

Supplementary Online Materials

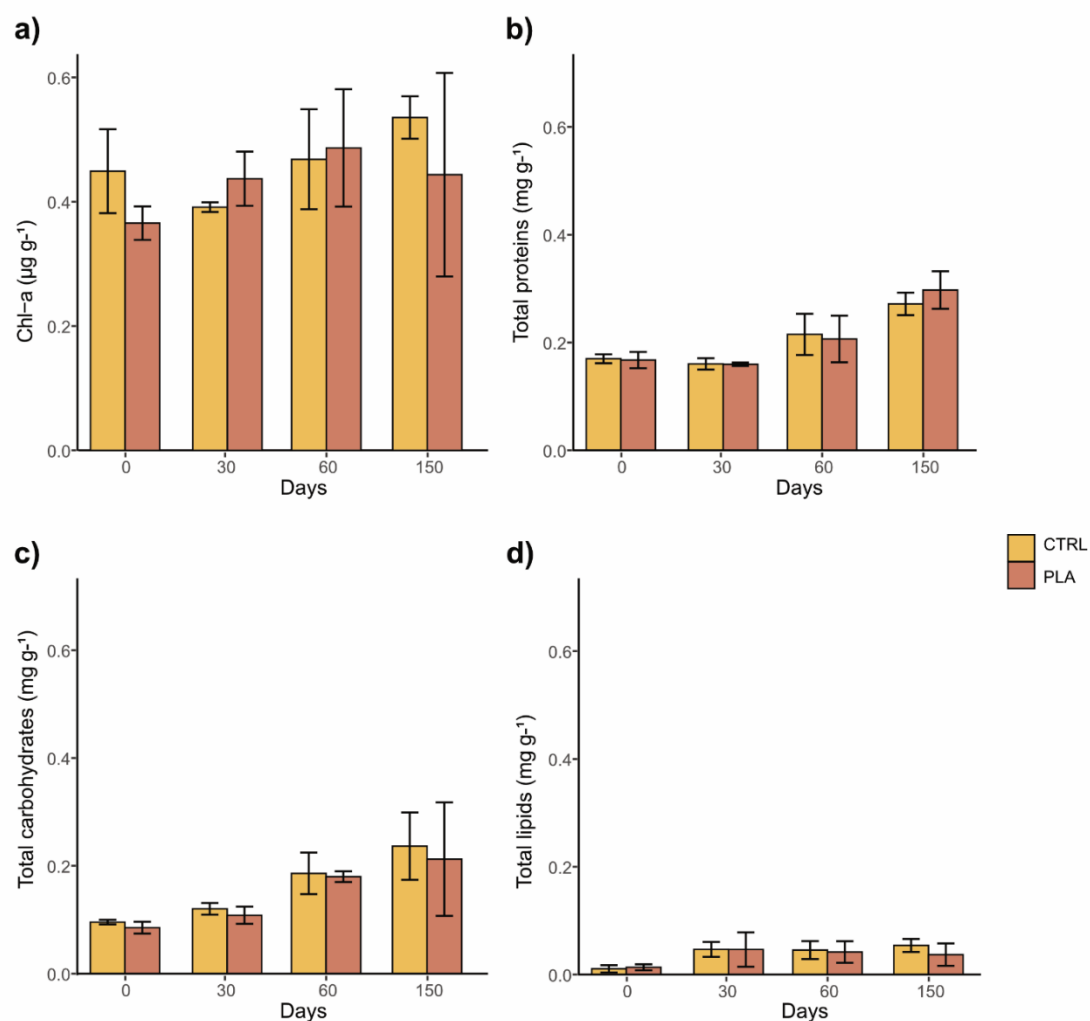
Bioplastics spark viral activity, reshape microbiomes and accelerate organic matter degradation in the marine environment

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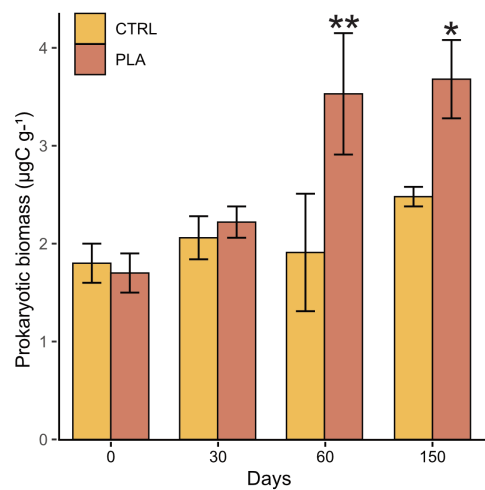
Supplementary figures: Supplementary Figures 1-11

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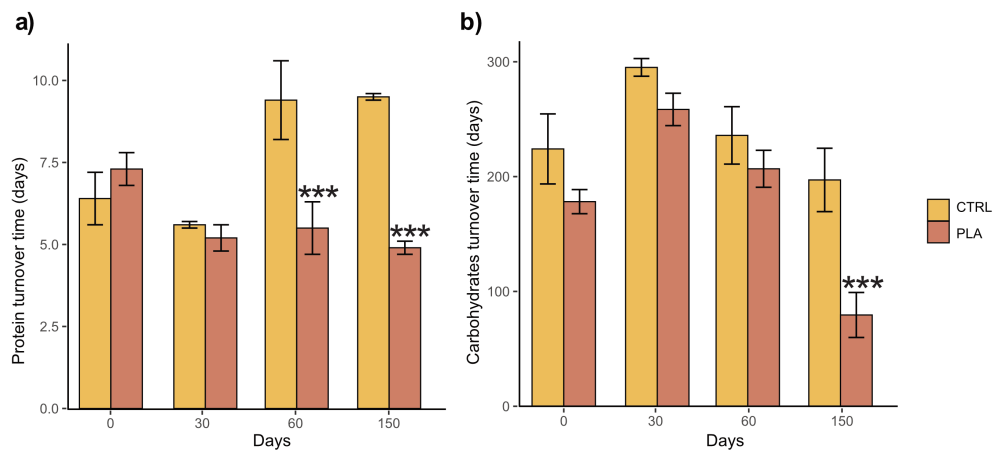
Supplementary Figures



