



Online Resource 4 Depiction of single canvas assay deployment apparatus. Strips were deployed at each site (n=10) at the sediment-water interface and 20 cm depth with foam buoy for easy detection and recovery.

Online Resource 5 Summary of sediment and seagrass characteristics measured across study sites.

	n	Fraction of sites where present (%)	mean	SE	median	min	max
LOI (%)	46	-	6.9	0.6	5	3.3	19.5
C _{org} content (%)	46	-	2.4	0.3	1.7	0.7	8.6
dry bulk density (g cm ⁻³)	46	-	0.7	0	0.7	0.2	1.5
C stock (mg cm ⁻³)	46	-	13.8	0.8	12.9	6.2	27.7
Mud content (%)	45	-	33.1	3.7	28	1.4	90.1
Thalassia coverage (%)	46	93.5	17.8	2.3	15.6	0	60.9
Syringodium coverage (%)	46	50	7.9	2.2	0.4	0	73.3
Halodule coverage (%)	46	34.8	1.5	0.7	0	0	22.3
Total seagrass coverage (%)	46	95.7	1.5	0.7	0	0	22.3
seagrass canopy ht. (cm)	44	-	18.8	1.2	17.3	7.9	41.2