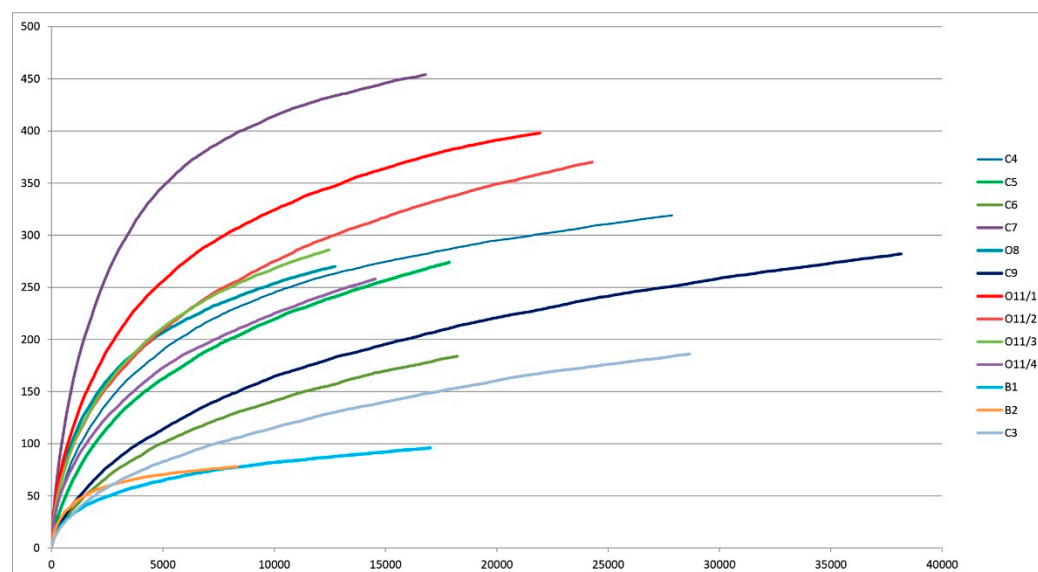
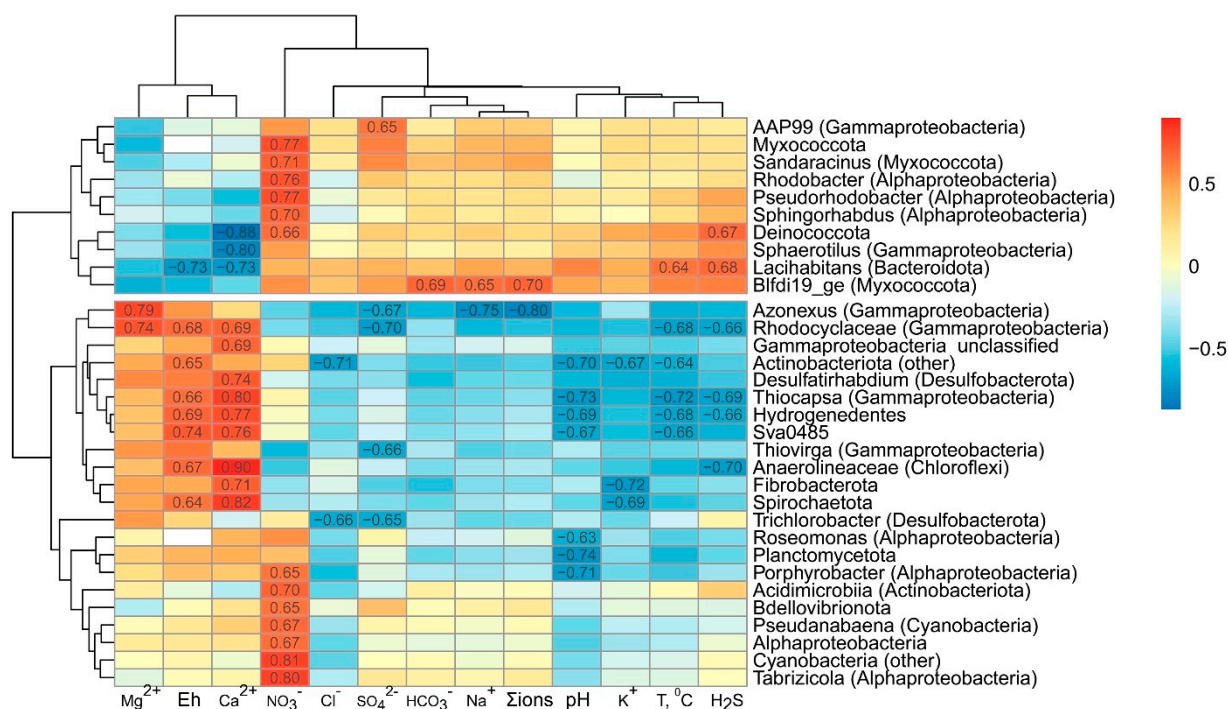