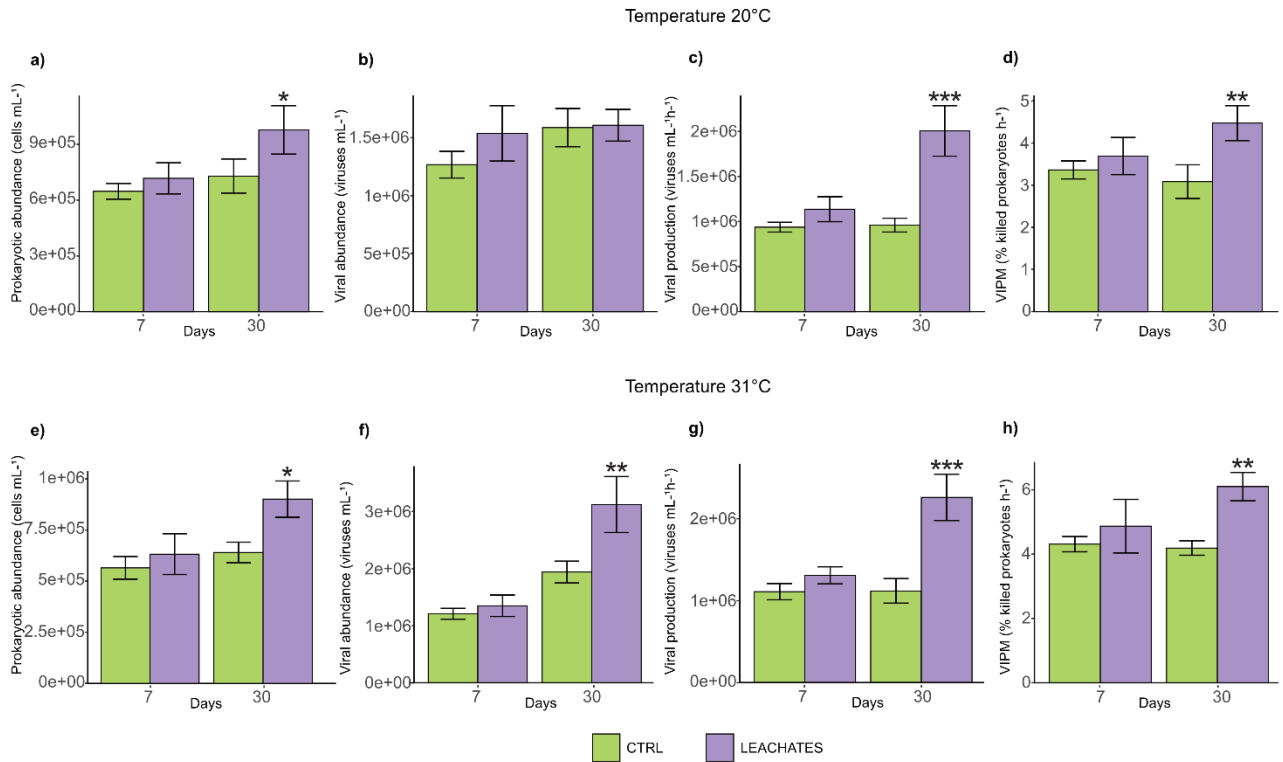
Supplementary Figure 1. Phytopigment and organic matter concentrations in the sediments exposed to the PLA contamination. a) Patterns of chlorophyll-*a*, **b)** protein, **c)** carbohydrate, and **d)** lipid concentrations. Reported are standard deviations ($\pm$). (Supplementary Table 1).



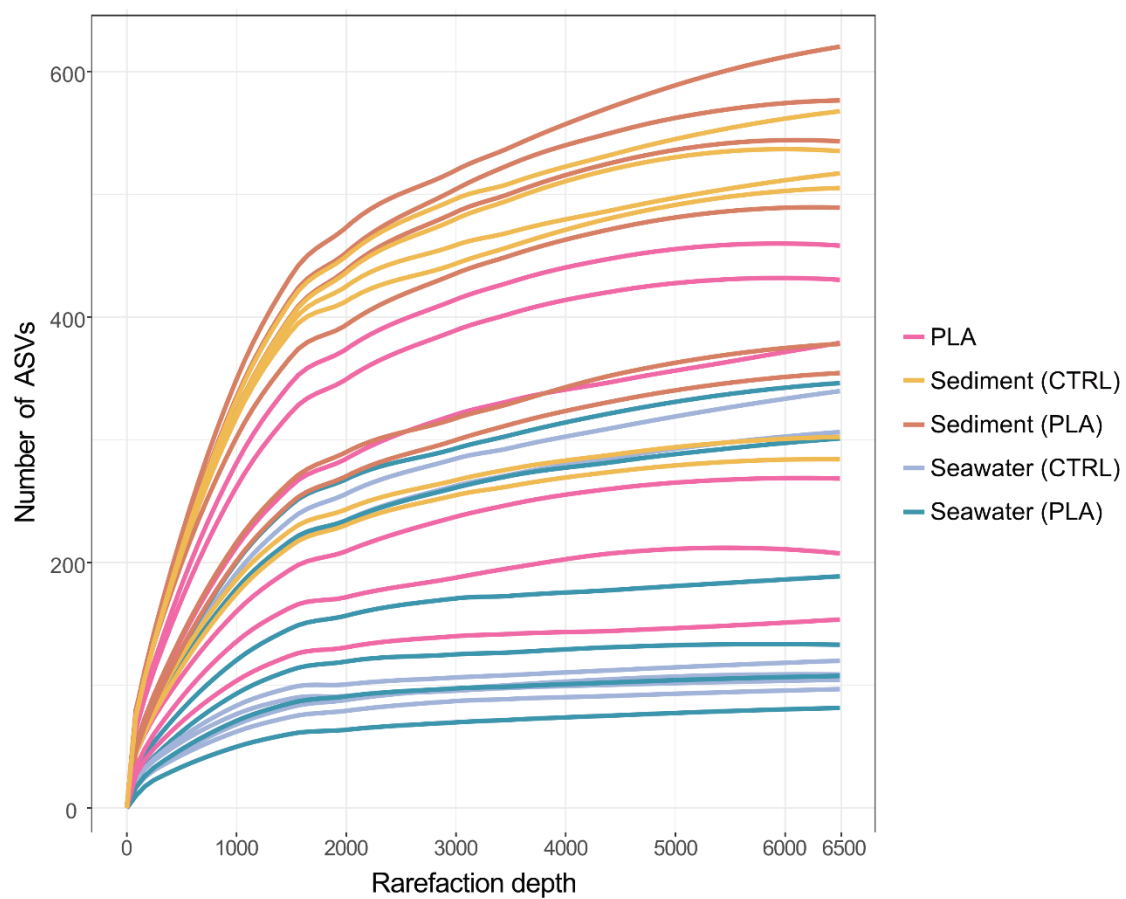
Supplementary Figure 2. Prokaryotic biomass in the sediments exposed to the PLA contamination. Prokaryotic biomass in the sediments contaminated with PLA (PLA) and in the control (CTRL) during the time-course experiment. Reported are standard deviations ($\pm$). Asterisks (*) indicate significant differences compared to the control. Significance values: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$ (Supplementary Table 2).



