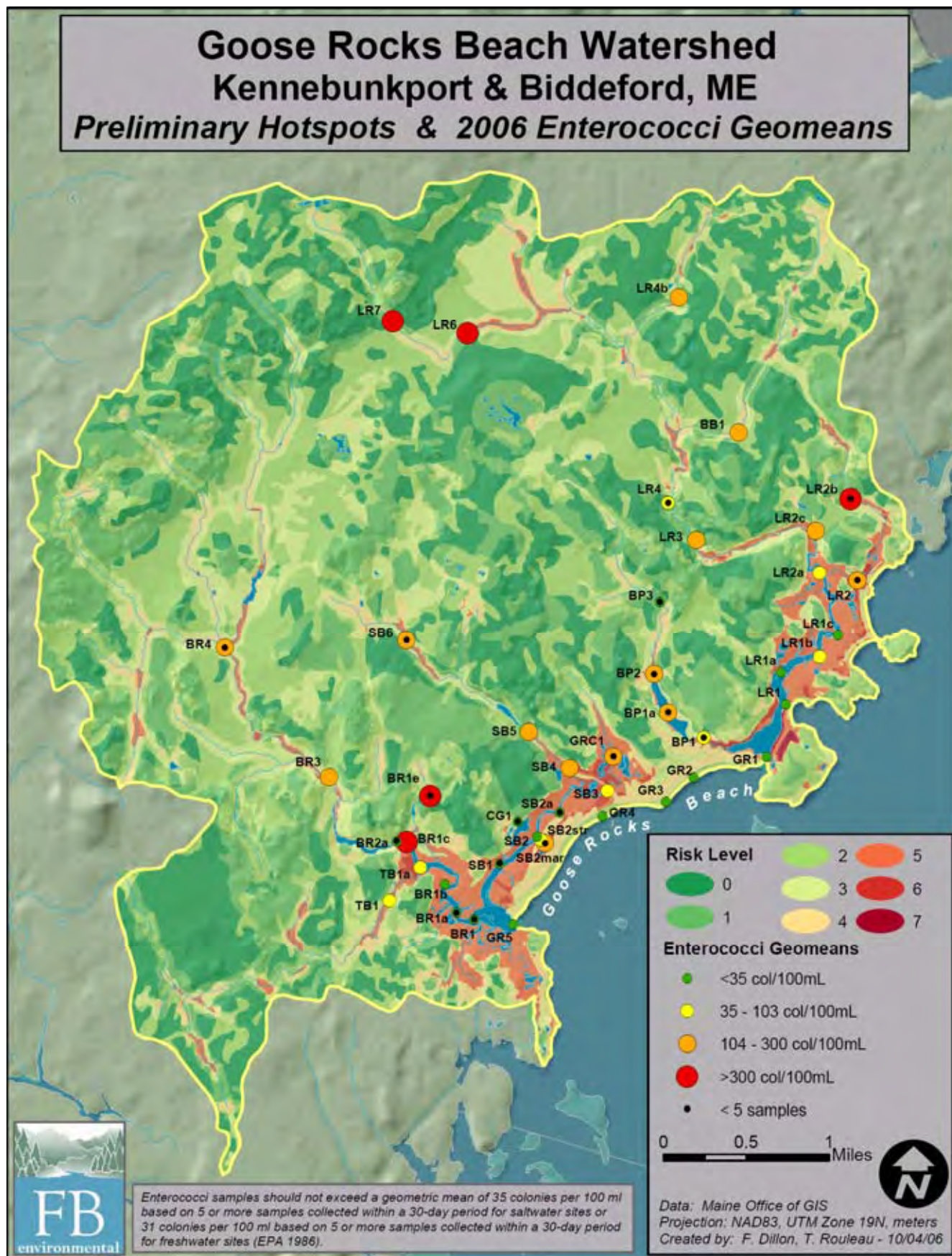




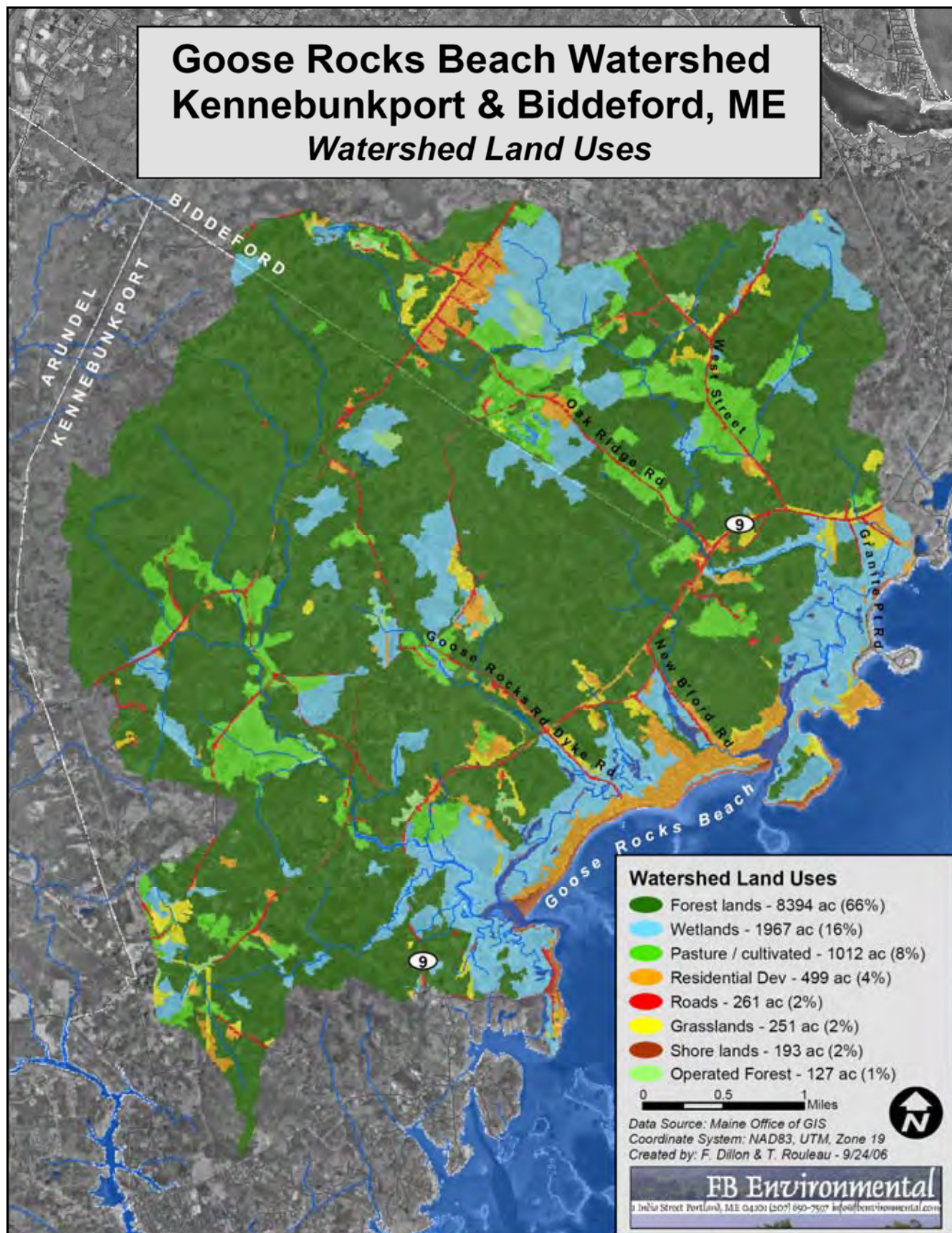
Map B5: GRB Preliminary Hotspots Map with Parcels



