

### Supplementary Table 1

Candidate generalized linear models used in an alternative analysis to describe short-term post-release mortality (within 24 h) for white seabass (*Atractoscion nobilis*) captured by hook and line. The number of predictor variables in the model (K), Akaike information criterion corrected for small sample sizes (AICc), difference in AICc between the given model and the best-performing model ( $\Delta$ AICc), individual model weight (AICc weight), and log-likelihood value (LL) are provided for each model. Predictor variables are *fishing site depth*, *hooking location*, *transport time*, and *water temperature at capture*. The selected model includes *hooking location* and *fishing site depth*. Note that, in the alternative models, *fishing site depth* was substituted for *fish total length*, which was used in models in the primary analysis (see Table 2 in the main article). Models were fitted to data for fish caught from 2021 through 2024 in the Southern California Bight.

Model	K	AICc	$\Delta$ AICc	AICc weight	LL
Hook + depth	3	115.46	0.00	0.55	-54.65
Hook + depth + temperature	4	117.44	1.98	0.20	-54.59
Hook $\times$ depth	4	117.58	2.12	0.19	-54.66
Hook	2	120.97	5.51	0.03	-58.45
Hook + temperature	3	122.81	7.35	0.01	-58.33
Hook $\times$ temperature	4	124.24	8.78	0.01	-57.99
Transport	2	131.31	15.85	0.00	-63.62
Null	1	137.62	22.16	0.00	-67.80

### Supplementary Table 2

Model coefficients (estimates, standard errors, and 95% confidence intervals on a logit scale) for the selected generalized linear model in the alternative analysis (see Supplementary Table 1).

The model was fitted to data for short-term post-release mortality (within 24 h) of white seabass (*Atractoscion nobilis*) captured by hook and line during 2021–2024 in the Southern California Bight. The reference level for *hooking location* is lip hooked.

Parameter	Estimate	Standard error	95% confidence interval	
			Lower value	Upper value
Intercept	-3.906	0.751	-5.379	-2.434
Hooking location	2.458	0.543	1.393	3.524
Fishing site depth	0.132	0.049	0.037	0.228