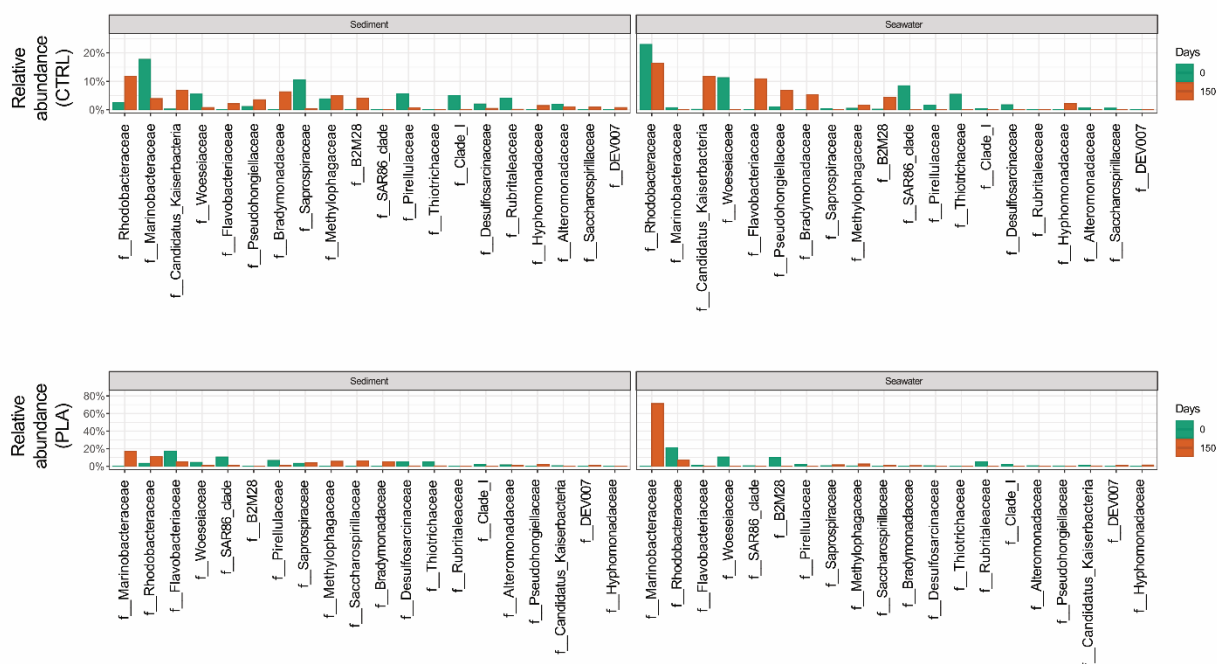
Supplementary Figure 3. Turnover times of protein and carbohydrate concentrations in sediments exposed to the PLA contamination. Turnover time of protein **a)** and carbohydrate **b)**, concentrations in the sediments contaminated with PLA (PLA) and in the control (CTRL) during the time-course experiment. Reported are standard deviations ($\pm$). Asterisks (*) indicate significant differences compared to the control. Significance values: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$ (Supplementary Table 2).



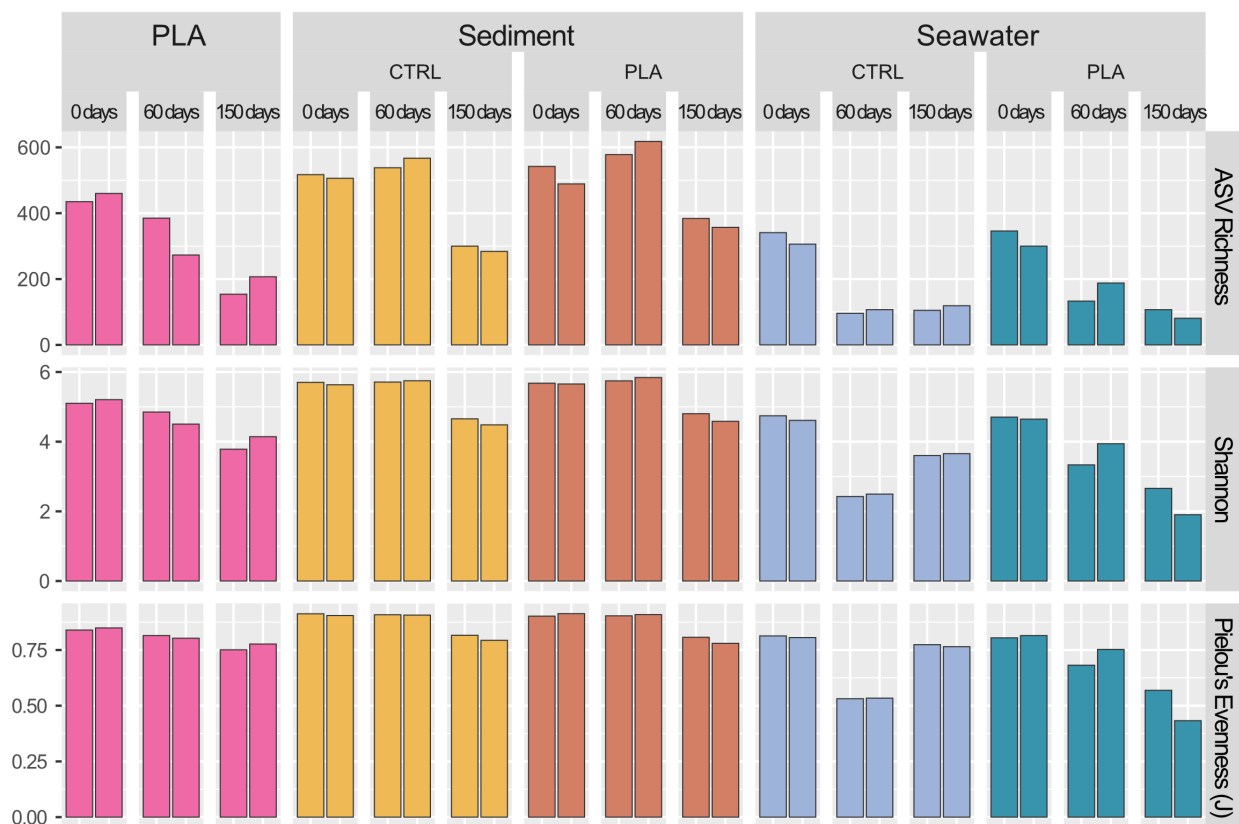
Supplementary Figure 4. Prokaryotic abundance, and viral abundance, production and induced-prokaryotic mortality in systems exposed to PLA leachates and high temperature. Prokaryotic abundance **a)**, viral abundance **b)**, viral production **c)** and virus-induced prokaryotic mortality **d)** in systems added with PLA leachates (LEACHATES) and in the control (CTRL) at 20 °C. Prokaryotic abundance **e)**, viral abundance **f)**, viral production **g)**, and virus-induced prokaryotic mortality **h)** in systems added with PLA leachates (LEACHATES) and in the control (CTRL) at 31 °C. Reported are standard deviations ($\pm$). Asterisks (*) indicate significant differences compared to the control. Significance values: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$ (Supplementary Table 4).



