Supplementary Material

Site number	Number of ACOs replaced	Number of pitfall traps replaced
MP1	6	17
MP2	0	0
WP2	1	1
WP3	9	10
RE1	0	0
RE2	0	0

Appendix S1. Table of Onduline artificial cover objects and pitfall traps replaced at each grid, two days before the first post-storm surge monitoring session began in November 2020.

Appendix S2. M_{t+1} of lizard species (*Oligosoma polychroma* and *Woodworthia maculata*) in grids that were inundated or unaffected by a coastal storm surge in April 2020. The storm surge is indicated by the vertical blue line. The data points after this line therefore demonstrate the potential impacts of the storm surge at seven months (November 2020) and eleven months after the storm surge (March 2021). Vertical bars around the mean CPUE are ± 1 SE, whereas error bars around mean SVL show the range of body sizes recorded from captured lizards. Points have been jittered along the x-axis for visibility.



Appendix S3. Estimated fixed effects of linear mixed effects models of the responses of relative abundance as the minimum number of known individuals per grid (M_{t+1}) to inundation. Significant effects (p < 0.05) are indicated in bold. SE = one standard error, DF = degrees of freedom.

Effect	Estimate	SE	DF	t	р		
O. polychroma *							
Intercept	2.683	0.978	41.835	2.742	0.009		
BA (after storm surge)	0.253	0.417	38.712	0.605	0.549		
CI (inundated)	-1.110	0.382	5.866	-2.903	0.028		
Minimum temperature	-0.185	0.071	40.395	-2.600	0.013		
Disturbance	-0.020	0.062	38.736	-0.327	0.745		
BA (after) × CI (inundated)	0.011	0.750	38.293	0.014	0.989		
W. maculata *							
Intercept	-0.535	1.672	34.288	-0.320	0.751		
BA (after storm surge)	-0.900	0.886	37.378	-1.016	0.316		
CI (inundated)	1.203	1.345	6.438	0.894	0.403		
Minimum temperature	0.020	0.113	31.686	0.181	0.858		
Disturbance	-0.031	0.097	32.046	-0.324	0.748		
BA (after) × CI (inundated)	0.337	1.623	37.672	0.208	0.837		
* transformation applied to response variable: $ln(M_{t+1} + 0.01)$							