

## Supporting Information

for

**Changes in microbial community structure in the wake of Hurricanes Katrina and Rita**

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### Methods

**Pie Chart Comparisons.** We used the output from the RDP II classifier to construct pie charts of the resulting taxonomic breakdown of our bacterial sequences. We find this approach useful in making broad scale qualitative comparisons between clone libraries derived from different sites and different dates. The phylogenetic affinity of the potential pathogens or pathogen related sequences is derived from taxonomic information obtained from the RDP classifier using the default settings (see supplementary Figure S1). We only included taxonomic assignments with bootstrap confidence values greater than or equal to 75% for potential pathogens and 66% overall (Figure S2).

**Construction of Trees in ARB.** We imported all sequences into the ARB (*1*) program and aligned them using the fast aligner option in the Integrated Aligners menu and further adjusted the alignment manually. We then used the “quick add sequences to tree” feature, to add all the sequences to the reference tree found in the SSURef\_91\_SILVA\_18\_07\_07\_opt.arb version of the silva-arb database (*2*). This allowed us to more accurately assign domains to a given sequence. We recovered a total of 192 eukaryal and 437 archaeal clones out of the 32

libraries examined. Pruned trees generated using the quick add feature to tree in ARB showing the most closely related sequences in the SSURef\_91 reference tree to our eukaryal and archaeal environmental clones can be viewed in Figures S3 and S4. A copy of our ARB alignment including data from all three domains is available upon request to the corresponding author. These trees are for reference purposes only and should not be considered robust phylogenetic inferences.

**Non-Metric Multi-Dimensional Scaling.** We also explored our data using non-metric multidimensional scaling (NMDS) that scales samples based on similarities or dissimilarities between them. Thus the starting point for NMDS analysis is a sample similarity matrix as opposed to the OTU abundance  $X$  sample matrix used as the starting point in DCA. We carried out our NMDS analysis using the PRIMER v6 software (3). Because the total number of clones sequenced per library varied, we first standardized our samples by total and then further Log  $(X+1)$  transformed the data to compensate for the abundance of rare taxa in the datasets. We then calculated the sample similarity matrix using a Bray-Curtis similarity on the standardized and transformed data. We ran the NMDS analysis with 50 restarts, a Kruskal fit scheme of 1, and a minimum stress of 0.01 and plotted the resulting data as both 2-d and 3-d MDS plots.

Results from our NMDS analysis of the 28 samples are shown in Figure S6. We plotted our results as both 2-d and 3-d ordinations but included the 3-d plot in Figure S6 since it better represented our sample relationships as evidenced by a lower stress value (0.1) than the 2-d ordination (stress= 0.15). As with DCA, the NMDS plot also revealed distinct sediment and lake/Industrial Canal clusters with other samples falling in between. Since these two independent methods yielded comparable results, we feel that they are the best tools available at the present time to summarize our overall results.

**Literature Cited:**

- (1) Ludwig, W.; Strunk, O.; Westram, R.; Richter, L.; Meier, H.; Yadhukumar; Buchner, A.; Lai, T.; Steppi, S.; Jobb, G.; Forster, W.; Brettske, I.; Gerber, S.; Ginhart, A. W.; Gross, O.; Grumann, S.; Hermann, S.; Jost, R.; Konig, A.; Liss, T.; Lussmann, R.; May, M.; Nonhoff, B.; Reichel, B.; Strehlow, R.; Stamatakis, A.; Stuckmann, N.; Vilbig, A.; Lenke, M.; Ludwig, T.; Bode, A.; Schleifer, K.-H., ARB: a software environment for sequence data. *Nucl. Acids. Res.* **2004**, *32*, 1363-1371.
  
- (2) Pruesse, E.; Quast, C.; Knittel, K.; Fuchs, B.; Ludwig, W.; Peplies, J.; Gloeckner, F. O., SILVA: a comprehensive online resource for quality checked and aligned ribosomal RNA sequence data compatible with ARB. *Nucl. Acids Res.* **2007**, *35*, 7188-7196.
  
- (3) Clark, K. R.; Gorely, R. N.; PRIMER-E: Plymouth, 2006.

Table S1. Sample codes, clone library information, Species Richness and Simpson diversity indices.

<u>Sample Code</u>	<u>Initial Clone Sequences Assembled</u>	<u>Post Quality Check</u>	<u>Post chimera-screening</u>	<u>No. putative Chimeric Sequences</u>	<u>Percent putative Chimeric Sequences</u>	<u>Bacterial Seqs</u>	<u>Archaeal Seqs</u>	<u>Eukaryal Seqs</u>	<u>Mito-Seqs</u>	<u>Chloroplast Seqs</u>	<u>Species Richness</u>	<u>Simpson (1-lambda')</u>
1	200	181	158	23	12.71	156	0	0	0	2	16	0.96807279
2	319	303	279	24	7.92	268	6	3	0	2	31	0.99217396
3	353	328	246	82	25.00	185	54	2	0	5	20	0.97561692
4	351	310	212	98	31.61	168	22	9	2	11	20	0.97754491
5	165	160	150	10	6.25	146	4	0	0	0	12	0.96211620
6	173	159	146	13	8.18	74	1	61	5	5	11	0.97186227
7	324	310	263	47	15.16	249	12	0	0	2	29	0.99284234
8	298	289	272	17	5.88	250	2	8	1	11	33	0.99546988
9	174	103	94	9	8.74	93	0	0	0	1	13	0.96914446
10	180	105	85	20	19.05	83	0	2	0	0	10	0.96796944
11	308	283	208	75	26.50	201	7	0	0	0	19	0.97611940
12	344	310	255	55	17.74	217	6	9	2	21	22	0.97444103
13	319	297	237	60	20.20	206	6	11	2	12	30	0.99521667
14	316	299	237	62	20.74	220	16	0	0	1	25	0.98385222
15	358	321	293	28	8.72	236	21	5	1	30	16	0.96069239
16	176	147	141	6	4.08	115	2	14	5	5	14	0.98337147
17	170	150	138	12	8.00	113	0	11	1	13	14	0.97882427
18	149	135	130	5	3.70	108	2	7	0	13	15	0.98303911
19	167	148	137	11	7.43	123	0	5	0	9	12	0.96268159
20	367	359	344	15	4.18	260	83	1	0	0	38	0.99685180
21	316	310	295	15	4.84	235	60	0	0	0	37	0.99818149
22	315	303	288	15	4.95	232	54	1	0	1	37	0.99865652
23	272	262	246	16	6.11	207	37	2	0	0	33	0.99817082
24	162	137	115	22	16.06	111	0	0	0	4	16	0.98411138
25	180	170	158	12	7.06	142	0	8	2	6	14	0.97003296
26	160	154	149	5	3.25	113	4	9	3	20	13	0.98277497
27	182	172	161	11	6.40	129	2	8	0	22	12	0.96535853
28	344	320	295	25	7.81	291	2	1	0	1	38	0.99578149

Table S2. Matrix showing percent OTU overlap between samples in the upper triangular matrix and theta-YC community structure similarity values in the lower.