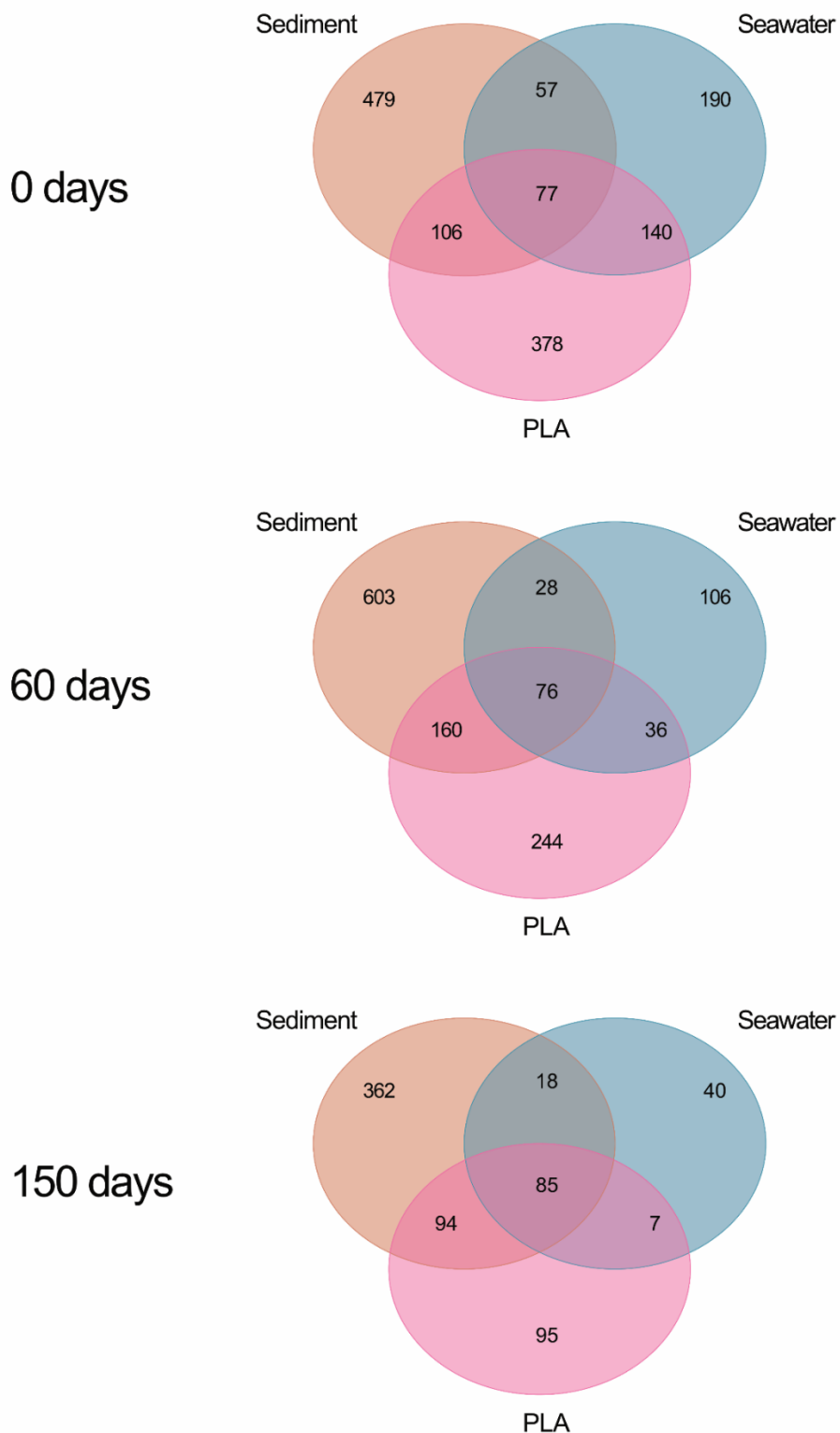
Supplementary Figure 5. Rarefaction curves showing the number of observed ASVs as a function of rarefaction depth for each sample type (PLA, seawater, and sediment), treatment condition (control and PLA-contaminated), and time points.



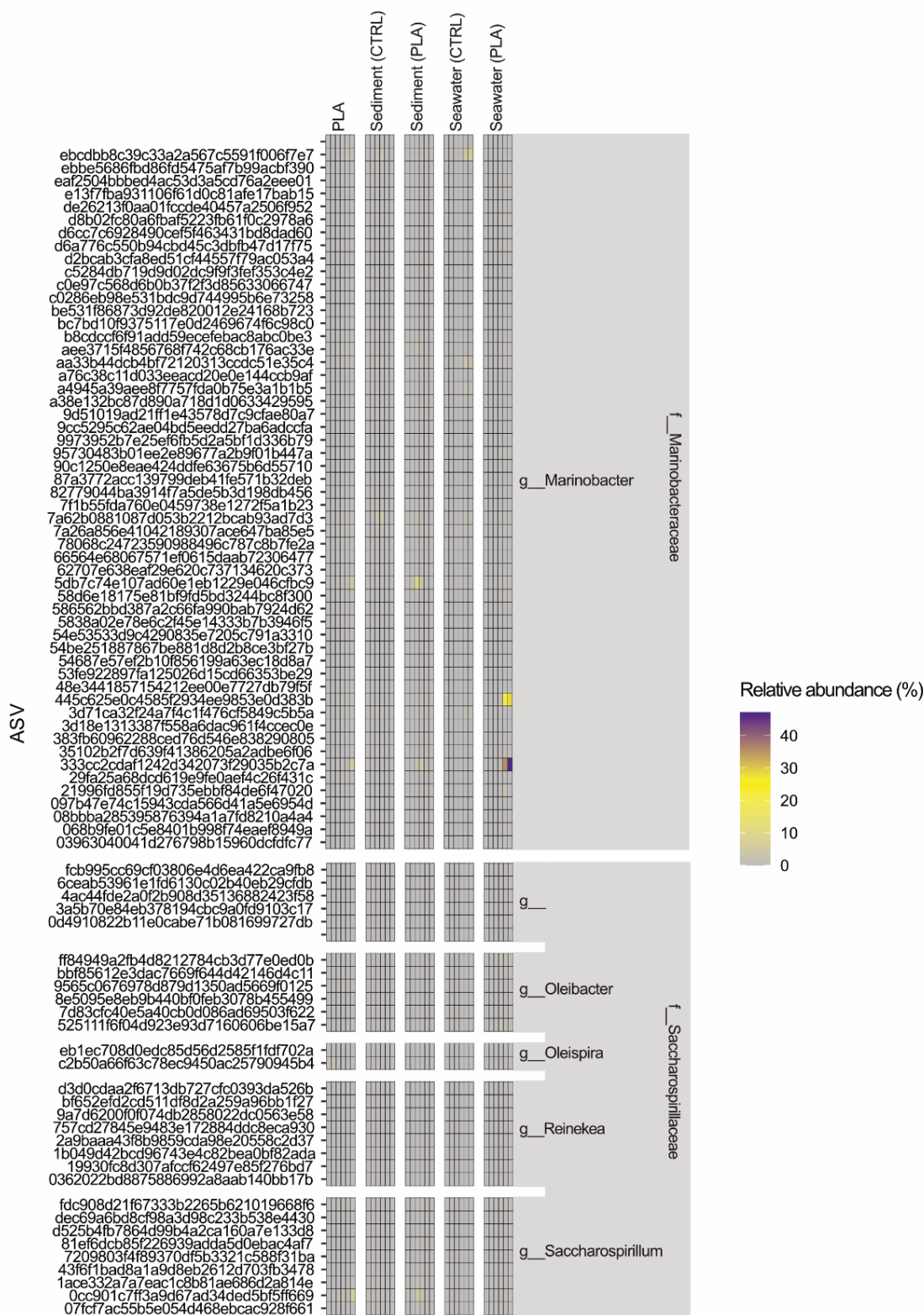
Supplementary Figure 6. Relative abundances of bacterial families in control and PLA-contaminated samples. Barplots showing average relative abundances of families (as a percentage of sequences on the total number of sequences in each sample after rarefaction) in seawater and sediment samples with and without PLA contamination.



