

Negative	Neutral	Positive
Gulf sturgeon (-0.85)	Southern stingray (-0.30)	Butterfish (-0.10)
Smalltooth sawfish (-0.80)	Sheepshead (-0.30)	Atlantic stingray (-0.10)
Eastern oyster (-0.70)	Red grouper (-0.30)	Spiny lobster (-0.10)
Snook (-0.60)	Hogfish (-0.30)	Spanish mackerel (-0.10)
Nassau grouper (-0.60)	Dusky shark (-0.30)	Florida pompano (-0.10)
Lemon shark (-0.60)	Yellowedge grouper (-0.30)	Blacknose shark (-0.10)
Great hammerhead shark (-0.60)	Yellow stingray (-0.30)	Atlantic sharpnose shark (-0.10)
Black grouper (-0.60)	Spotted seatrout (-0.25)	Vermilion snapper (-0.05)
Scamp grouper (-0.55)	Nurse shark (-0.25)	Mutton snapper (-0.05)
Southern flounder (-0.45)	Goliath grouper (-0.25)	Lesser amberjack (-0.05)
Gag grouper (-0.45)	Finetooth shark (-0.25)	Bluefish (-0.05)
Bonnethead shark (-0.45)	Tarpon (-0.25)	King mackerel (0.00)
Black sea bass (-0.45)	Golden tilefish (-0.25)	Greater amberjack (0.00)
Yellowmouth grouper (-0.40)	Blue crab (-0.25)	Flyingfishes (0.00)
Scalloped hammerhead shark (-0.40)	Blacktip shark (-0.25)	Gray triggerfish (0.05)
Black drum (-0.40)	Tomtate (-0.20)	Cobia (0.05)
Blueline tilefish (-0.35)	Tiger shark (-0.20)	Striped mullet (0.10)
Warsaw grouper (-0.35)	Sandbar shark (-0.20)	Royal red shrimp (0.10)
Speckled hind (-0.35)	Red drum (-0.20)	Dolphin (0.15)
Snowy grouper (-0.35)	Gulf menhaden (-0.20)	Anchovies (0.15)
Brown shrimp (-0.35)	Yellowtail snapper (-0.15)	Stone crab (0.20)
	White shrimp (-0.15)	Pink shrimp (0.20)
	Wenchman (-0.15)	Cero mackerel (0.20)
	Red snapper (-0.15)	Pinfish (0.20)
	Lane snapper (-0.15)	Almaco jack (0.25)
	Gray snapper (-0.15)	

Figure 13 - Directional Effect Scores. Whether climate change will have a negative, neutral, or positive effect on individual species was assessed by species experts. The negative, neutral, and positive directional effects on each species due to climate change are shown in red, yellow, and green respectively. The minimum and maximum values for the directional effect metric are -1.0 (negative) and 1.0 (positive). The species scores across this range are shown parenthetically. This process assigned a -0.85 to Gulf sturgeon, a zero score to king mackerel, greater amberjack, and flyingfishes, and a score of 0.35 to banded rudderfish, Atlantic croaker, and ballyhoo. The data are skewed towards negative effects overall.