		Sample Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		Library	A4S16P_ML	A4S16S_ML	C6S16_ML	C7p3_ML	I9S18D_ML	I9S18K_ML	L7S16_ML	L73_ML	051024-S1-W-T	060127-S1-W-T	Lc2Y10_ML	Lc2yS22_ML	Lc2z_ML	Lc2_ML	
Elysian Fields	1	A4S16P_ML		11.24	0.53	0.54	0.71	2.27	7.03	8.68	2.82	0.78	0.54	1.00	2.49	1.83	1
Elysian Fields	2	A4S16S_ML	0.2335 ±0.0516		0.70	0.72	1.27	2.21	10.42	8.35	2.54	0.90	1.44	0.34	2.39	2.56	2
Lake Pontchartrain	3	C6S16_ML	0.0005 ±0.0007	0.0049 ±0.0041		9.01	10.71	4.43	1.12	3.43	1.19	0.65	9.52	8.85	3.75	4.10	3
Lake Pontchartrain	4	C7p3_ML	0.0006 ±0.0008	0.0034 ±0.0029	0.2856 ±0.0683		9.82	4.58	0.38	3.85	0.61	0.00	9.76	9.05	1.91	4.60	4
Industrial Canal	5	I9S18D_ML	0.0005 ±0.0008	0.0041 ±0.0003	0.458 ±0.0757	0.1767 ±0.0467		3.64	2.27	4.53	2.50	0.95	11.73	8.99	4.11	10.21	5
Industrial Canal	6	I9S18K_ML	0.0066 ±0.0051	0.0067 ±0.0044	0.12 ±0.0479	0.0434 ±0.0195	0.0232 ±0.0143		0.48	3.43	1.82	0.00	5.26	5.36	3.35	2.69	6
17th Street Canal	7	L7S16_ML	0.0765 ±0.0232	0.1585 ±0.0344	0.0245 ±0.0162	0.0037 ±0.0034	0.0274 ±0.0155	0.0021 ±0.0026		10.79	3.18	1.94	0.76	1.08	2.82	3.04	7
17th Street Canal	8	L73_ML	0.1873 ±0.0464	0.21 ±0.0456	0.1358 ±0.0428	0.0568 ±0.0222	0.1179 ±0.0373	0.0526 ±0.0241	0.2072 ±0.0414		4.11	2.18	3.86	4.98	5.26	4.70	8
17th Street Canal	9	051024-S1-W-T	0.0044 ±0.0031	0.0108 ±0.0065	0.0201 ±0.018	0.0009 ±0.0013	0.0193 ±0.0183	0.0053 ±0.0051	0.0185 ±0.0096	0.0395 ±0.0188		1.89	1.23	2.81	3.19	4.08	9
17th Street Canal	10	060127-S1-W-T	0.0009 ±0.0013	0.0016 ±0.0017	0.0036 ±0.0036	0 ±0	0.0094 ±0.008	0 ±0	0.0071 ±0.0055	0.0065 ±0.0042	0.0463 ±0.034		1.35	1.83	1.47	2.20	10
Lake Charles	11	Lc2Y10_ML	0.0005 ±0.0007	0.0117 ±0.008	0.4376 ±0.0792	0.4694 ±0.0793	0.2344 ±0.0537	0.0992 ±0.0396	0.003 ±0.0024	0.0576 ±0.0211	0.0023 ±0.0022	0.0025 ±0.0024		11.82	4.60	6.30	11
Lake Charles	12	Lc2yS22_ML	0.0035 ±0.0033	0.0008 ±0.001	0.384 ±0.0748	0.1877 ±0.0487	0.119 ±0.0327	0.2298 ±0.068	0.0068 ±0.0042	0.0598 ±0.0194	0.022 ±0.0127	0.003 ±0.0024	0.408 ±0.0721		3.61	4.33	12
Lake Charles	13	Lc2z_ML	0.0079 ±0.0046	0.0095 ±0.0047	0.0491 ±0.0214	0.0488 ±0.0263	0.033 ±0.0158	0.0601 ±0.0288	0.0587 ±0.0252	0.0773 ±0.0244	0.022 ±0.0136	0.0122 ±0.0111	0.0601 ±0.0242	0.0399 ±0.0144		7.80	13
Lake Charles	14	Lc2_ML	0.012 ±0.01	0.008 ±0.0039	0.0712 ±0.0247	0.0833 ±0.0276	0.1052 ±0.0286	0.0121 ±0.0072	0.0821 ±0.0326	0.0759 ±0.0268	0.0377 ±0.0215	0.0253 ±0.02	0.0696 ±0.0222	0.0364 ±0.0139	0.3097 ±0.0718		14
Transect 3 Station 4	15	051011-T3S4-W-T	0.0003 ±0.0005	0.007 ±0.0051	0.2256 ±0.0468	0.4002 ±0.0752	0.3866 ±0.0747	0.035 ±0.0177	0.0072 ±0.0037	0.0592 ±0.02	0.0032 ±0.0031	0.0053 ±0.0042	0.4213 ±0.0695	0.1197 ±0.0294	0.0316 ±0.0134	0.0931 ±0.0254	15
Transect 2 Station 1	16	051011-T2S1-W-T	0.0018 ±0.0022	0.0098 ±0.0071	0.3173 ±0.0742	0.427 ±0.0952	0.3998 ±0.0866	0.0405 ±0.0239	0.0256 ±0.0129	0.0962 ±0.0308	0.0085 ±0.0074	0.0123 ±0.0084	0.3859 ±0.0775	0.114 ±0.0317	0.0928 ±0.0315	0.1579 ±0.0453	16
Transect 2 Station 4	17	051011-T2S4-W-T	0 ±0	0.0097 ±0.0078	0.3493 ±0.078	0.4608 ±0.0961	0.3399 ±0.0782	0.0625 ±0.0314	0.0105 ±0.0069	0.083 ±0.0286	0.0067 ±0.0064	0.0029 ±0.0036	0.4743 ±0.0744	0.1415 ±0.0373	0.0637 ±0.0246	0.0914 ±0.0265	17
Transect 2 Station 1	18	051025-T2S1-W-T	0.0019 ±0.0019	0.0074 ±0.0063	0.3217 ±0.079	0.4066 ±0.0951	0.3899 ±0.0867	0.0326 ±0.02	0.0204 ±0.0114	0.1093 ±0.0344	0.0227 ±0.0143	0 ±0	0.3312 ±0.0732	0.1259 ±0.0382	0.0503 ±0.0207	0.1247 ±0.0323	18
Transect 2 Station 4	19	051025-T2S4-W-T	0 ±0	0.0032 ±0.0031	0.3338 ±0.0738	0.6329 ±0.0839	0.3531 ±0.0781	0.0452 ±0.0212	0.0129 ±0.0077	0.077 ±0.0261	0.0061 ±0.0067	0 ±0	0.4023 ±0.0739	0.1475 ±0.0377	0.0382 ±0.019	0.0988 ±0.0281	19
Transect 2 Station 1	20	060329-T2S1-S-T	0.0011 ±0.0014	0.0016 ±0.0019	0.0115 ±0.0117	0.0072 ±0.0076	0.0103 ±0.0105	0.0022 ±0.0027	0.0017 ±0.0021	0.0414 ±0.0203	0.0026 ±0.0025	0.0028 ±0.0032	0.0011 ±0.0013	0.0082 ±0.0041	0.0057 ±0.004	0.0096 ±0.0078	20
Transect 2 Station 2	21	060329-T2S2-S-T	0.005 ±0.0037	0.01 ±0.0078	0.0039 ±0.0037	0.0082 ±0.0065	0.0058 ±0.0056	0.0049 ±0.0047	0.008 ±0.007	0.0301 ±0.0144	0.0019 ±0.002	0 ±0	0.0031 ±0.0034	0.0049 ±0.0028	0.0026 ±0.0027	0.014 ±0.0071	21
Transect 2 Station 3	22	060329-T2S3-S-T	0.0006 ±0.0009	0.0038 ±0.0027	0.0007 ±0.0009	0.0092 ±0.0075	0.0024 ±0.0027	0 ±0	0.001 ±0.0015	0.0237 ±0.0111	0.007 ±0.0067	0 ±0	0.0031 ±0.0034	0.0039 ±0.0024	0.0027 ±0.0028	0.0075 ±0.0049	22
Transect 2 Station 4	23	060329-T2S4-S-T	0 ±0	0 ±0	0.0007 ±0.001	0.0025 ±0.0029	0 ±0	0 ±0	0 ±0	0.0155 ±0.0086	0.0154 ±0.0157	0.0023 ±0.0029	0 ±0	0.0067 ±0.0036	0 ±0	0.0024 ±0.0028	23
Transect 6 Station 1	24	060127-T6S1-W-T	0.0028 ±0.0026	0.0065 ±0.0041	0.1203 ±0.049	0.0704 ±0.0323	0.1403 ±0.0511	0.0074 ±0.0061	0.0227 ±0.0113	0.0695 ±0.028	0.2773 ±0.0894	0.3661 ±0.0894	0.0728 ±0.0285	0.0418 ±0.0155	0.0301 ±0.016	0.0654 ±0.0273	24
Transect 6 Station 4	25	060127-T6S4-W-T	0.0006 ±0.0009	0.0082 ±0.0057	0.1992 ±0.0519	0.2124 ±0.0552	0.2594 ±0.0613	0.0608 ±0.0286	0.0095 ±0.006	0.0579 ±0.0217	0.0049 ±0.0047	0 ±0	0.2326 ±0.0534	0.0981 ±0.0278	0.0296 ±0.0129	0.0801 ±0.0249	25
Transect 6 Station 1	26	060329-T6S1-W-T	0.0027 ±0.0031	0.0152 ±0.0086	0.2181 ±0.058	0.3278 ±0.0836	0.2131 ±0.0557	0.0446 ±0.0244	0.0107 ±0.0063	0.0622 ±0.0223	0.0746 ±0.0405	0.1895 ±0.0587	0.3517 ±0.0742	0.1385 ±0.041	0.035 ±0.0177	0.0793 ±0.0247	26
Transect 6 Station 4	27	060329-T6S4-W-T	0.0025 ±0.0024	0.0126 ±0.0082	0.3372 ±0.0717	0.2977 ±0.0687	0.4524 ±0.0853	0.0529 ±0.0288	0.0178 ±0.0096	0.0836 ±0.0276	0.0101 ±0.009	0.0022 ±0.0027	0.3437 ±0.0657	0.1056 ±0.0278	0.0377 ±0.0178	0.098 ±0.0274	27
Lake Charles Treatment Facility	28	Gctb_ML	0.0019 ±0.0016	0.0074 ±0.0049	0.0214 ±0.015	0.0092 ±0.0067	0.0236 ±0.0139	0 ±0	0.0256 ±0.0101	0.0307 ±0.0142	0.0084 ±0.005	0.0081 ±0.0062	0.0047 ±0.0033	0.0055 ±0.0034	0.0039 ±0.0031	0.0084 ±0.0049	28