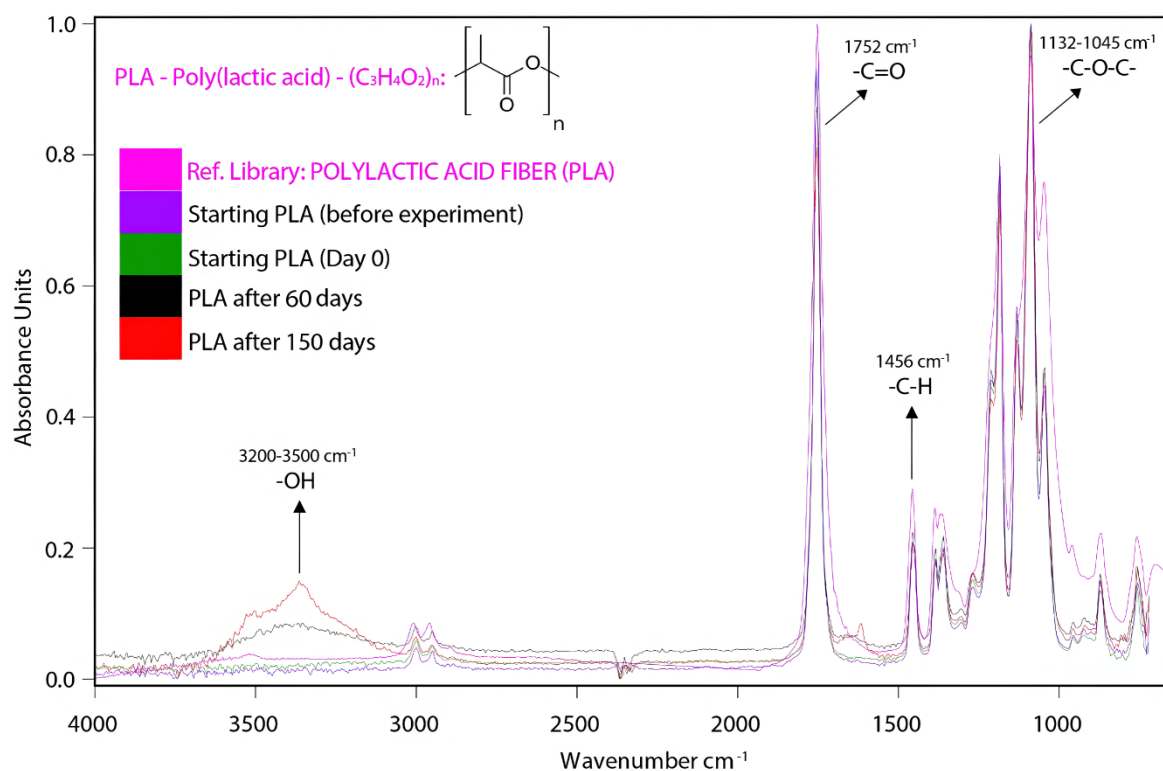
Supplementary Figure 7. Alpha-diversity indices. Bar plots showing alpha-diversity values for each replicate of sediment, seawater (with and without PLA), and PLA samples at different time points.



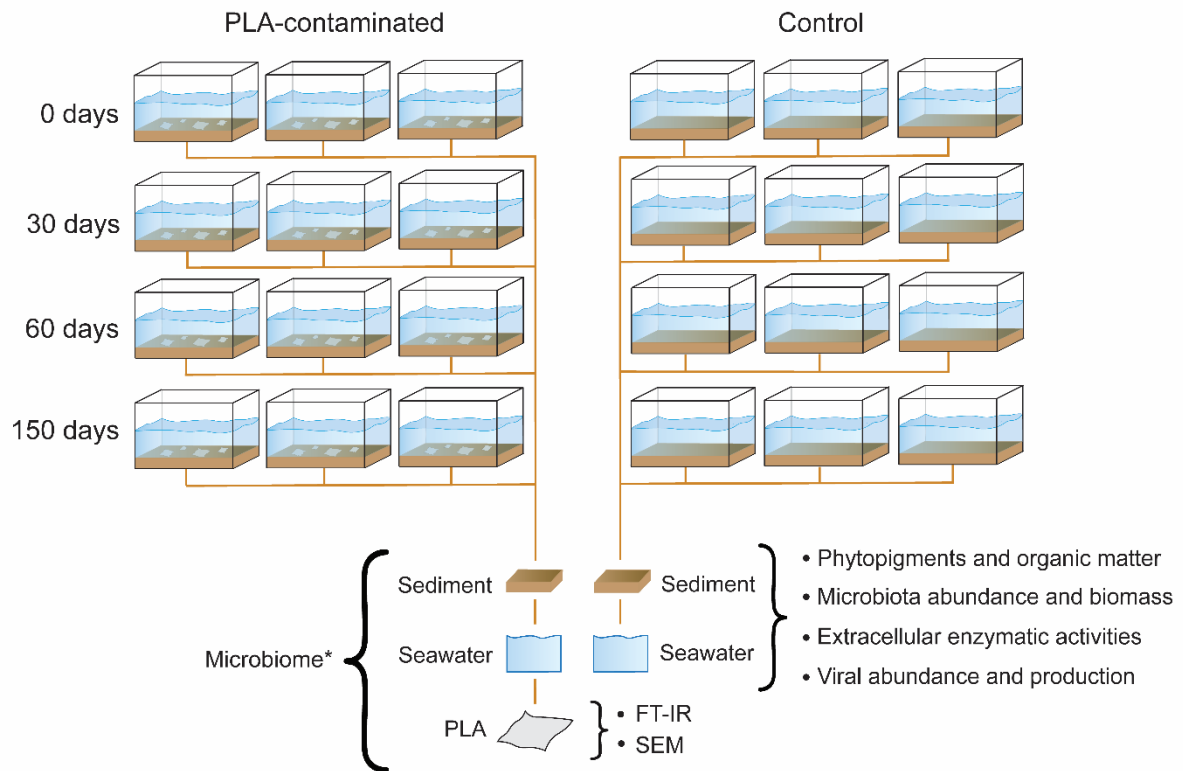
Supplementary Figure 8. Exclusive and shared ASVs among microbiomes from PLA and PLA-contaminated seawater and sediment. Venn diagrams showing the number of ASVs shared between PLA, PLA-contaminated seawater and sediment microbiomes or exclusive of each matrix, separated by treatment and sampling time.



Supplementary Figure 9. Heatmap showing the relative abundances of ASVs belonging to members of the families Saccharospirillaceae and Marinobacteraceae.



Supplementary Figure 10. FTIR spectra of PLA fragments during the experiment. The graph reports the spectra of the PLA fragments from cups before and at the beginning of the experiment, and after 60 days and 150 days as well as of the closest spectrum matching the reference library. Major peaks corresponding to the characteristic chemical bonds within the PLA molecules are highlighted, as well as the band between 3200 and 3500 cm^{-1} appeared after 60 days from the start of the experiment, corresponding to the increase in hydroxyl (-OH) groups.



Supplementary Figure 11. Experimental setup with twenty-four glass tanks, each filled with 300 g of previously homogenized wet sediment and 300 mL of contextual surface seawater. Also reported are the analyses carried out at each sampling time point (0, 30, 60, and 150 days) on sediment, seawater, and PLA. *For microbiome analyses, samples were collected from seawater, sediment and PLA in two independent tanks at the start of the experiment (t0) and after 60 and 150 days.