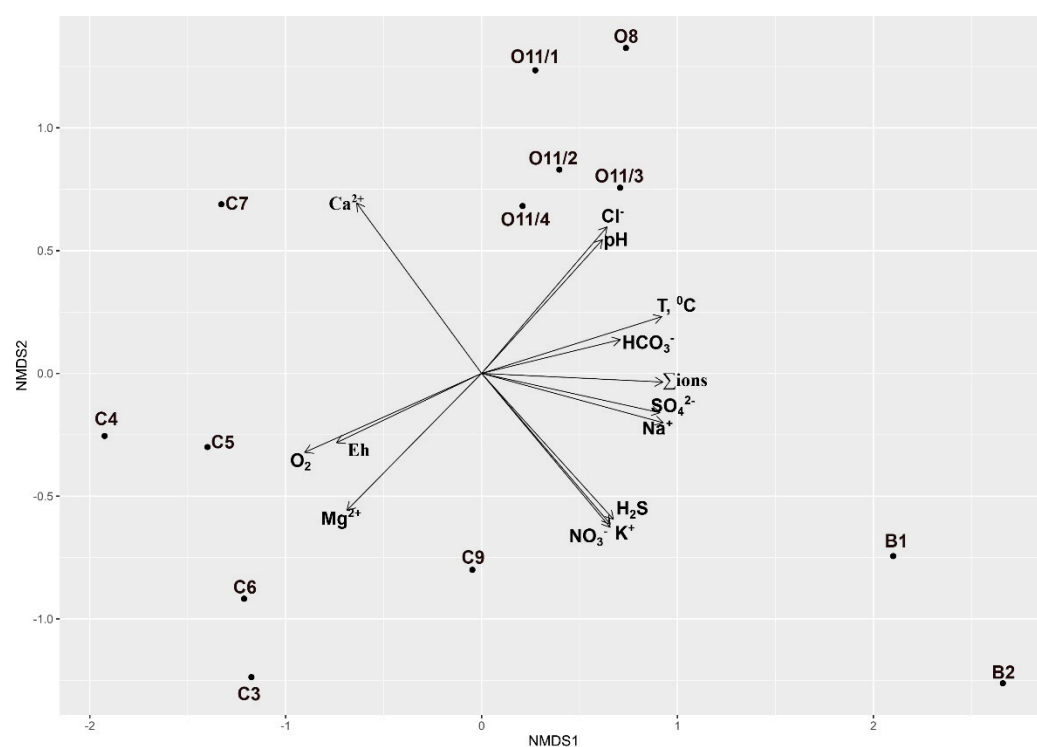
# Supplementary Materials.



**Figure S1.** Rarefaction curves plotting the number observed OTUs as a function of the number of sequences defined at genetic distance level of 0.03.



**Figure S2.** A heat map (with Spearman's rank correlation coefficient) showing correlation between dominant OTUs (97% identity) with abiotic factors. Colors indicate the  $r$  values of Spearman's rank correlation coefficient. The influence of a factor was assumed to be reliable if the  $p$ -value of the Spearman statistics was  $< 0.05$ .



**Figure S3.** Non-metric multidimensional scaling (NMDS) based on Bray-Curtis dissimilarities shows relationships between the relative bacterial abundance of each sample and environmental parameters.

**Table S1.** Physical and chemical parameters of water in Zmeevaya bay (concentration of ion-mg/l).

site	T, °C	pH	Eh, mB	HCO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	NH <sub>4</sub> <sup>+</sup>
B1	42.6	9.6	-441	87	23	6.2	130	120	2.8	1.8	0.01	-
B2	39.0	9.2	-442.6	103	27	7.9	150	132	3.2	3.1	0.01	-
C3	18.8	8.5	-230	47.2	0.51	0.14	8.90	2.50	0.90	13.1	0.98	0.06
C4	18.5	8.4	-152.7	81.3	0.35	0.06	6.86	4.70	0.60	20.0	1.36	0.06
C5	19.4	8.9	-198.8	75.7	21.4	0.00	60.9	40.9	1.20	18.8	0.61	0.34
C6	23.8	9.1	-420	71.9	5.48	0.00	7.06	15.0	1.20	11.5	1.90	0.22
C7	18.0	8.3	-231	59.0	3.71	0.19	16.2	2.60	0.70	20.5	1.23	0.10
O8	32.9	9.6	-360	84.1	27.8	0.00	60.5	51.7	1.20	16.1	0.05	0.14
C9	21.6	9.0	-285	86.4	14.8	0.00	43.6	36.4	2.80	15.2	0.98	0.26
O11	32.3	9.6	-426	84.0	20.5	0.00	56.5	51.1	1.20	16.1	0.06	-
C12	19.1	7.8	+150	69.0	0.26	0.00	5.21	3.40	1.00	16.3	2.98	0.01

"-" not measured.