	Sample Code	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	Library	051011-T3S4-W-T	051011-T2S1-W-T	051011-T2S4-W-T	051025-T2S1-W-T	051025-T2S4-W-T	060329-T2S1-S-T	060329-T2S2-S-T	060329-T2S3-S-T	060329-T2S4-S-T	060127-T6S1-W-T	060127-T6S4-W-T	060329-T6S1-W-T	060329-T6S4-W-T	Gctb ML	
Elysian Fields	1 A4S16P ML	0.59	0.67	0.00	1.32	0.00	0.34	1.06	0.35	0.00	1.27	0.66	0.69	1.44	1.01	1
Elysian Fields	2 A4S16S ML	1.52	1.23	1.66	1.22	0.86	0.26	0.53	1.05	0.00	1.98	1.22	2.08	2.15	0.77	2
Lake Pontchartrain	3 C6S16 ML	10.77	9.09	12.14	8.99	9.04	0.31	0.64	0.32	0.35	6.52	8.43	9.30	9.09	0.62	3
Lake Pontchartrain	4 C7p3 ML	14.21	11.70	13.10	9.82	11.80	0.32	0.66	0.65	0.36	5.03	9.25	8.38	10.00	0.95	4
Industrial Canal	5 I9S18D ML	17.01	14.85	16.00	11.54	14.41	0.37	0.76	0.38	0.00	8.09	13.08	12.10	16.24	1.82	5
Industrial Canal	6 I9S18K ML	6.57	3.39	6.09	5.00	7.41	0.38	0.79	0.00	0.00	2.38	4.17	4.39	3.74	0.00	6
17th Street Canal	7 L7S16 ML	2.02	1.32	1.34	1.31	0.92	0.27	0.28	0.28	0.00	2.54	0.87	1.79	1.39	2.40	7
17th Street Canal	8 L73 ML	3.70	3.98	3.63	4.35	3.32	1.77	1.82	2.07	1.67	4.25	4.35	4.45	3.75	2.01	8
17th Street Canal	9 051024-S1-W-T	1.36	1.56	1.60	3.07	0.85	0.73	0.76	0.76	0.43	3.68	1.54	4.03	2.56	2.19	9
17th Street Canal	10 060127-S1-W-T	1.50	2.63	0.90	0.00	0.00	0.39	0.00	0.00	0.45	14.75	0.00	8.18	0.97	1.15	10
Lake Charles	11 Lc2Y10 ML	14.81	13.53	10.78	6.39	10.63	0.32	0.33	0.33	0.00	6.18	9.89	9.64	11.32	0.95	11
Lake Charles	12 Lc2yS22 ML	10.25	10.21	9.83	6.92	9.66	2.42	2.19	1.55	2.38	5.67	8.51	8.79	6.86	1.51	12
Lake Charles	13 Lc2z ML	3.66	4.41	4.46	3.06	2.30	1.08	0.55	0.55	0.00	4.26	3.93	2.69	2.78	0.81	13
Lake Charles	14 Lc2 ML	7.62	6.37	7.96	7.28	6.18	0.86	2.37	1.18	0.32	7.08	5.34	4.50	7.25	1.14	14
Transect 3 Station 4	15 051011-T3S4-W-T		20.00	21.71	12.10	13.79	0.67	0.35	0.34	0.00	6.75	13.38	11.26	13.89	1.66	15
Transect 2 Station 1	16 051011-T2S1-W-T	0.4632 ±0.0862		18.04	10.14	13.49	0.71	0.37	0.37	0.00	6.95	12.32	12.12	15.20	1.42	16
Transect 2 Station 4	17 051011-T2S4-W-T	0.6063 ±0.0942	0.4773 ±0.0873		11.85	14.63	0.72	0.75	0.37	0.00	8.51	16.30	14.73	14.75	1.79	17
Transect 2 Station 1	18 051025-T2S1-W-T	0.5352 ±0.0916	0.4684 ±0.0836	0.4856 ±0.0888		10.94	0.71	0.37	0.73	0.82	7.53	10.00	8.96	11.02	1.41	18
Transect 2 Station 4	19 051025-T2S4-W-T	0.5662 ±0.085	0.4634 ±0.0922	0.5255 ±0.095	0.582 ±0.0991		1.11	0.77	0.38	0.00	7.46	11.72	11.48	13.91	1.10	19
Transect 2 Station 1	20 060329-T2S1-S-T	0.0023 ±0.002	0.0084 ±0.0066	0.0056 ±0.0048	0.0087 ±0.0071	0.0048 ±0.0041		8.92	8.63	7.97	0.36	0.74	0.94	8.92	8.63	20
Transect 2 Station 2	21 060329-T2S2-S-T	0.0048 ±0.005	0.0084 ±0.0089	0.0032 ±0.003	0.0074 ±0.008	0.0075 ±0.0067	0.2375 ±0.0525		7.88	9.26	0.36	0.74	0.75	1.16	0.72	21
Transect 2 Station 3	22 060329-T2S3-S-T	0.0102 ±0.0103	0.0037 ±0.0042	0.0065 ±0.007	0.0115 ±0.0108	0.0091 ±0.0094	0.1833 ±0.0448	0.1494 ±0.0359		10.00	0.36	0.36	0.37	1.15	0.72	22
Transect 2 Station 4	23 060329-T2S4-S-T	0 ±0	0 ±0	0 ±0	0.0027 ±0.0028	0 ±0	0.1782 ±0.0434	0.1593 ±0.0358	0.1658 ±0.0344		0.40	0.00	0.83	0.00	0.26	23
Transect 6 Station 1	24 060127-T6S1-W-T	0.106 ±0.0388	0.1077 ±0.0384	0.1067 ±0.0382	0.1298 ±0.0449	0.1157 ±0.0416	0.0066 ±0.0057	0.0025 ±0.0031	0.0026 ±0.0032	0.0141 ±0.0145		10.27	17.14	10.53	1.38	24
Transect 6 Station 4	25 060127-T6S4-W-T	0.4061 ±0.0719	0.2697 ±0.0676	0.3213 ±0.075	0.4135 ±0.0831	0.396 ±0.0818	0.0031 ±0.0029	0.0085 ±0.0082	0.0101 ±0.0104	0 ±0	0.1253 ±0.043		12.69	13.38	1.41	25
Transect 6 Station 1	26 060329-T6S1-W-T	0.4597 ±0.0871	0.328 ±0.0734	0.456 ±0.0837	0.4179 ±0.0796	0.4055 ±0.0864	0.001 ±0.0015	0.0059 ±0.0056	0.0098 ±0.0102	0.0053 ±0.005	0.3308 ±0.079	0.3611 ±0.0793		16.53	2.16	26
Transect 6 Station 4	27 060329-T6S4-W-T	0.5624 ±0.0803	0.4074 ±0.0811	0.5115 ±0.0884	0.5651 ±0.085	0.5322 ±0.0928	0.0061 ±0.0054	0.0097 ±0.0082	0.0092 ±0.0082	0 ±0	0.1351 ±0.0443	0.5271 ±0.083	0.4697 ±0.0842		1.48	27
Lake Charles Treatment Facility	28 Gctb ML	0.0136 ±0.0087	0.0167 ±0.0094	0.014 ±0.0082	0.0222 ±0.0121	0.0156 ±0.0093	0.0055 ±0.0037	0.0043 ±0.0034	0.0079 ±0.006	0.0023 ±0.0029	0.0116 ±0.0075	0.0132 ±0.0089	0.0138 ±0.0087	0.0169 ±0.0095		28

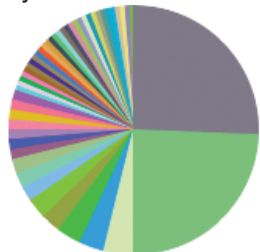




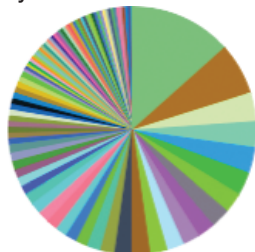


Figure S2. Comprehensive pie charts showing a comparative bacterial taxonomic summary of the sequences in all 28 samples generated using the output from RDP II's online Classifier program (<http://rdp.cme.msu.edu/classifier/classifier.jsp>). Clicking on the sample names allows one to view a taxonomic breakdown of the sequences down to genus when possible or some higher taxonomic level. Asterisks indicate taxonomic levels shared with the raw sewage sample.