Supplementary Tables

Supplementary Table 1. Output of the Two-way ANOVA analysis on phytopigment (chlorophyll *a*) and organic matter concentrations (proteins, carbohydrates and lipids) in the sediments exposed to the PLA contamination. The following variables are reported: **a)** chlorophyll *a*, **b)** proteins, **c)** carbohydrates and **d)** lipids.

a)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	0.00320	0.00320	0.433	0.5201	n.s.
	Time	3	0.08264	0.02755	3.725	0.0332	*
	Treatment:Time	3	0.02951	0.00984	1.330	0.2996	n.s.
	Residuals	16	0.11833	0.00740			
b)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	0.00007	0.000073	0.126	0.727	n.s.
	Time	3	0.05813	0.019376	33.592	3.89e-07	***
	Treatment:Time	3	0.00104	0.000346	0.601	0.624	n.s.
	Residuals	16	0.00923	0.000577			
c)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	16.8	16.76	3.371	0.085	n.s.
	Time	3	522.3	174.11	35.009	2.93e-07	***
	Treatment:Time	3	6.4	2.12	0.427	0.737	n.s.
	Residuals	16	79.6	4.97			
d)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	0.000124	0.000124	0.387	0.5426	n.s.
	Time	3	0.004985	0.001662	5.205	0.0106	*
	Treatment:Time	3	0.000348	0.000116	0.363	0.7803	n.s.
	Residuals	16	0.005108	0.000319			

Supplementary Table 2. Output of the Two-way ANOVA analysis for prokaryotic abundance and biomass, extracellular enzymatic activities, turnover times of protein and carbohydrate concentrations. The following variables are reported for sediments: **a)** prokaryotic abundance, **b)** prokaryotic biomass, **c)** aminopeptidase activity, **d)** β -glucosidase activity, **e)** turnover time of protein concentrations, **f)** turnover time of carbohydrate concentrations. The following variables are reported for seawater: **g)** prokaryotic abundance, **h)** aminopeptidase activity, and **i)** β -glucosidase.

a)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	2.358e+16	2.358e+16	124.76	< 2e-16	***
	Time	3	9.222e+16	3.074e+16	162.65	< 2e-16	***
	Treatment:Time	3	1.440e+16	4.799e+15	25.39	6.15E-11	***
	Residuals	64	1.210e+16	1.890e+14			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	5333333	-14973744	25640411	0.9911609	n.s.	
	TREAT:t1-CTRL:t1	15222222	-5084855	35529299	0.2843720	n.s.	
	TREAT:t2-CTRL:t2	77333333	57026256	97640411	0.0000000	***	
	TREAT:t3-CTRL:t3	46888889	26581812	67195966	0.0000000	***	
b)	Aligned Rank Transform ANOVA						
	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment:Time	7	24755.1	3536.4	35.716	< 2.2e-16	***
	Residuals	64	6336.9	99.0			
	Factor	Df	Df.res	F value	Pr(>F)	Significance	
	Treatment	1	70	10.983	0.0014586	**	
	Time	3	68	23.028	2.13E-10	***	
	Comparison	Estimate	Std. Error	t value	Pr(> t)	Significance	
	TREAT:t0-CTRL:t0	-3.722	4.691	-0.794	0.99291	n.s.	
	TREAT:t1-CTRL:t1	7.333	4.691	1.563	0.76994	n.s.	
	TREAT:t2-CTRL:t2	40.889	4.691	8.717	< 0.001	**	
	TREAT:t3-CTRL:t3	16.722	4.691	3.565	0.01507	*	
c)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	10.37	10.365	17.25	0.000749	***
	Time	3	55.81	18.602	30.95	6.78E-07	***
	Treatment:Time	3	67.62	22.540	37.50	1.82E-07	***
	Residuals	16	9.62	0.601			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	-1.16134503	-3.35285473	1.030165	0.6081462	n.s.	
	TREAT:t1-TREAT:t0	2.17528133	-0.01622836	4.366791	0.0524550	n.s.	
	TREAT:t2-CTRL:t2	-1.07578387	-3.26729356	1.115726	0.6877993	n.s.	
	TREAT:t3-CTRL:t3	7.01834484	4.82683515	9.209855	0.0000001	***	
d)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	10.37	10.365	17.25	0.000749	***
	Time	3	55.81	18.602	30.95	6.78E-07	***
	Treatment:Time	3	67.62	22.540	37.50	1.82E-07	***
	Residuals	16	9.62	0.601			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	-1.16134503	-3.35285473	1.030165	0.6081462	n.s.	
	TREAT:t1-CTRL:t1	0.47625046	-1.71525924	2.667760	0.9934781	n.s.	
	TREAT:t2-CTRL:t2	-1.07578387	-3.26729356	1.115726	0.6877993	n.s.	
	TREAT:t3-CTRL:t3	7.01834484	4.82683515	9.209855	0.0000001	***	

e)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	23.26	23.257	58.78	9.59e-07	***
	Time	3	15.07	5.024	12.70	0.000168	***
	Treatment:Time	3	32.38	10.795	27.28	1.58e-06	***
	Residuals	16	6.33	0.396			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0 - CTRL:t0	0.91104542	-0.8671534	2.68924425	0.6442770	n.s.	
	TREAT:t1 - CTRL:t1	-0.31023949	-2.0884383	1.46795934	0.9982988	n.s.	
	TREAT:t2 - CTRL:t2	-3.88683178	-5.6650306	-2.10863295	0.0000250	***	
	TREAT:t3 - CTRL:t3	-4.58924631	-6.3674451	-2.81104748	0.0000029	***	
f)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	19700	19700	47.293	3.72e-06	***
	Time	3	58847	19616	47.090	3.65e-08	***
	Treatment:Time	3	7474	2491	5.981	0.0062	**
	Residuals	16	6665	417			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0 - CTRL:t0	-45.947373	-103.6423134	11.747568	0.1747538	n.s.	
	TREAT:t1 - CTRL:t1	-36.560443	-94.25538315	21.134498	0.4034371	n.s.	
	TREAT:t2 - CTRL:t2	-29.141343	-86.83628365	28.553597	0.6590754	n.s.	
	TREAT:t3 - CTRL:t3	-117.554342	-175.2492825	-59.859402	0.0000593	***	
g)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.752e+13	1.752e+13	113.36	8.41E-16	***
	Time	3	2.876e+14	9.585e+13	620.34	< 2e-16	***
	Treatment:Time	3	8.387e+12	2.796e+12	18.09	1.30E-08	***
	Residuals	64	9.889e+12	1.545e+11			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	46111.11	-534511.89	626734.1	0.9999967	n.s.	
	TREAT:t1-CTRL:t1	1602000.00	1021377.00	2182623.0	0.0000000	***	
	TREAT:t2-CTRL:t2	625555.56	44932.55	1206178.6	0.0259482	*	
	TREAT:t3-CTRL:t3	1672222.22	1091599.22	2252845.2	0.0000000	***	
h)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	387.2	387.2	110.3	5.89E-06	***
	Time	1	379.1	379.1	107.9	6.38E-06	***
	Treatment:Time	1	295.7	295.7	84.2	1.61E-05	***
	Residuals	8	28.1	3.5			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	1.432333	-3.467899	6.332566	0.7872280	n.s.	
	TREAT:t3-CTRL:t3	21.290000	16.389767	26.190233	0.0000033	***	
i)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	2.444	2.444	32.15	0.000471	***
	Time	1	1.791	1.791	23.55	0.001267	**
	Treatment:Time	1	3.280	3.280	43.14	0.000175	***
	Residuals	8	0.608	0.076			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	-0.143000	-0.8640370	0.578037	0.9177717	n.s.	
	TREAT:t3-CTRL:t3	1.948333	1.2272963	2.669370	0.0001144	***	

Supplementary Table 3. Output of the Two-way ANOVA analysis for viral abundance, production and induced-prokaryotic mortality. The following variables are reported: **a)** viral abundance in sediments, **b)** viral production in sediments, **c)** virus-induced prokaryotic mortality in sediments, and **d)** viral abundance in seawater.

