

## Supplementary Tables

Supplementary Table S1. Location of sites in the Whitsunday Islands, central Great Barrier Reef, Queensland, Australia with GPS coordinates, location category (inner or outer nearshore), distances to shore, and depths where biofilm samples were deployed. Sampling and replication at each island and method of analysis is shown. Double Cone Is. was excluded as according to the water quality data we cannot clearly categorise this as an inner or outer nearshore island.

Site	Nearshore location (distance from coast in km)	Coordinates	Depth (m)	Clone library	T-RFLP
Pine	inner (5)	S20°22.679' E148°53.302	6	dry 2008 wet 2009 n = 162	dry 2008/09 wet 2009/10
Daydream	inner (3)	S20°15.345' E148°48.729	6	dry 2008 wet 2009 n = 171	n = 24 dry 2008/09 wet
Double Cone	inner (10)	S20°06.295' E148°43.305	6	n.a. n.a. n.a.	2009/10 n = 24 dry 2008/09
Edward	outer (37)	S20°14.693 E149°10.302	6	dry 2008 wet 2009 n = 166	wet 2009/10 n = 24
Deloraine	outer (31.25)	S20°09.457' E149°04.183	6	dry 2008 wet 2009 n= 166	dry 2008/09 wet 2009/10 n = 24 dry 2008/09 wet 2009/10 n = 24

Supplementary Table 4. Results of PERMANOVA analysis of 16S rRNA T-RFLP data using two groups location (inner and outer nearshore) and season (wet and dry) (A) and posthoc test for the interaction term using two groups (B) of bacterial biofilm assemblages. Tests are based on 9999 permutations. P (MC): P value based on Monte Carlo random draws. P-values < 0.05 are highlighted for clarity.

A) Overall PERMANOVA of location and season

Source	Df	SS	MS	Pseudo-F	P (MC)
Location	1	9232.2	9232.2	3.646	<b>0.0018*</b>
Season	1	16235	16235	6.412	<b>0.0001*</b>
L x S	1	7084	7084	2.798	<b>0.0107*</b>
Residual	92	2.33 x 10 <sup>5</sup>	2531.9		
Total	95	2.66 x 10 <sup>5</sup>			

B) Posthoc tests within the interaction term (season within location)

Dry/wet		
Groups	T	P (MC)
Inner	2.2361	<b>0.0002*</b>
Outer	2.0197	<b>0.0031*</b>

C) Posthoc tests within the interaction term (location within season)

inner/outer		
Groups	T	P (MC)
Dry	1.8562	<b>0.0115*</b>
Wet	1.7241	<b>0.0109*</b>

Supplementary Table 5. Distance-based linear model (DistLM) marginal tests based on permutation procedures (9999 permutations) showing the % variance of single water quality parameters: temperature, salinity, dissolved organic carbon (DOC), dissolved inorganic nitrogen (DIN), total suspended solids (TSS), chlorophyll *a* (Chl *a*) and Secchi depth.

Residual degrees of freedom (df) = 116.

Variable	SS (trace)	Pseudo-F	P-value	% Variance
Temperature	16418	5.90	0.0001	4.84
Salinity	13574	4.84	0.0001	4.00
DOC	22692	8.32	0.0001	6.69
DIN	10609	3.74	0.0006	3.13
Chl <i>a</i>	22282	8.16	0.0001	6.57
TSS	15416	5.53	0.0001	4.55
Secchi depth	9545.2	3.36	0.0016	2.82