Elysian Fields A4S16P



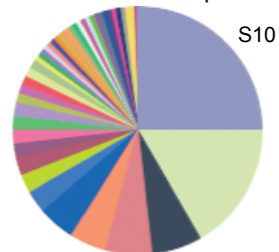
Elysian Fields A4S16S



Lake Pont. C6S16

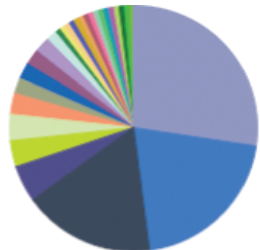


Lake Pont. C7p3

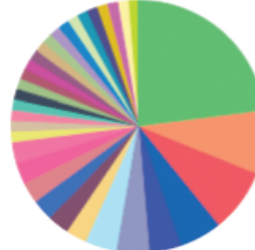


S10

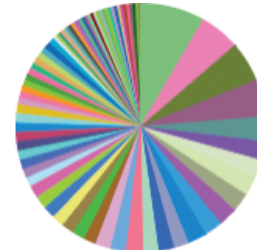
Industrial Canal I9S18D



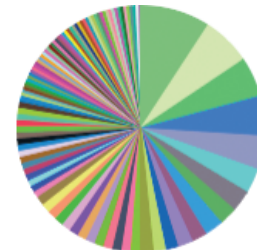
Industrial Canal I9S18K



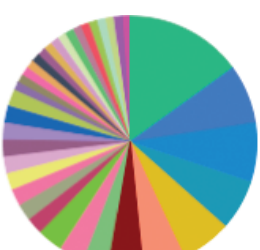
17th Street Canal L7S16



17th Street Canal L73



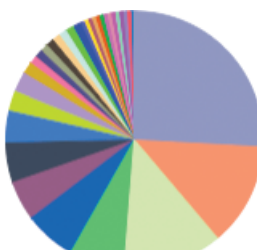
17th Street Canal 24Oct05



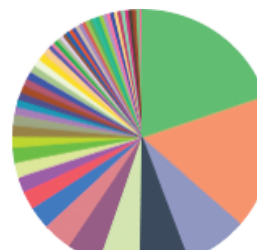
17th Street Canal 27Jan06



Lake Charles Lc2Y10



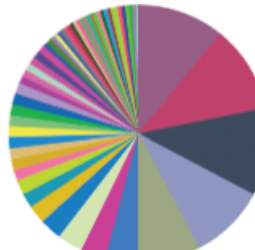
Lake Charles Lc2YS22



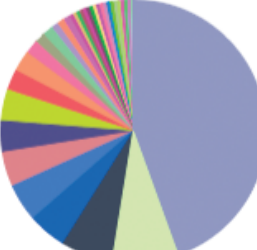
Lake Charles Lc2Z



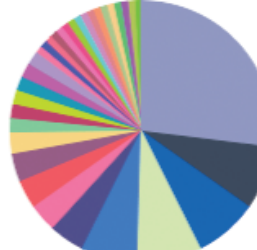
Lake Charles Lc2



Transect 3 St.4 11Oct05



Transect 2 St.1 11Oct05



Transect 2 St.4 11Oct05



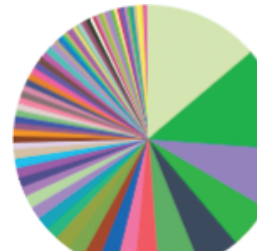
Transect 2 St.1 25Oct05



Transect 2 St.4 25Oct05



Transect 2 St.1 29Mar05-sed



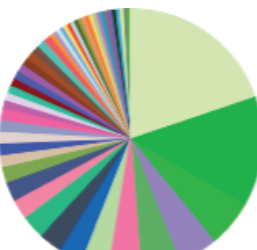
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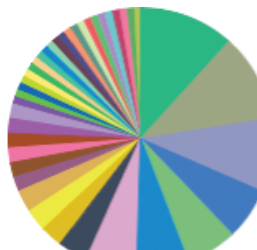
Transect 2 St.3 29Mar05-sed



Transect 2 St.4 29Mar05-sed



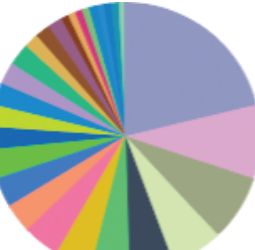
Transect 6 St.1 27Jan06



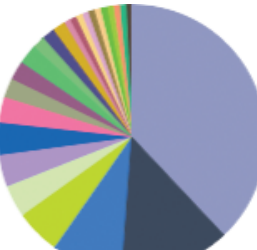
Transect 6 St.4 27Jan06



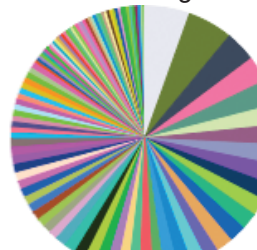
Transect 6 St.1 29Mar06



Transect 6 St.4 29Mar06



Raw Sewage Gct



## Elysian Fields A4S16P (n=156)

40	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Allochromatium
38	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
6	*Bacteria
5	*Bacteria Firmicutes Clostridia Clostridiales
5	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfocapsa
4	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
4	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae
3	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Coprobacillus
3	Bacteria Chlorobi Chlorobia Chlorobiales Chlorobiaceae Chlorobaculum
3	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geobacter
2	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
2	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Bacteroidaceae Bacteroides
2	*Bacteria Bacteroidetes
1	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Tolumonas
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
1	*Bacteria Proteobacteria Deltaproteobacteria
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Halothiobacillaceae Thiovirga
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae_genera_in_sedis
1	*Bacteria Actinobacteria Actinobacteria Actinomycetales
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae Opiritus
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Kluysvera
1	*Bacteria Proteobacteria Gammaproteobacteria
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae Desulfovibrio
1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae Anaerovorax
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Sporobacter
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Hyphomicrobium
1	*Bacteria Proteobacteria Alphaproteobacteria
1	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Corynebacteriaceae Corynebacterium
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Deferribacteraceae Denitrovibrio
1	*Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfomicrobiaceae Desulfomicrobium
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Acetivibrio
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
1	*Bacteria Firmicutes

36	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
18	Bacteria Proteobacteria Gammaproteobacteria Thiotrichales Piscirickettsiaceae Thiomicrospira
10	*Bacteria
9	Bacteria Chlorobi Chlorobia Chlorobiales Chlorobiaceae Chlorobaculum
9	*Bacteria Firmicutes Clostridia Clostridiales
8	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfocapsa
7	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae
7	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Allochromatium
6	*Bacteria Bacteroidetes
6	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geobacter
6	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
6	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Prevotellaceae
6	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Halothiobacillaceae Thiovirga
6	*Bacteria Proteobacteria Gammaproteobacteria
5	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
5	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Parabacteroides
4	*Bacteria Firmicutes
4	*Bacteria Actinobacteria Actinobacteria Actinomycetales
4	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
4	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Bacteroidaceae Bacteroides
4	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
4	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Tolumonas
4	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae
3	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
3	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae Desulfovibrio
3	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
3	Bacteria Lentisphaerae Lentisphaerae Victivallales Victivallaceae Victivallis
3	*Bacteria Proteobacteria Alphaproteobacteria
3	Bacteria Deferribacteres Deferribacteres Deferribacterales Deferribacteraceae Denitrovibrio
2	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurimonas
2	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
2	*Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
2	Bacteria Firmicutes Bacilli Lactobacillales Incertae sedis 9 Oscillospira
2	Bacteria Deferribacteres Deferribacteres Deferribacterales Incertae sedis 3 Synergistes
2	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae
2	*Bacteria Proteobacteria
2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Anaerofilum
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
2	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Papillibacter
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
2	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfuricurvum
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Desulfuromusa
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Malonomonas
1	*Bacteria Proteobacteria Deltaproteobacteria
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Prevotellaceae Prevotella
1	*Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae
1	Bacteria Actinobacteria Actinobacteria Coriobacteriales Coriobacteriaceae
1	Bacteria Spirochaetes Spirochaetes Spirochaetales Spirochaetaceae
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_gen_in_sedis

## Elysian Fields A4S16S (n=268) continued

1	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
1	Bacteria Proteobacteria Gammaproteobacteria Thiotrichales Piscirickettsiaceae
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Rikenellaceae Rikenella
1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Klebsiella
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Aeromonas
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacter
1	Bacteria OP11 Unassigned Unassigned Unassigned OP11_genera_incertae_sedis
1	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Lactococcus
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Hyphomonas
1	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae
1	Bacteria Firmicutes Mollicutes
1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Sporobacter
1	Bacteria Firmicutes Clostridia Clostridiales Peptococcaceae Peptococcus
1	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae Fusibacter
1	Bacteria Firmicutes Clostridia
1	Bacteria Firmicutes Bacilli Bacillales Turicibacteraceae Turicibacter
1	Bacteria Firmicutes Bacilli Bacillales Alicyclobacillaceae Alicyclobacillus
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Bacteriovorax
1	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Phascolarctobacterium
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacterium
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
1	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Azonexus
1	*Bacteria Proteobacteria Betaproteobacteria
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	*Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfomicrobiaceae Desulfomicrobium

## Lake Ponchartrain C6S16 (n=185)

29	*Bacteria Actinobacteria Actinobacteria Actinomycetales
25	*Bacteria
24	*Bacteria Proteobacteria Alphaproteobacteria
21	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
19	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
13	*Bacteria Proteobacteria Gammaproteobacteria
8	*Bacteria Proteobacteria
6	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
5	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
5	*Bacteria Proteobacteria Betaproteobacteria
4	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
2	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Alcanivoraceae Alcanivorax
2	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
2	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Robiginitalea
1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae
1	Bacteria Lentisphaerae Lentisphaerae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Rikenellaceae
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Catellibacterium

## Lake Pontchartrain C7p3 (n=168)

42	*Bacteria Proteobacteria Alphaproteobacteria
28	*Bacteria
11	*Bacteria Proteobacteria Gammaproteobacteria
10	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
8	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
8	*Bacteria Proteobacteria
5	*Bacteria Actinobacteria Actinobacteria Actinomycetales
4	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
4	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
3	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
3	*Bacteria Proteobacteria Betaproteobacteria
3	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
2	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
2	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Peredibacter
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobacteraceae
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Hahellaceae Hahella
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae gen_incertainae_sedis
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_gen_in_sedis
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Rheinheimera
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Saprospira
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Balneola
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	*Bacteria Bacteroidetes
1	Bacteria Lentisphaerae Lentisphaerae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae Herbaspirillum
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Aquabacterium
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae Polynucleobacter
1	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae

## Industrial Canal I9S18D (n=146)

40	*Bacteria Proteobacteria Alphaproteobacteria
30	*Bacteria Actinobacteria Actinobacteria Actinomycetales
25	*Bacteria Proteobacteria Gammaproteobacteria
7	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
5	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
5	*Bacteria
4	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
3	*Bacteria Proteobacteria
3	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Balneola
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Aquicella
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Actinobacteria Actinobacteria
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Alcanivoraceae Alcanivorax
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Proteobacteria Betaproteobacteria
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Geodermatophilaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rickettsiales Rickettsiaceae
1	Bacteria Chloroflexi Chloroflexi Chloroflexales
1	Bacteria Proteobacteria Alphaproteobacteria Rickettsiales Rickettsiaceae Orientia
1	*Bacteria Firmicutes



## Industrial Canal I9S18K (n=74)

17	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
6	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
6	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
4	*Bacteria Proteobacteria
3	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae gen_incertae_sedis
3	*Bacteria Proteobacteria Alphaproteobacteria
3	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
2	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
2	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Coxiella
2	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Hyphomonas
2	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
2	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Caldilinea
2	*Bacteria Proteobacteria Betaproteobacteria
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
1	Bacteria Proteobacteria Epsilonproteobacteria Campylobacteriales Helicobacteraceae
1	*Bacteria Proteobacteria Gammaproteobacteria
1	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylocaldum
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Incertae sedis 3 Caldithrix
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaeae
1	*Bacteria
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
1	Bacteria Proteobacteria Alphaproteobacteria Rickettsiales Incertae sedis 4 Caedibacter
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp10
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus

## 17th Street Canal L7S16 (n=249)

21	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
13	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae
13	*Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
12	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
8	Bacteria Deferribacteres Deferribacteres Deferribacterales Deferribacteraceae Denitrovibrio
6	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Dechloromonas
6	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae
6	*Bacteria
6	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
6	*Bacteria Bacteroidetes
6	*Bacteria Firmicutes Clostridia Clostridiales
6	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
5	*Bacteria Proteobacteria Alphaproteobacteria
5	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurimonas
5	Bacteria OP11 Unassigned Unassigned Unassigned OP11_genera_incertae_sedis
5	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Bacteroidaceae Bacteroides
5	Bacteria SR1 Unassigned Unassigned Unassigned SR1_genera_incertae_sedis
5	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
4	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Halothiobacillaceae Thiovirga
4	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfocapsa
4	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
4	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
4	*Bacteria Actinobacteria Actinobacteria Actinomycetales
4	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae Fusibacter
4	Bacteria Firmicutes Mollicutes Acholeplasmatales Acholeplasmataceae Acholeplasma
3	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
3	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geobacter
3	Bacteria Firmicutes Bacilli Bacillales Turicibacteraceae Turicibacter
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
3	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae Desulfovibrio
3	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Comamonas
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Prevotellaceae Prevotella
2	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae
2	Bacteria Lentisphaerae Lentisphaerae Victivallales Victivallaceae Victivallis
2	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Klebsiella
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
2	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
2	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfuricum
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Cloacibacterium

## 17th Street Canal L7S16 (n=249) continued

2	*Bacteria Proteobacteria
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Trichlorobacter
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Zoogloea
1	*Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae
1	Bacteria Proteobacteria Gammaproteobacteria Thiotrichales Piscirickettsiaceae
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Rheinheimera
1	Bacteria Actinobacteria Actinobacteria Coriobacteriales Coriobacteriaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Aeromonas
1	*Bacteria Proteobacteria Gammaproteobacteria
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Prosthecobacter
1	Bacteria Proteobacteria Alphaproteobacteria Rickettsiales Incertae sedis 4 Caedibacter
1	Bacteria Chloroflexi Chloroflexi Chloroflexales Chloroflexaceae
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Deferribacteraceae
1	Bacteria Firmicutes Bacilli Lactobacillales Incertae sedis 9 Oscillospira
1	Bacteria Chlorobi Chlorobia Chlorobiales Chlorobiaceae Chlorobaculum
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Prevotellaceae
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Rikenellaceae Rikenella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Megasphaera
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Clostridium
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Sphingopyxis
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Rhodoferax
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylovorus
1	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Dysgonomonas
1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae Anaerovorax
1	Bacteria Firmicutes Clostridia
1	*Bacteria Firmicutes
1	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Azospira

## 17th Street Canal L73 (n=250)

23	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
16	*Bacteria
13	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
13	*Bacteria Actinobacteria Actinobacteria Actinomycetales
11	*Bacteria Proteobacteria Alphaproteobacteria
8	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
7	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Allochromatium
6	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineaceae
6	*Bacteria Firmicutes Clostridia Clostridiales
5	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
5	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobacteraceae
4	*Bacteria Proteobacteria
4	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfuricurvum
4	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
3	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae
3	*Bacteria Proteobacteria Betaproteobacteria
3	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Sporobacter
3	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Bacteroidaceae Bacteroides
3	*Bacteria Firmicutes
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
3	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
3	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Dechloromonas
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobulbaceae Desulfocapsa
3	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
3	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
3	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
2	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae Desulfovibrio
2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae _gen_in_sedis
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
2	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Azonexus
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Halothiobacillaceae Thiovirga
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Anaerofilum
2	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae Anaerovorax
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
2	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Muricauda
2	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Parabacteroides
2	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae Fusibacter

2	Bacteria Cyanobacteria Cyanobacteria
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Halothiobacillaceae Halothiobacillus
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Cloacibacterium
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Ectothiorhodospiraceae
1	*Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
1	*Bacteria Proteobacteria Deltaproteobacteria
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Trichlorobacter
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacterales
1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Citrobacter
1	*Bacteria Bacteroidetes
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Incertae sedis 7
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylocaldum
1	Bacteria Proteobacteria Gammaproteobacteria Vibrionales Vibrionaceae Vibrio
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
1	Bacteria SR1 Unassigned Unassigned Unassigned SR1_genera_incertae_sedis
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Prosthecobacter
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Fluviicola
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Aquicella
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylomonas
1	*Bacteria Proteobacteria Gammaproteobacteria
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
1	*Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfomicrobiaceae Desulfomicrobium
1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae Acetobacterium
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Clostridium
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Aquabacterium
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Firmicutes Clostridia Clostridiales Peptococcaceae Desulfosporosinus
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
1	Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales Acetobacteraceae Roseomonas
1	Bacteria Proteobacteria Betaproteobacteria Hydrogenophilales Hydrogenophilaceae Thiobacillus
1	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Niastella
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
1	Bacteria OP11 Unassigned Unassigned Unassigned OP11_genera_incertae_sedis
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacter
1	Bacteria Firmicutes Bacilli Bacillales
1	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Megasphaera
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Deferribacteraceae Denitrovibrio
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Thauera
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Zoogloea
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geobacter

## 17th Street Canal 24 Oct 05 (n=93)

14	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
7	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
6	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
6	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
5	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
4	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
3	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
3	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
3	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Niastella
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
2	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
2	*Bacteria Proteobacteria
2	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae genera_incertae_sedis
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Klebsiella
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	*Bacteria Proteobacteria Gammaproteobacteria
1	Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Comamonas
1	*Bacteria
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Sphingobacteriaceae
1	Bacteria Proteobacteria Alphaproteobacteria Caulobacterales Caulobacteraceae
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Hyphomicrobium
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae Bordetella
1	*Bacteria Bacteroidetes
1	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae

## 17th Street Canal 27 Jan 06 (n=83)

16	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
13	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
11	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
7	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae Polynucleobacter
3	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
3	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
3	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
2	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae Mycetocola
2	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
1	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Aeromonas
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Alkanindiges
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Legionellaceae Legionella
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Hongiella
1	*Bacteria Fusobacteria Fusobacteria Fusobacteriales Fusobacteriaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Malikia
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales

## Lake Charles Lc2Y10 (n=201)

52	*Bacteria Proteobacteria Alphaproteobacteria
26	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
25	*Bacteria
14	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
13	*Bacteria Proteobacteria
10	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
10	*Bacteria Proteobacteria Gammaproteobacteria
8	*Bacteria Actinobacteria Actinobacteria Actinomycetales
5	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
5	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
3	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
2	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Roseovarius
2	Bacteria Actinobacteria Actinobacteria
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Balneola
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Alcanivoraceae Alcanivorax
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Winogradskyella
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae Opiritus
1	*Bacteria Proteobacteria Deltaproteobacteria
1	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae
1	*Bacteria Bacteroidetes
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae



## Lake Charles Lc2YS22 (n=217)

43	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
36	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
17	*Bacteria Proteobacteria Alphaproteobacteria
13	*Bacteria Proteobacteria Gammaproteobacteria
11	*Bacteria
9	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
8	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
6	*Bacteria Actinobacteria Actinobacteria Actinomycetales
5	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
4	*Bacteria Bacteroidetes
4	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
4	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
3	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
3	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
2	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
2	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae gen_in_sedis
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Saprospira
2	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Winogradskyella
2	Bacteria Actinobacteria Actinobacteria
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobulbaceae
1	*Bacteria Proteobacteria Deltaproteobacteria
1	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae
1	*Bacteria Proteobacteria
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opitutaceae Opitutus
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobulbaceae Desulfobulbus
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Hyphomicrobium
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineaceae
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Clostridium
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Hongiella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Erythrobacter
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Roseovarius
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
1	*Bacteria Proteobacteria Betaproteobacteria

## Lake Charles Lc2Z (n=206)

26	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
14	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
14	*Bacteria Proteobacteria Gammaproteobacteria
13	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
9	*Bacteria Actinobacteria Actinobacteria Actinomycetales
9	*Bacteria
7	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
7	*Bacteria Proteobacteria Alphaproteobacteria
6	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
5	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
5	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaeaceae Fluviicola
4	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
4	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
3	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae Fusibacter
3	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
3	*Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
2	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Silicibacter
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
2	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylovorus
2	*Bacteria Proteobacteria Deltaproteobacteria
2	*Bacteria Proteobacteria
2	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
2	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
2	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Ferribacterium
2	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Azonexus
2	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Dechloromonas
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Rhodoferax
2	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
2	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineaceae Caldilinea
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
2	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae Microcella
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Alteromonadaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Tolumonas
1	*Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfomicrobiaceae Desulfomicrobium
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Alcanivoraceae Alcanivorax
1	*Bacteria Bacteroidetes

## Lake Charles Lc2Z (n=206) continued

1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Cystobacteraceae Anaeromyxobacter
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Prosthecobacter
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae _gen_in_sedis
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
1	no_ref_taxonomy
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	Bacteria Proteobacteria Gammaproteobacteria Vibrionales Vibrionaceae
1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Chryseomonas
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Oceanospirillaceae Pseudospirillum
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Saprospira
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
1	*Bacteria Firmicutes Clostridia Clostridiales
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae Burkholderia
1	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Catellibacterium
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodovulum
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Hyphomicrobium
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix
1	Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae Aquaspirillum
1	*Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae Formivibrio
1	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Azovibrio
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Paracoccus
1	*Bacteria Proteobacteria Betaproteobacteria
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae

24	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
24	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
24	*Bacteria Proteobacteria Gammaproteobacteria
21	*Bacteria Proteobacteria Alphaproteobacteria
17	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
9	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Incertae sedis 7 Marinobacterium
7	*Bacteria
6	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae
5	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
4	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
4	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
3	*Bacteria Proteobacteria Betaproteobacteria
3	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
3	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylovorus
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
3	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Silicibacter
3	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
3	*Bacteria Proteobacteria Deltaproteobacteria
3	*Bacteria Proteobacteria
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	Bacteria Proteobacteria Gammaproteobacteria Vibrionales Vibrionaceae Vibrio
2	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae
2	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
2	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylocaldum
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae gen_incertae_sedis
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Aquicella
1	*Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacteriales Desulfobacteraceae
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Incertae sedis 7 Teredinibacter
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae Allochromatium
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Shewanellaceae Shewanella
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Desulfuromonas
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Roseovarius
1	Bacteria Chlamydiae Chlamydiae Chlamydiales Parachlamydiaceae Parachlamydia
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Caldilinea
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Sphingobacteriaceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	Bacteria Chloroflexi Chloroflexi Chloroflexales
1	*Bacteria Firmicutes Clostridia Clostridiales
1	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Methylocystaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Methylocystaceae Terasakiella
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
1	Bacteria Proteobacteria Alphaproteobacteria Caulobacterales Caulobacteraceae
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	*Bacteria Firmicutes
1	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
1	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae

## Transect 3 Station 4 11 Oct 05 (n=236)

105	*Bacteria Proteobacteria Alphaproteobacteria
19	*Bacteria
15	*Bacteria Proteobacteria Gammaproteobacteria
11	*Bacteria Proteobacteria
11	*Bacteria Actinobacteria Actinobacteria Actinomycetales
10	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
9	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
9	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
6	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
6	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
4	*Bacteria Proteobacteria Betaproteobacteria
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
3	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Fluviicola
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
2	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
1	*Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylovorus
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Peredibacter
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylocaldum
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Coxiella
1	*Bacteria Proteobacteria Deltaproteobacteria
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Robiginitalea
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Niastella
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	Bacteria Proteobacteria Alphaproteobacteria Rickettsiales Rickettsiaceae
1	Bacteria Firmicutes Mollicutes Acholeplasmatales Acholeplasmataceae Acholeplasma
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	Bacteria Chlamydiae Chlamydiae Chlamydiales
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae

## Transect 2 Station1 11 Oct 05 (n=115)

31	*Bacteria Proteobacteria Alphaproteobacteria
9	*Bacteria Proteobacteria Gammaproteobacteria
9	*Bacteria Proteobacteria
9	*Bacteria
8	*Bacteria Actinobacteria Actinobacteria Actinomycetales
5	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
4	*Bacteria Proteobacteria Betaproteobacteria
4	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
4	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
3	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
2	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Fluviicola
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
2	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Incertae sedis 7
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae Methylomonas
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae Herbaspirillum
1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Cystobacteraceae Anaeromyxobacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Robiginitalea
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	Bacteria Actinobacteria Actinobacteria
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	*Bacteria Bacteroidetes
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix

## Transect 2 Station 4 11 Oct 05 (n=113)

30	*Bacteria Proteobacteria Alphaproteobacteria
14	*Bacteria
13	*Bacteria Proteobacteria Gammaproteobacteria
6	*Bacteria Actinobacteria Actinobacteria Actinomycetales
6	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
4	*Bacteria Proteobacteria
4	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
3	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
3	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
3	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Fluviicola
3	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae Opiritus
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
2	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Cloacibacterium
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Hongiella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
1	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Proteobacteria Betaproteobacteria
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Peredibacter
1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Polyangiaceae

## Transect 2 Station 1 25 Oct 05 (n=108)

35	*Bacteria Proteobacteria Alphaproteobacteria
10	*Bacteria
10	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	*Bacteria Proteobacteria Gammaproteobacteria
6	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
3	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
3	Bacteria Actinobacteria Actinobacteria
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
2	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Prosthecobacter
1	*Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae
1	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
1	*Bacteria Proteobacteria
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Blastopirellula
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	*Bacteria Bacteroidetes
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Fluviicola
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
1	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp4
1	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter



## Transect 2 Station 4 25 Oct 05 (n=123)

45	*Bacteria Proteobacteria Alphaproteobacteria
16	*Bacteria
10	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 3.1 Prochlorothrix
6	*Bacteria Proteobacteria
4	*Bacteria Proteobacteria Gammaproteobacteria
3	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
3	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae genera_in_sedis
2	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
2	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae genera_incertae_sedis
1	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_genera_in_sedis
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	*Bacteria Bacteroidetes
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Brumimicrobium
1	Bacteria Actinobacteria Actinobacteria
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Balneola
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales

## Transect 2 Station1 29 Mar 06 sediment (n=260)

36	*Bacteria
32	*Bacteria Proteobacteria Deltaproteobacteria
19	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
14	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
13	*Bacteria Proteobacteria Gammaproteobacteria
13	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
7	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
6	*Bacteria Proteobacteria Betaproteobacteria
6	*Bacteria Proteobacteria
5	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
5	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales
5	Bacteria Proteobacteria Epsilonproteobacteria Campylobacteriales Helicobacteraceae Sulfurovum
4	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
4	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Leptolinea
4	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
4	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae
3	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
3	*Bacteria Bacteroidetes
3	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp18
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Ectothiorhodospiraceae
2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_gen_in_sedis
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacteriales Rhodobacteraceae
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales
2	Bacteria Proteobacteria Alphaproteobacteria Rhodobacteriales Rhodobacteraceae Rhodobacter
2	Bacteria OP10 Unassigned Unassigned Unassigned OP10_genera_incertae_sedis
2	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
2	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales Polyangiaceae Byssovorax
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
2	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacterium
2	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Pirellula
2	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp7
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp5
2	Bacteria Chloroflexi Anaerolineae
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae
1	*Bacteria Actinobacteria Actinobacteria Actinomycetales

## Transect 2 Station1 29 Mar 06 sediment (n=260) continued

1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacterales Syntrophaceae Desulfobacca
1	Bacteria Actinobacteria Actinobacteria Rubrobacterales
1	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp22
1	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp23
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae Coxiella
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp4
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Desulfuromonas
1	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae Holdemania
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Incertae sedis 3 Caldithrix
1	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Rhodoplanes
1	*Bacteria Proteobacteria Alphaproteobacteria
1	*Bacteria Firmicutes
1	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp10
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Erythrobacter
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Sphingomonas
1	Bacteria Chlamydiae Chlamydiae Chlamydiales
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Chlamydiae Chlamydiae Chlamydiales Parachlamydiaceae Parachlamydia
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Bacteriovorax
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae Polynucleobacter
1	Bacteria Chlamydiae Chlamydiae Chlamydiales Simkaniaceae
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae

## Transect 2 Station 2 29 Mar 06 sediment (n=235)

50	*Bacteria
26	*Bacteria Proteobacteria Deltaproteobacteria
15	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
13	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
11	*Bacteria Proteobacteria Gammaproteobacteria
8	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
6	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Desulfuromonas
5	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_genera_in_sedis
5	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
5	*Bacteria Proteobacteria Betaproteobacteria
5	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
4	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
4	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
4	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacterium
3	*Bacteria Proteobacteria
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
3	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_gene_in_sedis
3	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
3	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp18
2	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales
2	Bacteria OP10 Unassigned Unassigned Unassigned OP10_genera_incertae_sedis
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
2	Bacteria Chloroflexi Anaerolineae
2	Bacteria BRC1 Unassigned Unassigned Unassigned BRC1_genera_incertae_sedis
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales
2	*Bacteria Firmicutes Clostridia Clostridiales
1	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales
1	*Bacteria Proteobacteria Deltaproteobacteria Myxococcales Polyangiaceae Byssovorax
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae Opiritus
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae genera_in_sedis
1	Bacteria WS3 Unassigned Unassigned Unassigned WS3_genera_incertae_sedis
1	Bacteria SR1 Unassigned Unassigned Unassigned SR1_genera_incertae_sedis
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Cystobacteraceae
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales Oceanospirillaceae
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales Syntrophaceae Desulfobacca
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5
1	*Bacteria Bacteroidetes

## Transect 2 Station 2 29 Mar 06 sediment (n=235) continued

■	1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
■	1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
■	1	Bacteria Chlamydiae Chlamydiae Chlamydiales Simkaniaceae Rhabdochlamydia
■	1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorpaceae
■	1	Bacteria Actinobacteria Actinobacteria
■	1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp22
■	1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp23
■	1	Bacteria Actinobacteria Actinobacteria Actinomycetales Propionibacteriaceae Propionibacterium
■	1	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Leptolinea
■	1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Clostridium
■	1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Sphingomonas
■	1	Bacteria Proteobacteria Betaproteobacteria Hydrogenophilales Hydrogenophilaceae Thiobacillus
■	1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfofrigus
■	1	*Bacteria Proteobacteria Alphaproteobacteria
■	1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
■	1	Bacteria Firmicutes Clostridia
■	1	Bacteria Firmicutes Mollicutes Incertae sedis 8 Erysipelotrichaceae Holdemania
■	1	Bacteria Gemmatimonadetes Gemmatimonadetes Gemmatimonadales Gemmatimonadaceae Gemmatimonas
■	1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geothermobacter

46	*Bacteria
22	*Bacteria Proteobacteria Deltaproteobacteria
18	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
13	*Bacteria Proteobacteria Gammaproteobacteria
12	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
9	*Bacteria Proteobacteria
8	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
6	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
6	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacterium
5	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Levilinea
4	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
4	*Bacteria Proteobacteria Betaproteobacteria
4	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
4	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae
4	*Bacteria Proteobacteria Alphaproteobacteria
3	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
3	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
3	Bacteria Chloroflexi Anaerolineae
2	*Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_genera_incertae_sedis
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae Desulfuromonas
2	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
2	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp10
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp22
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
2	Bacteria Chlamydiae Chlamydiae Chlamydiales
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	*Bacteria Bacteroidetes
1	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Leptolinea
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Caldilinea
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Ectothiorhodospiraceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
1	Bacteria Proteobacteria Gammaproteobacteria Legionellales Coxiellaceae
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp18
1	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Rhodobiaceae Parvibaculum
1	no_ref_taxonomy
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_genera_incertae_sedis
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp13
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacterales Syntrophaceae Desulfobacca
1	Bacteria Deferribacteres Deferribacteres Deferribacterales Incertae sedis 3 Caldithrix
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
1	Bacteria OP10 Unassigned Unassigned Unassigned OP10_genera_incertae_sedis
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodovulum
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfonema
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorpaceae
1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Haliangiaceae Haliangium
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Robiginitalea
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp2
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Erythrobacter

## Transect 2 Station 4 29 Mar 06 sediment (n=207)

41	*Bacteria
28	*Bacteria Proteobacteria Deltaproteobacteria
12	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
10	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae
10	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
8	*Bacteria Proteobacteria Betaproteobacteria
7	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae
6	*Bacteria Proteobacteria
6	*Bacteria Proteobacteria Gammaproteobacteria
6	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
5	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae
5	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfobacterium
4	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales
3	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobulbaceae Desulfobulbus
3	Bacteria Proteobacteria Gammaproteobacteria Chromatiales
3	Bacteria OP10 Unassigned Unassigned Unassigned OP10_genera_incertae_sedis
3	*Bacteria Proteobacteria Alphaproteobacteria
3	*Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp7
2	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Chromatiaceae
2	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Clostridium
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae
2	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Desulfuromonaceae
2	*Bacteria Bacteroidetes
2	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Ectothiorhodospiraceae
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
2	Bacteria Chloroflexi Anaerolineae
2	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp21
2	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 5 Subdivision 5_gen_in_sedis
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales Syntrophaceae
1	Bacteria SR1 Unassigned Unassigned Unassigned SR1_genera_incertae_sedis
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp22
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales Syntrophobacteraceae Syntrophobacter
1	*Bacteria Bacteroidetes Bacteroidetes Bacteroidales
1	Bacteria Proteobacteria Deltaproteobacteria Syntrophobacteriales Syntrophobacteraceae
1	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Helicobacteraceae Sulfurovum
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Pirellula
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
1	*Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
1	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Leptolinea
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5
1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonales Geobacteraceae Geothermobacter
1	Bacteria Proteobacteria Deltaproteobacteria Desulfobacterales Desulfobacteraceae Desulfonema
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
1	Bacteria Proteobacteria Betaproteobacteria Hydrogenophilales Hydrogenophilaceae Thiobacillus
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales

## Transect 6 Station 1 27 Jan 06 (n=111)

13	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
12	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
10	*Bacteria Proteobacteria Alphaproteobacteria
7	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
7	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
7	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
4	*Bacteria Proteobacteria Gammaproteobacteria
3	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae Polynucleobacter
3	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
2	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae
2	*Bacteria Proteobacteria Betaproteobacteria
2	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
2	*Bacteria Bacteroidetes
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	*Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Dechloromonas
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	*Bacteria Proteobacteria
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Bacteriovorax
1	Bacteria Proteobacteria Deltaproteobacteria Bdellovibrionales Bacteriovoracaceae Peredibacter
1	Bacteria Actinobacteria Actinobacteria
1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Cellvibrio
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae
1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae Aquimonas
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales Acetobacteraceae
1	*Bacteria
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
1	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Hydrogenophaga
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Curvibacter
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	*Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
1	*Bacteria Proteobacteria Alphaproteobacteria Rhizobiales



Transect 6 Station 4 27 Jan 06 (n=142)

51	*Bacteria Proteobacteria Alphaproteobacteria
25	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
9	*Bacteria Actinobacteria Actinobacteria Actinomycetales
8	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
6	*Bacteria Proteobacteria Gammaproteobacteria
3	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
3	*Bacteria Proteobacteria
3	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
3	*Bacteria
3	*Bacteria Bacteroidetes
2	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
2	Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales Rhodospirillaceae
2	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
2	*Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae
2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales
1	Bacteria Proteobacteria Gammaproteobacteria Alteromonadales Incertae sedis 7
1	*Bacteria Proteobacteria Betaproteobacteria
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae Opiritus
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Xiphinematobacteriaceae gen_in_sedis
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opiritaceae
1	*Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Hongiella
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Isosphaera
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Pirellula
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Polaribacter
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Crocinitomix
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales

## Transect 6 Station 1 29 Mar 06 (n= 113)

24	*Bacteria Proteobacteria Alphaproteobacteria
10	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
9	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
7	*Bacteria
6	*Bacteria Proteobacteria Gammaproteobacteria
5	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
5	*Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
5	*Bacteria Proteobacteria Betaproteobacteria
4	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
4	*Bacteria Actinobacteria Actinobacteria Actinomycetales
4	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
3	*Bacteria Proteobacteria
3	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
3	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
3	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
2	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
2	Bacteria Proteobacteria Gammaproteobacteria Methylococcales Methylococcaceae
2	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
1	Bacteria Proteobacteria Gammaproteobacteria Chromatiales Ectothiorhodospiraceae
1	*Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
1	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Erythrobacter
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae Mycetocola
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Malikia
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Oxalobacteraceae

## Transect 6 Station 4 29 Mar 06 (n=129)

49	*Bacteria Proteobacteria Alphaproteobacteria
17	*Bacteria Proteobacteria Gammaproteobacteria
11	*Bacteria Actinobacteria Actinobacteria Actinomycetales
7	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae Methylophilus
5	*Bacteria
5	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
5	*Bacteria Proteobacteria
4	*Bacteria Proteobacteria Betaproteobacteria
3	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
3	*Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
3	*Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothecae
2	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Rhodobacter
2	*Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae
1	*Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
1	Bacteria Proteobacteria Gammaproteobacteria Oceanospirillales
1	*Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae Owenweeksia
1	Bacteria Actinobacteria Actinobacteria
1	*Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Hongiella
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1
1	*Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Roseovarius