a)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	0.447	0.447	47.16	3.18E-09	***
	Time	3	14.353	4.784	505.15	< 2e-16	***
	Treatment:Time	3	0.494	0.165	17.40	2.27E-08	***
	Residuals	64	0.606	0.009			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0-CTRL:t0	-0.075022	-0.218769	0.068725	0.7273828	n.s.	
	TREAT:t1-CTRL:t1	0.076579	-0.067168	0.220326	0.7065041	n.s.	
	TREAT:t2-CTRL:t2	0.308412	0.164665	0.452159	0.0000002	***	
	TREAT:t3-CTRL:t3	0.320126	0.176379	0.463873	0.0000001	***	
b)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.668e+15	1.668e+15	17.992	7.29E-05	***
	Time	3	2.677e+15	8.923e+14	9.622	2.49E-05	***
	Treatment:Time	3	1.366e+15	4.554e+14	4.911	0.00392	**
	Residuals	64	5.935e+15	9.273e+13			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0 - CTRL:t0	968,888.9	-13,255,063.3	15,192,841	0.9999989	n.s.	
	TREAT:t1 - CTRL:t1	2,527,777.8	-11,696,174.4	16,751,730	0.9992380	n.s.	
	TREAT:t2 - CTRL:t2	12,307,000.0	-1,916,952.2	26,530,952	0.138101	n.s.	
	TREAT:t3 - CTRL:t3	22,706,666.7	8,482,714.5	36,930,619	0.0001223	***	
c)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	0.05723	0.05723	61.76	5.72E-11	***
	Time	3	0.03394	0.01131	12.21	2.06E-06	***
	Treatment:Time	3	0.08158	0.02719	29.34	4.70E-12	***
	Residuals	64	0.05931	0.00093			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0 - CTRL:t0	0.014444444	-0.03052138	0.059410272	0.9718206	n.s.	
	TREAT:t1 - CTRL:t1	0.008888889	-0.03607694	0.053854717	0.9984841	n.s.	
	TREAT:t2 - CTRL:t2	0.030000000	-0.01496583	0.074965828	0.4320079	n.s.	
	TREAT:t3 - CTRL:t3	0.172222222	0.12725639	0.217188050	0.0000000	***	
d)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.979e+13	1.979e+13	78.73	9.42e-13	***
	Time	3	1.054e+15	3.513e+14	1397.68	< 2e-16	***
	Treatment:Time	3	1.309e+13	4.364e+12	17.36	2.34e-08	***
	Residuals	64	1.609e+13	2.514e+11			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:t0 - CTRL:t0	12.184	-1.655	26.023	0.1242401	n.s.	
	TREAT:t1 - CTRL:t1	38.166	24.327	52.004	0.0000000	***	
	TREAT:t2 - CTRL:t2	8.802	-5.037	22.640	0.4946527	n.s.	
	TREAT:t3 - CTRL:t3	29.449	15.610	43.288	0.0000002	***	

Supplementary Table 4. Output of the Two-way ANOVA analysis for prokaryotic abundance, viral abundance, production and induced-prokaryotic mortality in systems exposed to PLA leachates. The following variables are reported: a) prokaryotic abundance at 20 °C, b) prokaryotic abundance at 31 °C, c) viral abundance at 20 °C, d) viral abundance at 31 °C, e) viral production at 20 °C, f) viral production at 31 °C, g) virus-induced prokaryotic mortality at 20 °C, and h) virus-induced prokaryotic mortality at 31 °C.

a)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	7.60e+10	7.60e+10	8.888	0.0176	*
	Time	1	8.79e+10	8.79e+10	10.278	0.0125	*
	Treatment:Time	1	2.39e+10	2.39e+10	2.789	0.1334	n.s.
	Residuals	8	6.84e+10	8.55e+09			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days- CTRL:7 days	70	-171,793.48	311,793.5	0.7918	n.s.	
	TREAT:30 days - CTRL:30 days	248,333.3	6,539.85	490,126.8	0.0443	*	
b)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	8.04e+10	8.04e+10	13.806	0.0059	**
	Time	1	8.91e+10	8.91e+10	15.307	0.0045	**
	Treatment:Time	1	2.80e+10	2.80e+10	4.816	0.0595	.
	Residuals	8	4.66e+10	5.82e+09			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	67	-132,483.37	266,483.4	0.7129	n.s.	
	TREAT:30 days - CTRL:30 days	260,333.33	60,849.96	459,816.7	0.0131	*	
c)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	6.16e+10	6.16e+10	2.083	0.1869	n.s.
	Time	1	1.12e+11	1.12e+11	3.790	0.0874	n.s.
	Treatment:Time	1	4.81e+10	4.81e+10	1.627	0.2379	n.s.
	Residuals	8	2.37e+11	2.96e+10			
d)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.30e+12	1.30e+12	16.14	0.00386	**
	Time	1	4.68e+12	4.68e+12	58.02	6.2e-05	***
	Treatment:Time	1	8.16e+11	8.16e+11	10.13	0.01294	*
	Residuals	8	6.45e+11	8.06e+10			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	136,666.7	-605,537.85	878,871.2	0.9324	n.s.	
	TREAT:30 days - CTRL:30 days	1,180,000.0	437,795.48	1,922,204.5	0.00414	**	
e)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.16e+12	1.16e+12	43.20	0.000174	***
	Time	1	5.92e+11	5.92e+11	22.02	0.001557	**
	Treatment:Time	1	5.36e+11	5.36e+11	19.92	0.002102	**
	Residuals	8	2.15e+11	2.69e+10			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	199,666.67	-229,047.4	628,380.7	0.4845	n.s.	
	TREAT:30 days - CTRL:30 days	1,044,666.67	615,952.6	1,473,380.7	0.00024	***	

f)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	1.35e+12	1.35e+12	44.13	0.00016	***
	Time	1	6.90e+11	6.90e+11	22.57	0.00144	**
	Treatment:Time	1	6.64e+11	6.64e+11	21.73	0.00162	**
	Residuals	8	2.45e+11	3.06e+10			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	200	-257,112.6	657,112.6	0.5323	n.s.	
	TREAT:30 days - CTRL:30 days	1,141,000	683,887.4	1,598,112.6	0.00020	***	
g)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	2.245	2.245	15.760	0.00412	**
	Time	1	0.185	0.185	1.299	0.28737	n.s.
	Treatment:Time	1	0.848	0.848	5.954	0.04056	*
	Residuals	8	1.139	0.142			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	200	-257,112.6	657,112.6	0.5323	n.s.	
	TREAT:30 days - CTRL:30 days	1,141,000	683,887.4	1,598,112.6	0.0020	**	
h)	Factor	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
	Treatment	1	4.563	4.563	18.415	0.00265	**
	Time	1	0.919	0.919	3.707	0.09037	.
	Treatment:Time	1	1.360	1.360	5.489	0.04721	*
	Residuals	8	1.982	0.248			
	Post-hoc test (Tukey HSD)						
	Comparison	diff	lwr	upr	p adj	Significance	
	TREAT:7 days - CTRL:7 days	0.5600	-0.7416	1.8616	0.5449	n.s.	
	TREAT:30 days - CTRL:30 days	1.9067	0.6051	3.2083	0.0068	**	