Map B6: GRB Watershed Preliminary Hotspots and Bacteria Geometric Means



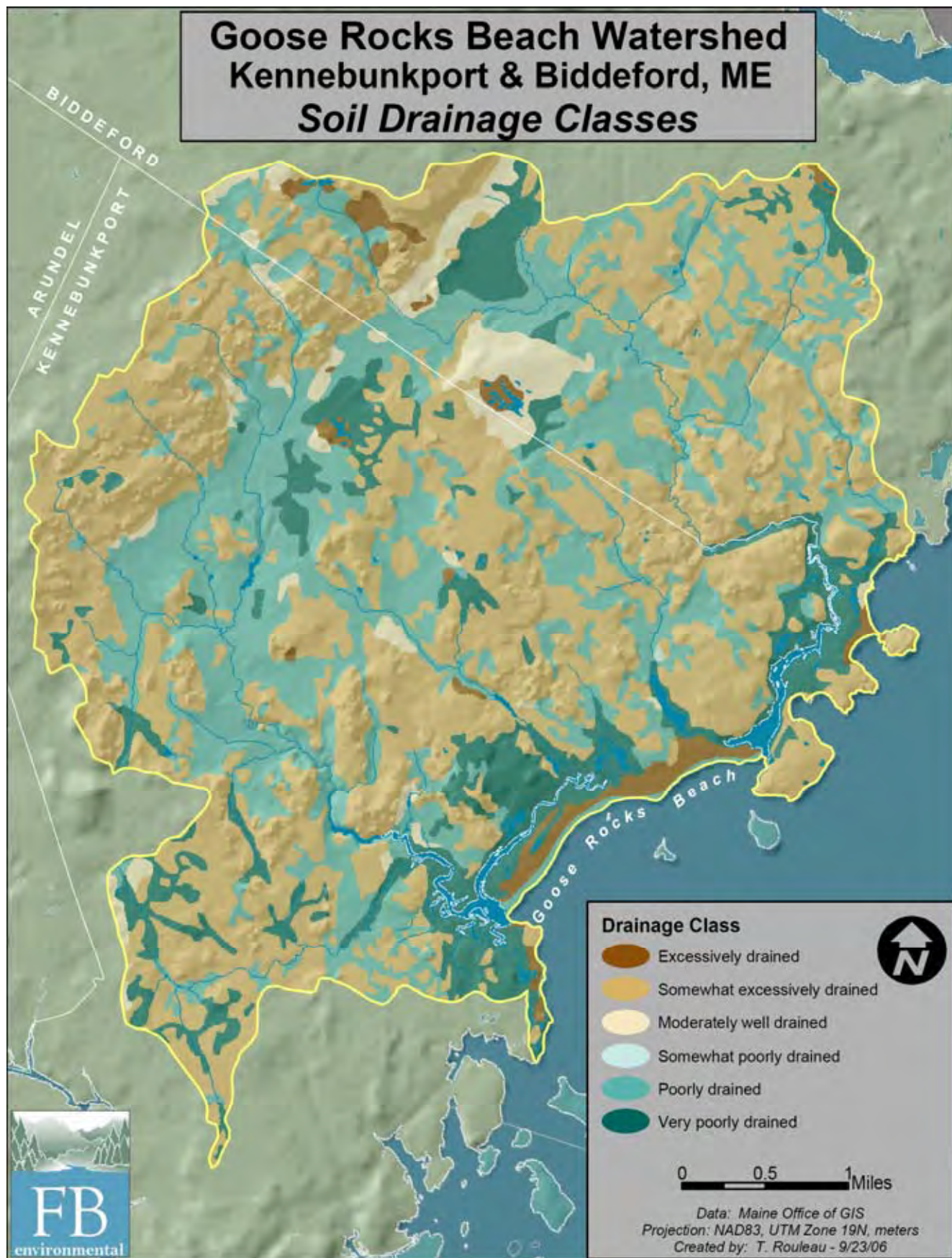
Map B7: GRB Watershed Land Use Map



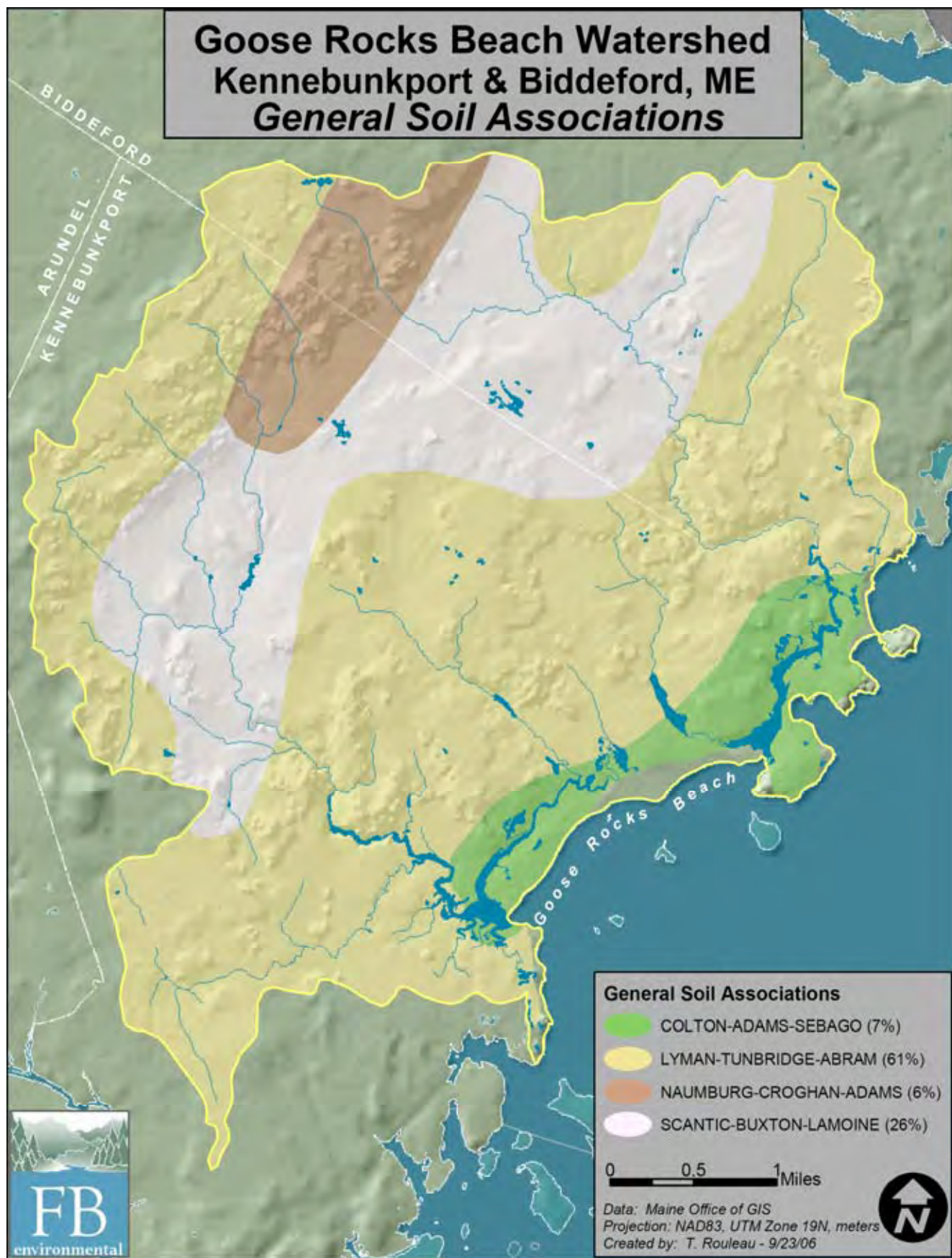
Map B8: GRB Watershed Development Suitability Map



Map B9: GRB Watershed Development Soil Drainage Class Map



Map B10: GRB Watershed Development General Soil Association Map



Map B11: GRB Watershed Elevation Map