16	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Zoogloea
16	Bacteria Proteobacteria Epsilonproteobacteria Campylobacterales Campylobacteraceae Arcobacter
11	Bacteria Proteobacteria Gammaproteobacteria
9	Bacteria Proteobacteria Betaproteobacteria
9	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Aeromonas
7	Bacteria
7	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae
7	Bacteria Proteobacteria Alphaproteobacteria
7	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Dechloromonas
6	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Nannocystaceae
6	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae
6	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales
6	Bacteria Proteobacteria
6	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter
5	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5
5	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae Tolumonas
5	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Acidovorax
5	Bacteria Firmicutes Clostridia Clostridiales
4	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea
4	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae
4	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Propionivibrio
4	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Planctomyces
4	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Nitrospira
4	Bacteria Proteobacteria Deltaproteobacteria
4	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae
4	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp4
4	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae Dokdonella
4	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Cloacibacterium
3	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Flavobacterium
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae
3	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae Hyphomicrobium
3	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae
3	Bacteria Actinobacteria Actinobacteria Actinomycetales
3	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales
3	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Methylocystaceae Methylocystis
3	Bacteria Proteobacteria Deltaproteobacteria Myxococcales
3	Bacteria Fusobacteria Fusobacteria Fusobacteriales Fusobacteriaceae
3	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Aquabacterium
3	Bacteria Bacteroidetes
3	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae
3	Bacteria Proteobacteria Deltaproteobacteria Myxococcales Polyangiaceae Byssovorax
2	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae
2	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Bacteroidaceae Bacteroides
2	Bacteria Proteobacteria Betaproteobacteria Burkholderiales
2	Bacteria Proteobacteria Alphaproteobacteria Rhodospirillales
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Niastella
2	Bacteria Bacteroidetes Bacteroidetes Bacteroidales
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Crenotrichaceae Terrimonas
2	Bacteria Fusobacteria Fusobacteria Fusobacteriales Fusobacteriaceae Propionigenium
2	Bacteria Proteobacteria Alphaproteobacteria Sphingomonadales Sphingomonadaceae Novosphingobium
2	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Prevotellaceae Prevotella
2	Bacteria Firmicutes
2	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae
2	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae

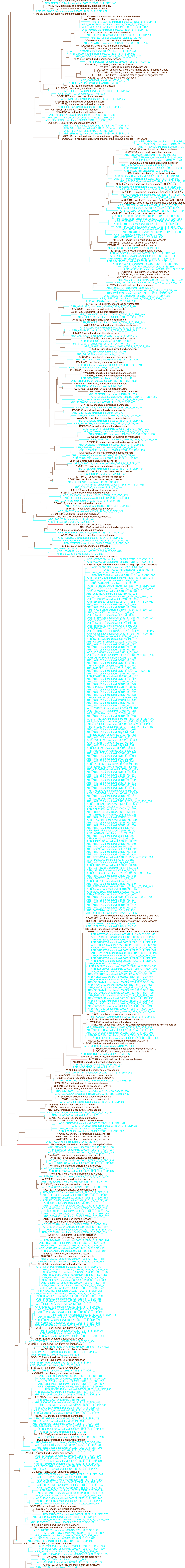
## Raw Sewage Gct (n=291) continued

1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Opitutaceae Opitutus
1	Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae Formivibrio
1	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Subdivision 3 Subdivision 3_gen_in_sedis
1	Bacteria Proteobacteria Betaproteobacteria Nitrosomonadales Nitrosomonadaceae Nitrosomonas
1	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae Thauera
1	Bacteria Proteobacteria Betaproteobacteria Methylophilales Methylophilaceae
1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Alkanindiges
1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Klebsiella
1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales
1	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfomicrobiaceae Desulfomicrobium
1	Bacteria Proteobacteria Betaproteobacteria Rhodocyclales Rhodocyclaceae
1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae Pseudomonas
1	Bacteria Spirochaetes Spirochaetes Spirochaetales Spirochaetaceae Spirochaeta
1	Bacteria Proteobacteria Alphaproteobacteria Caulobacterales Caulobacteraceae Brevundimonas
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Flexibacteraceae Arcicella
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Haliscomenobacter
1	Bacteria Bacteroidetes Sphingobacteria Sphingobacteriales Saprospiraceae Lewinella
1	Bacteria Chloroflexi Chloroflexi Chloroflexales Chloroflexaceae Roseiflexus
1	Bacteria Chloroflexi Anaerolineae Caldilineales Caldilineacea Caldilinea
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae Robiginitalea
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Flavobacteriaceae
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp7
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp6
1	Bacteria Actinobacteria Actinobacteria Actinomycetales Microbacteriaceae Microbacterium
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Paludibacter
1	Bacteria Bacteroidetes Flavobacteria Flavobacteriales Cryomorphaceae
1	Bacteria Bacteroidetes Bacteroidetes Bacteroidales Porphyromonadaceae Parabacteroides
1	Bacteria Cyanobacteria Cyanobacteria Unassigned Family 1.1 Cyanothece
1	Bacteria Fibrobacteres Fibrobacteres Fibrobacterales Fibrobacteraceae Fibrobacter
1	Bacteria Acidobacteria Acidobacteria Acidobacteriales Acidobacteriaceae Gp10
1	Bacteria Planctomycetes Planctomycetacia Planctomycetales Planctomycetaceae Gemmata
1	Bacteria Proteobacteria Alphaproteobacteria Rhizobiales Hyphomicrobiaceae
1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae Loktanella
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Diaphorobacter
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Comamonas
1	Bacteria Nitrospira Nitrospira Nitrospirales Nitrospiraceae Magnetobacterium
1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Ruminococcus
1	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Mitsuoella
1	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Streptococcus
1	Bacteria Firmicutes Clostridia Clostridiales Acidaminococcaceae Veillonella
1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Faecalibacterium
1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia
1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae
1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Incertae sedis 5 Leptothrix



Figure S4. ARB-generated tree showing placement of archaeal sequences from our samples.

Refer to Table 1 for sample name information.



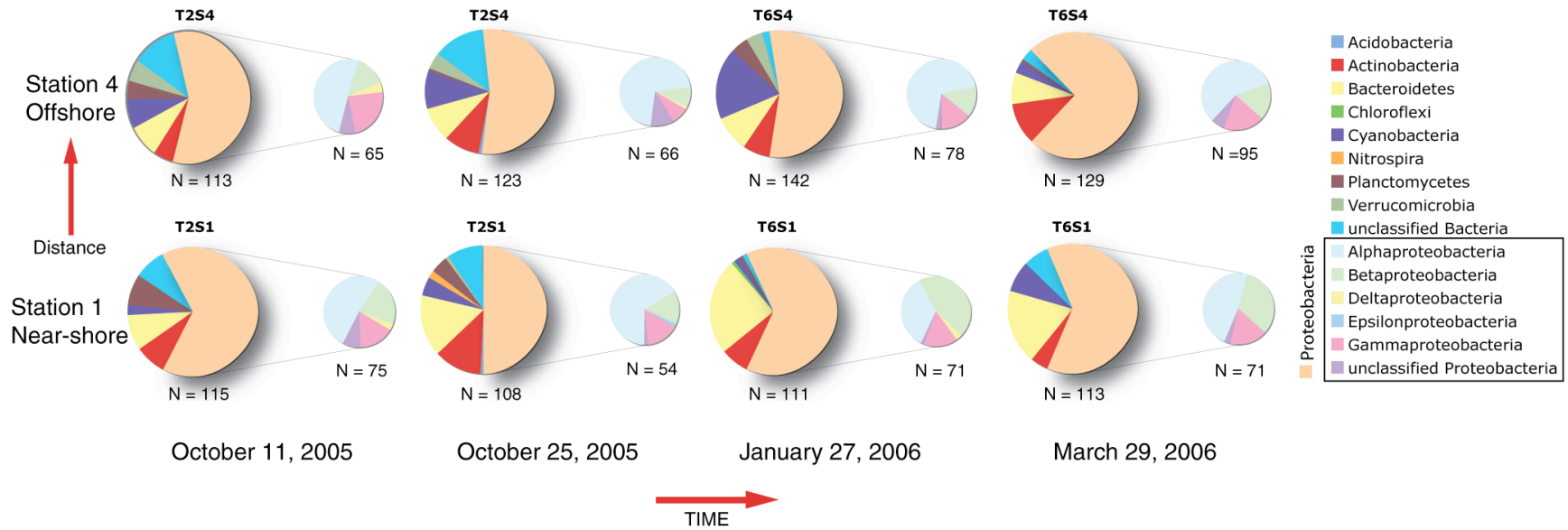


Figure S5. Pie charts showing changes in relative abundances of bacterial phyla and classes of Proteobacteria over time at transect stations near-shore and offshore.



Figure S6. Non-Metric Multidimensional Scaling 3-d ordination of 28 samples based on standardization by total and Log(X+1) transformed OTU abundances and Bray-Curtis similarities. Refer to Table 1 for sample codes.

