

Appendix A

Socioeconomic and environmental predictors of estuarine shoreline hard armoring

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Table A.1. Shoreline armoring logistic regression models.

Variable	Model 1 NA / no NFE	Model 2 NA+NFE	Model 3 no NA / no NFE	Model 4 NFE / no NA
arm_neigh	2.3239*** (0.1452)	2.1098*** (0.1844)		
distance	-0.0023*** (0.0004)	-0.0030*** (0.0004)	-0.0038*** (0.0005)	-0.0044*** (0.0006)
elev	0.0003 (0.0618)	-0.0253 (0.0872)	0.0428 (0.0864)	0.0080 (0.1278)
slope	3.0852*** (1.0270)	3.7527*** (1.4010)	3.3221* (1.7471)	3.7672* (2.1567)
ln(shore_l)	-0.0846** (0.0430)	-0.0914* (0.0518)	-0.1200** (0.0609)	-0.1381** (0.0640)
parcel_area	0.0689* (0.0409)	0.1047** (0.0421)	0.1004** (0.0434)	0.1397*** (0.0463)
med_energy	-0.1170 (0.1385)	-0.1057 (0.1548)	-0.2245 (0.1850)	-0.1119 (0.1809)
hi_energy	1.2610*** (0.1872)	1.3607*** (0.1996)	1.6908*** (0.2461)	1.7695*** (0.2736)
erosion_rate	1.3069*** (0.3963)	1.2841*** (0.3687)	1.9639*** (0.6569)	1.7726*** (0.6216)
bldg_val	0.0087*** (0.0013)	0.0093*** (0.0012)	0.0096*** (0.0016)	0.0099*** (0.0015)
bryan	0.1124* (0.0615)	0.6761*** (0.0252)	0.0181 (0.0867)	0.6734*** (0.0452)
liberty	-0.3742*** (0.0634)	-0.5709 (0.5471)	-0.7354*** (0.1176)	-0.7588 (0.6306)
mcintosh	-0.6610*** (0.0788)	-1.0806*** (0.1405)	-1.0225*** (0.1252)	-1.0746*** (0.1590)
glynn	-0.0061 (0.0827)	0.6286*** (0.1319)	-0.0671 (0.0945)	0.8140*** (0.1573)
camden	-0.5515*** (0.0330)	-0.6814 (0.5169)	-0.9414*** (0.0677)	-0.8704 (0.5872)
constant	-2.4124*** (0.3144)	-2.8219*** (0.3816)	-1.0028*** (0.3699)	-1.8569*** (0.4685)
Observations	13,209	13,209	13,209	13,209
Neighb_FE	NO	YES	NO	YES
lnL	-4008.493	-3846.755	-4806.206	-4436.230
AIC	8026.986	7703.510	9622.412	8882.459
BIC	8064.429	7740.953	9659.855	8919.902
Pseudo R²	0.4333	0.4562	0.3205	0.3728
Accuracy	0.8736	0.8807	0.8458	0.8550
ROC_auc	0.9099 (0.0030)***	0.9028 (0.0034)***	0.8662 (0.0036)***	0.8724 (0.0038)***

Standard errors in parentheses: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

NA is neighbor armoring variable; NFE is neighborhood fixed effects; “Accuracy” is the in-sample prediction accuracy; “ROC_auc” is the area under the “Receiver Operating Characteristic” curve, which is the plot of sensitivity versus 1-specificity from a 10-fold cross validation. (Sensitivity is the fraction of positive cases that are correctly classified by the logit model, while specificity is the fraction of negative cases that are correctly classified.)