**Table S2.** Total and unique OTUs in samples.

Sample	Number of OTU	unique OTU
B1 B2 O11/1-O11/4 O8 C3-C9 (all samples)	1	Otu0004
B1 O11/1-O11/4 B2 C5-C9	1	Otu0016
B1 O11/1-O11/4 C3- C9 O8	2	Otu0009 Otu0001

O11/1-O11/4 O8 B2 C3-C9	1	Otu0050
B1 O11/1-O11/4 B2 3 4 6 O8 9	1	Otu0003
O11/1-O11/4 3 4 5 6 7 8 9 (II and III clusters)	6	Otu0026 Otu0005 Otu0103 Otu0071 Otu0037 Otu0023
B1 O11/1-O11/4 C7	1	Otu0466
O11/1-O11/4	32	Otu0101 Otu0244 Otu0225 Otu0110 Otu0362 Otu0077 Otu0138 Otu0263 Otu0090 Otu0398 Otu0594 Otu0095 Otu0204 Otu0403 Otu0510 Otu0047 Otu0763 Otu0250 Otu0328 Otu0134 Otu0091 Otu0028 Otu0142 Otu0684 Otu0088 Otu0048 Otu0069 Otu0259 Otu0113 Otu0059 Otu0066 Otu0122
B1 B2 (I cluster)	19	Otu0271 Otu0184 Otu0786 Otu0541 Otu0378 Otu0388 Otu0273 Otu0175 Otu0380 Otu0757 Otu0821 Otu0677 Otu0806 Otu0369 Otu0660 Otu0385 Otu0342 Otu0604 Otu0042
C3 C4 C5 C6 C7 C9 (III cluster)	13	Otu0171 Otu0077 Otu0008 Otu0214 Otu0037 Otu0479 Otu0180 Otu0132 Otu0085 Otu0091 Otu0014 Otu0079 Otu0066
B1	6	Otu0526 Otu0653 Otu0248 Otu0524 Otu0642 Otu0613
B2	24	Otu0106 Otu0482 Otu0356 Otu0625 Otu0163 Otu0861 Otu0877 Otu0192 Otu0648 Otu0654 Otu0460 Otu0859 Otu0559 Otu0326 Otu0781 Otu0390 Otu0236 Otu0249 Otu0632 Otu0463 Otu0361 Otu0578 Otu0773 Otu0890
C3	3	Otu0716 Otu0844 Otu0562
C4	33	Otu0680 Otu0579 Otu0915 Otu0508 Otu0817 Otu0690 Otu0522 Otu0568 Otu0804 Otu0182 Otu0649 Otu0893 Otu0694 Otu0668 Otu0764 Otu0387 Otu0516 Otu0547 Otu0575 Otu0874 Otu0790 Otu0691 Otu0285 Otu0481 Otu0419 Otu0777 Otu0112 Otu0565 Otu0891 Otu0855 Otu0379 Otu0529 Otu0836
C5	5	Otu0738 Otu0735 Otu0538 Otu0742 Otu0682
C6	4	Otu0500 Otu0672 Otu0818 Otu0372
C7	78	Otu0302 Otu0381 Otu0517 Otu0918 Otu0506 Otu0509 Otu0888 Otu0798 Otu0871 Otu0674 Otu0849 Otu0614 Otu0878 Otu0917 Otu0488 Otu0916 Otu0611 Otu0433 Otu0760 Otu0643 Otu0177 Otu0869 Otu0492 Otu0750 Otu0431 Otu0921 Otu0805 Otu0770 Otu0696 Otu0346 Otu0771 Otu0569 Otu0525 Otu0595 Otu0548 Otu0329 Otu0769 Otu0181 Otu0797 Otu0857 Otu0896 Otu0438 Otu0897 Otu0731 Otu0826 Otu0628 Otu0904 Otu0809 Otu0724 Otu0655 Otu0829 Otu0608 Otu0707 Otu0720 Otu0093 Otu0440 Otu0747 Otu0437 Otu0444 Otu0834 Otu0503 Otu0808 Otu0486 Otu0693 Otu0860 Otu0528 Otu0854 Otu0609 Otu0848 Otu0485

		Otu0851 Otu0281 Otu0551 Otu0839 Otu0384 Otu0353 Otu0845 Otu0675
O11/1	27	Otu0152 Otu0350 Otu0465 Otu0688 Otu0635 Otu0908 Otu0534 Otu0858 Otu0572 Otu0820 Otu0391 Otu0886 Otu0532 Otu0796 Otu0843 Otu0912 Otu0646 Otu0557 Otu0374 Otu0683 Otu0772 Otu0733 Otu0801 Otu0748 Otu0902 Otu0765 Otu0411
O11/2	2	Otu0706 Otu0697
O11/3	5	Otu0307 Otu0741 Otu0421 Otu0624 Otu0665
O11/4	2	Otu0767 Otu0318