Supplementary Table 5. Alpha-diversity indices. a) ASV richness, b) Shannon Index, c) Pielou Index.

a)	Sample	Measure	Value	Replicate	Matrix	Time	Treatment
	BP_1	ASV richness	517	R1	Sediment	0 days	CTRL
	BP_2	ASV richness	506	R2	Sediment	0 days	CTRL
	BP_4	ASV richness	542	R1	Sediment	0 days	PLA
	BP_5	ASV richness	489	R2	Sediment	0 days	PLA
	BP_8	ASV richness	538	R1	Sediment	60 days	CTRL
	BP_9	ASV richness	567	R2	Sediment	60 days	CTRL
	BP_11	ASV richness	578	R1	Sediment	60 days	PLA
	BP_12	ASV richness	618	R2	Sediment	60 days	PLA
	BP_13	ASV richness	341	R1	Seawater	0 days	CTRL
	BP_14	ASV richness	306	R2	Seawater	0 days	CTRL
	BP_16	ASV richness	346	R1	Seawater	0 days	PLA
	BP_17	ASV richness	300	R2	Seawater	0 days	PLA
	BP_18	ASV richness	96	R1	Seawater	60 days	CTRL
	BP_19	ASV richness	107	R2	Seawater	60 days	CTRL
	BP_21	ASV richness	133	R1	Seawater	60 days	PLA
	BP_22	ASV richness	188	R2	Seawater	60 days	PLA
	BP_24	ASV richness	435	R1	PLA	0 days	PLA
	BP_25	ASV richness	460	R2	PLA	0 days	PLA
	BP_27	ASV richness	385	R1	PLA	60 days	PLA
	BP_28	ASV richness	273	R2	PLA	60 days	PLA
	BP_30	ASV richness	300	R1	Sediment	150 days	CTRL
	BP_31	ASV richness	284	R2	Sediment	150 days	CTRL
	BP_33	ASV richness	384	R1	Sediment	150 days	PLA
	BP_34	ASV richness	357	R2	Sediment	150 days	PLA
	BP_35	ASV richness	105	R1	Seawater	150 days	CTRL
	BP_36	ASV richness	119	R2	Seawater	150 days	CTRL
	BP_38	ASV richness	107	R1	Seawater	150 days	PLA
	BP_39	ASV richness	81	R2	Seawater	150 days	PLA
	BP_40	ASV richness	154	R1	PLA	150 days	PLA
	BP_42	ASV richness	207	R2	PLA	150 days	PLA

b)	Sample	Measure	Value	Replicate	Matrix	Time	Treatment
	BP_1	Shannon	5.701218	R1	Sediment	0 days	CTRL
	BP_2	Shannon	5.632228	R2	Sediment	0 days	CTRL
	BP_4	Shannon	5.677867	R1	Sediment	0 days	PLA
	BP_5	Shannon	5.654873	R2	Sediment	0 days	PLA
	BP_8	Shannon	5.71041	R1	Sediment	60 days	CTRL
	BP_9	Shannon	5.747573	R2	Sediment	60 days	CTRL
	BP_11	Shannon	5.744938	R1	Sediment	60 days	PLA
	BP_12	Shannon	5.840718	R2	Sediment	60 days	PLA
	BP_13	Shannon	4.742474	R1	Seawater	0 days	CTRL
	BP_14	Shannon	4.61114	R2	Seawater	0 days	CTRL
	BP_16	Shannon	4.703835	R1	Seawater	0 days	PLA
	BP_17	Shannon	4.646973	R2	Seawater	0 days	PLA
	BP_18	Shannon	2.425219	R1	Seawater	60 days	CTRL
	BP_19	Shannon	2.494964	R2	Seawater	60 days	CTRL
	BP_21	Shannon	3.333472	R1	Seawater	60 days	PLA
	BP_22	Shannon	3.940687	R2	Seawater	60 days	PLA
	BP_24	Shannon	5.100045	R1	PLA	0 days	PLA
	BP_25	Shannon	5.205495	R2	PLA	0 days	PLA
	BP_27	Shannon	4.850126	R1	PLA	60 days	PLA
	BP_28	Shannon	4.503844	R2	PLA	60 days	PLA
	BP_30	Shannon	4.654552	R1	Sediment	150 days	CTRL
	BP_31	Shannon	4.481776	R2	Sediment	150 days	CTRL
	BP_33	Shannon	4.802539	R1	Sediment	150 days	PLA
	BP_34	Shannon	4.583617	R2	Sediment	150 days	PLA
	BP_35	Shannon	3.601373	R1	Seawater	150 days	CTRL
	BP_36	Shannon	3.655316	R2	Seawater	150 days	CTRL
	BP_38	Shannon	2.659095	R1	Seawater	150 days	PLA
	BP_39	Shannon	1.90208	R2	Seawater	150 days	PLA
	BP_40	Shannon	3.783219	R1	PLA	150 days	PLA
	BP_42	Shannon	4.142049	R2	PLA	150 days	PLA

c)	Sample	Measure	Value	Replicate	Matrix	Time	Treatment
	BP_1	Pielou	0.912481	R1	Sediment	0 days	CTRL
	BP_2	Pielou	0.904552	R2	Sediment	0 days	CTRL
	BP_4	Pielou	0.901926	R1	Sediment	0 days	PLA
	BP_5	Pielou	0.913201	R2	Sediment	0 days	PLA
	BP_8	Pielou	0.908165	R1	Sediment	60 days	CTRL
	BP_9	Pielou	0.906506	R2	Sediment	60 days	CTRL
	BP_11	Pielou	0.903353	R1	Sediment	60 days	PLA
	BP_12	Pielou	0.908851	R2	Sediment	60 days	PLA
	BP_13	Pielou	0.813198	R1	Seawater	0 days	CTRL
	BP_14	Pielou	0.805638	R2	Seawater	0 days	CTRL
	BP_16	Pielou	0.804564	R1	Seawater	0 days	PLA
	BP_17	Pielou	0.814718	R2	Seawater	0 days	PLA
	BP_18	Pielou	0.53134	R1	Seawater	60 days	CTRL
	BP_19	Pielou	0.53393	R2	Seawater	60 days	CTRL
	BP_21	Pielou	0.681643	R1	Seawater	60 days	PLA
	BP_22	Pielou	0.752551	R2	Seawater	60 days	PLA
	BP_24	Pielou	0.839466	R1	PLA	0 days	PLA
	BP_25	Pielou	0.849014	R2	PLA	0 days	PLA
	BP_27	Pielou	0.814703	R1	PLA	60 days	PLA
	BP_28	Pielou	0.8029	R2	PLA	60 days	PLA
	BP_30	Pielou	0.816047	R1	Sediment	150 days	CTRL
	BP_31	Pielou	0.793379	R2	Sediment	150 days	CTRL
	BP_33	Pielou	0.807062	R1	Sediment	150 days	PLA
	BP_34	Pielou	0.779827	R2	Sediment	150 days	PLA
	BP_35	Pielou	0.77383	R1	Seawater	150 days	CTRL
	BP_36	Pielou	0.764851	R2	Seawater	150 days	CTRL
	BP_38	Pielou	0.569055	R1	Seawater	150 days	PLA
	BP_39	Pielou	0.432837	R2	Seawater	150 days	PLA
	BP_40	Pielou	0.751093	R1	PLA	150 days	PLA
	BP_42	Pielou	0.776724	R2	PLA	150 days	PLA