

Snapper-Groupers Amendment 17

Economic Effects on the
Recreational Sector

Introduction

- Economic effects are estimated as changes in angler consumer surplus (CS) and for-hire vessel producer surplus as proxied by net operating revenues (NOR)
- No consideration for regional economic impacts
- Methodology follows that of Amendment 15A, Amendment 16, and red snapper interim rule

Economic Values per Trip

- Consumer surplus: benefit an angler derives from a fishing trip minus costs

Value: \$53.53 in 2008 dollars

- Producer surplus: net operating revenue per angler for-hire trip = total revenue minus trip costs on a per angler basis

Value:

Charterboat: \$162 in 2008 dollars

Headboat: \$78 in 2008 dollars

Target Trips

- Average target trips: 2003-2007 average angler target trips for snapper-grouper

	Charterboat	Headboat	Private	Total
Red Snapper	2,818	50,757	36,326	89,901
Snapper-Grouper*	42,782	190,223	522,674	755,679
Total	45,600	240,980	559,000	845,580

.*Snapper-grouper trips are net of red snapper trips.

Calculation of Economic Effects

- Changes in consumer surplus (CS)
(Δ CS value per trip) X (number of target trips)
- Change in net operating revenue (NOR)
– (NOR value per trip) X (Δ (number of target trips))

“Baseline Economic Values”

	Charterboat	Headboat	Private	Total
Red Snapper				
CS-Trips	\$150,848	\$2,717,022	\$1,944,531	\$4,812,401
NOR	\$456,516	\$3,959,046		\$4,415,562
Total	\$607,364	\$6,676,068	\$1,944,531	\$9,227,963
Snapper-Grouper Species				
CS-Trips	\$2,290,120	\$10,182,637	\$27,978,739	\$40,451,497
NOR	\$6,930,684	\$14,837,394		\$21,768,078
Total	\$9,220,804	\$25,020,031	\$27,978,739	\$62,219,575

Economic Effects of Alternatives

- Alternative 2: prohibit harvest of red snapper

	Charterboat	Headboat	Private	Total
Red Snapper				
CS-Trips	\$150,848	\$2,717,022	\$1,944,531	\$4,812,401
NOR	\$456,516	\$3,959,046		\$4,415,562
Total	\$607,364	\$6,676,068	\$1,944,531	\$9,227,963

Economic Effects

- Alternative 7: red snapper bag limit reduction from 2 to 1 fish

	Charterboat	Headboat	Private	Total
Red Snapper				
CS-Trips	\$75,424	\$1,358,511	\$972,266	\$2,406,201

Economic Effects

- Alternatives 3-6: Closure of red snapper fishery plus area closures for other species
 - Effects of Alternative 2
plus
 - Effects of area closures on the other species

Ranking of Red Snapper Alternatives

- From smallest to largest short-term adverse economic effects:
 - Alternative 1
 - Alternative 7
 - Alternative 2
 - Alternative 3
 - Alternative 4, 5
 - Alternative 6

Ranking of Alternatives for Other Species (Smallest to Largest)

- Speckled Hind/Warsaw Grouper
 - Alternatives 2, 5, 4, 3
- Golden Tilefish
 - Alternatives 4,3, 5
- Snowy Grouper
 - Alternatives 4, 2, 3

Issues and Limitations

- Headboat target trips
 - No information on targeting by species
 - GA and NE Florida (Mayport -- Port Canaveral)
 - Overestimate economic effects despite not using red snapper target trips in other areas
- Consumer surplus
 - Based on the Gulf red snapper analysis
 - Charter and private CS based on the 2003 angler survey conducted for the Southeast
 - Headboat CS, based on Gulf headboat study
- Net operating revenue
 - Based on the Gulf red snapper analysis
 - Charter NOR, based on 2002-2003 Gulf survey
 - Headboat NOR, based on two 1999 studies

Issues (cont'd)

- Target trips
 - Considered to carry more economic meaning when determining expected economic effects of regulations than catch or harvest trips
 - Cancellation of trips: may not be true for some trips targeting red snapper under measures affecting red snapper only; may be more true when large areas are closed
- Baseline economic values
 - Not strictly baseline, based on changes in CS and NOR
 - Do not account for effects on target trips of previous amendments (Amendments 13c, 15a, 16)