

**Table S3. Summary of the number of pyrosequences obtained for each major taxonomic division for sediment samples collected from Grand Isle, Louisiana, 2010-2011.**

Sample Number	Alphaproteobacteria	Betaproteobacteria	Gammaproteobacteria	Deltaproteobacteria	Epsilonproteobacteria	Acidobacteria	Actinobacteria	Bacteroidetes	Chloroflexi	Firmicutes	Gemmatimonadetes	Nitrospira	Planctomycetes	Proteobacteria	Spirachaetes	Verrucomicrobia	Cyanobacteria	TM7	WS3	Tenericutes	SR1	Chrysiogenetes	OD1	OP10	BRC1	Fibrobacteres	OP11	UnclassifiedWS3	UnclassifiedTM7	UnclassifiedOD1	UnclassifiedSR1	UnclassifiedOP10	UnclassifiedOP11	Unclassified-BRC1	Total
HOR-10-18A	73	88	250	4	0	0	14	130	81	546	0	0	0	415	0	2	51	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1369
HOR-10-18B	84	16	38	32	1882	368	406	202	0	2358	2	2	13	2052	3	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5463
HOR-10-39A	355	774	1113	67	146	82	202	435	19	1161	116	0	12	2455	2	163	88	19	0	1	0	0	0	13	0	0	0	0	19	0	0	13	0	0	4792
HOR-10-39B	374	398	1238	254	55	325	243	702	151	1226	70	56	91	2319	5	96	66	8	3	0	0	3	2	3	0	0	0	3	8	2	0	3	0	0	5462
HOR-11-73A	2402	149	507	64	0	0	1890	171	6	444	0	40	43	3122	0	9	19	111	0	0	0	0	0	0	0	0	0	0	111	0	0	0	0	0	5901
HOR-11-73B	826	187	349	64	5	76	1253	76	50	187	43	9	47	1428	0	53	0	5	0	0	0	0	0	6	0	0	0	0	5	0	0	6	0	0	3235
HOR-10-20A	264	100	2239	261	78	604	539	413	50	2846	107	10	161	2942	0	142	604	0	3	0	2	0	0	0	0	0	0	3	0	0	2	0	0	0	8514
HOR-10-20B	313	15	1394	357	60	782	231	79	230	1190	63	39	277	2139	0	57	23	0	8	0	0	1	0	0	0	0	0	8	0	0	0	0	0	0	5290
HOR-10-42A	285	745	1736	267	17	288	113	248	169	354	29	10	111	3050	5	37	34	3	8	1	0	0	0	0	6	0	0	8	3	0	0	0	0	6	4503
HOR-11-74A	424	143	89	38	0	0	1722	133	11	257	11	0	3	694	0	1	0	31	0	9	0	0	0	0	0	0	0	0	31	0	0	0	0	0	2596
HOR-11-74B	515	188	192	187	4	303	888	70	131	108	122	5	69	1086	16	108	13	141	0	0	0	0	3	0	1	0	0	0	141	3	0	0	0	1	3100
HOR-11-75A	1615	53	3819	46	3	0	147	740	22	112	3	3	89	5536	1	28	326	15	0	0	0	0	0	0	1	0	0	0	15	0	0	0	0	1	7111
HOR-11-75B	876	653	802	653	18	531	204	96	328	209	100	476	209	3002	15	104	17	17	6	0	0	0	0	1	1	0	0	6	17	0	0	1	0	1	5504
HOR-11-76A	2266	25	826	66	5	0	12	1040	12	41	2	1	63	3188	3	136	1936	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6499
HOR-11-76B	1512	274	2458	618	19	667	797	173	177	289	16	33	202	4881	28	19	305	111	12	2	0	2	4	0	0	0	0	12	111	4	0	0	0	0	7946
HOR-11-77A	1158	84	656	240	17	0	604	41	307	1014	0	4	20	2155	3	208	864	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5356
HOR-11-77B	765	45	3301	490	390	150	315	384	167	254	26	13	88	4991	47	24	7	7	4	17	0	0	2	0	0	0	0	4	7	2	0	0	0	0	6608
HOR-11-78A	2981	21	2285	63	4	0	62	686	12	51	1	4	5	5354	0	53	129	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	6382
HOR-11-78B	726	70	1816	9	4	403	326	517	182	378	65	29	117	3067	5	34	8	4	2	1	0	0	0	0	0	0	2	4	0	0	0	0	0	0	5236
HOR-11-79A	1213	34	2592	116	0	0	69	1689	52	91	17	4	34	3955	5	12	40	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6057
HOR-11-79B	663	55	1233	472	5	447	222	1089	189	350	69	13	117	2428	4	33	63	1	10	2	0	0	0	0	0	0	10	1	0	0	0	0	0	0	4952

Sample Number	<i>Alphaproteobacteria</i>	<i>Betaproteobacteria</i>	<i>Gammaproteobacteria</i>	<i>Deltaproteobacteria</i>	<i>Epsilonproteobacteria</i>	<i>Acidobacteria</i>	<i>Actinobacteria</i>	<i>Bacteroidetes</i>	<i>Chloroflexi</i>	<i>Firmicutes</i>	<i>Gemmatimonadetes</i>	<i>Nitrospira</i>	<i>Planctomycetes</i>	<i>Proteobacteria</i>	<i>Spirochaetes</i>	<i>Verruconicrobia</i>	<i>Cyanobacteria</i>	TM7	WS3	<i>Tenericutes</i>	SR1	<i>Chrysiogenetes</i>	OD1	OP10	BRC1	<i>Fibrobacteres</i>	OP11	UnclassifiedWS3	UnclassifiedTM7	UnclassifiedOD1	UnclassifiedSR1	UnclassifiedOP10	UnclassifiedOP11	Unclassified-BRC1	Total
HOR-10-21B	112	54	498	123	33	265	80	472	145	5694	76	0	111	820	0	5	0	0	10	0	0	0	7	0	0	0	0	10	0	7	0	0	0	0	7816
HOR-10-43A	367	61	1308	299	82	170	55	332	106	2330	9	0	62	2117	13	31	216	0	11	21	0	0	0	0	0	2	0	11	0	0	0	0	0	0	5540
HOR-11-80A	431	4	1886	223	6	163	167	810	96	566	32	4	105	2620	3	46	40	2	6	8	0	0	0	0	0	0	6	2	0	0	0	0	0	4712	

