South Atlantic Council's Consideration of Red Snapper Stock Status

Prepared by: SAFMC Staff

September 2008

RED SNAPPER ASSESSMENT & MANAGEMENT

1. HISTORICAL OVERVIEW
   A. 1990 PDT/NMFS ASSESSMENT
   B. SG AMENDMENT 4 ACTIONS
   C. NMFS/MANOOCH ET AL. 1997

2. 2007/2008 SEDAR ASSESSMENT
   A. SEDAR 15-RD04 – AGE, GROWTH & REPRODUCTION - 2004
   B. SEDAR 15-RD06 - AGE & GROWTH – 2007
   C. RESULTS

3. COUNCIL DECISIONS – JUNE 2008

4. AMENDMENT 17 SCHEDULE

1990 PDT/NMFSTOCK ASSESSMENT

1. THE PDT HIGHLY RECOMMENDS ESTABLISHMENT OF REEF FISH **RESERVES** EQUAL IN AREA TO 20% OF THE "LIVE BOTTOM" ALONG THE SOUTHEASTERN UNITED STATES AS WELL AS ESTABLISHING A HOST OF MINIMUM SIZE LIMITS.
2. RED SNAPPER – **21" SIZE LIMIT** TO ACHIEVE 40% SPR. PROJECTED TO REDUCE FISHING MORTALITY BY 41% OFF NC, SC & GA AND 51% OFF NORTH FL.
3. SG AMENDMENT 4, PAGE 28: ASSESSMENT RESULTS FOR RED SNAPPER INDICATED THAT: "CONDITIONS EXISTING UNDER THE **HEADBOAT FISHERY** ARE CURRENTLY PRODUCING A SSR (EQUILIBRIUM, BOTH SEXES) OF 15 PERCENT FOR THE CAROLINAS, AND 5 PERCENT FOR NORTH FLORIDA. A 58 PERCENT REDUCTION IN F OR A MINIMUM SIZE OF 490 MM (19.3") IS REQUIRED TO ACHIEVE A SSR OF 30 PERCENT, AND A 72 PERCENT REDUCTION IF F OR A MINIMUM SIZE OF 530 MM (21") IS NEEDED TO ACHIEVE A SSR OF 40 PERCENT. THE **COMMERCIAL HOOK AND LINE FISHERY** OPERATING OFF THE CAROLINAS IS PRODUCING A SSR OF 24 PERCENT. A 19 PERCENT REDUCTION IN F OR A MINIMUM SIZE OF 392 MM (15.4") IS REQUIRED TO ACHIEVE A SSR OF 30 PERCENT, AND A 41 PERCENT REDUCTION IN F OR A MINIMUM SIZE OF 490 MM (19.3") IS NEEDED TO OBTAIN A SSR OF 40%.

1990 PDT/NMFSTOCK ASSESSMENT

3. CONTINUED: SG AMENDMENT 4, PAGE 28: THE **NORTH FLORIDA COMMERCIAL FISHERY** IS PRODUCING A SSR OF 17 PERCENT. A 37 PERCENT REDUCTION IN F OR A MINIMUM ISZE OF 421 MM (16.6”) IS REQUIRED TO ACHIEVE A SSR OF 30 PERCENT, AND 51 PERCENT REDUCTION IN F OR A MINIMUM SIZE OF 483 MM (19.0”) IS NEEDED TO ACHIEVE A SSR OF 40 PERCENT..THE PDT BELIEVES THE MOST APPROPRIATE GOAL FOR MANAGEMENT OF THE RED SNAPPER RESOURCE IS A 40 PERCENT SSR AND RECOMMENDS ADOPTION OF A 21” (530 MM) TOTAL LENGTH MINI8MUM SIZE LIMIT. STUDIES CONDUCTED BY THE NMFS AND STATE OF SOUTH CAROLINA REVEAL **80-100 PERCENT SURVIVAL** OF CAUGHT AND RELEASED RED SNAPPER. THE IMPACT OF IMPOSING A **BAG LIMIT** WAS EVALUATED UTILIZING HEADBOAT DATA FROM ALL AREAS. EVEN WITH A 72 PERCENT REDUCTION IN F NEEDED TO ACHIEVE THE PDT’S RECOMMENDED SSR 40%, A BAG LIMIT WOULD NOT BE EFFECTIVE. FOR EXAMPLE A 1 FISH PER ANGLER BAG WOULD REDUCE F BY ONLY 50 PERCENT FOR THE CAROLINAS 7.6 PERCENT FOR NORTH FLORIDA, AND ONLY 45 PERCENT FOR SOUTH FLORIDA. INSTEAD OF A SIZE LIMIT, THE NORTH FLORIDA COMMERCIAL FISHERY COULD BE REDUCED 51 PERCENT AND THE CAROLINAS COMMERCIAL FISHERY F REDUCED 41 PERCENT TO ACHIEVE A SSR OF 40 PERCENT.”

SNAPPER GROUPER AMENDMENT 4 (APRIL 1991)
REGULATIONS EFFECTIVE 1/1/92

RED SNAPPER SIZE LIMIT – THE COUNCIL CONCLUDED THAT INCLUDING RED SNAPPER WITHIN THE 20” MINIMUM SIZE GROUPING WOULD BE APPROPRIATE. THE RESULTING SSRS OF 33% AND 40% FOR THE RECREATIONAL AND COMMERCIAL FISHEREIS, RESPECTIVELY, EXCEED THEIR OVERFISHING LEVEL OF 30%.

RED SNAPPER BAG LIMIT – SPECIFY A SNAPPER AGGREGATE BAG LIMIT OF 10 EXCLUDING VERMILION SNAPPER AND SPECIFY THAT NO MORE THAN TWO CAN BE RED SNAPPERS.

PREVIOUS STOCK ASSESSMENT – NMFS/MANOOCH ET AL. 1997

1. LANDINGS = 1986-1996
2. MAXIMUM AGE = 25; FEW FISH > AGE 12 LANDED
   A. #SAMPLES = 537; 1990-1996
   B. SAMPLES - 220 HB, 206 FISH-INDEP MARMAP & 111 COMM
3. NATURAL MORTALITY (M) = 0.15 – 0.30
4. SPR (86-91)=3-15%; SPR (92-95)=11-32%
5. FULL F (86-91)=0.48-0.31; FULL F (92-95)=0.69-0.50
6. WE BELIEVE THAT M IS PROBABLY OVER 0.20 BUT NOT OVER 0.30
7. SPR = 25% FOR M = 0.25 AND 32% FOR M=0.30 FOR 1992-95)
8. WE CONCLUDE THAT THE RED SNAPPER STOCK IS IN A "TRANSITIONAL" CONDITION. THAT IS, THE STATUS OF THE STOCK IS LESS THAN DESIRABLE, BUT DOES APPEAR TO BE RESPONDING FOR THE BETTER TO SOMETHING, POSSIBLY MANAGEMENT, IN THE MOST RECENT YEARS.

RED SNAPPER AGE SAMPLING & ANALYSES

1. **NMFS/MANOOCH ET AL. 1997**
   A. # OTOLITH SAMPLES = 537; 1990-1996
   B. SAMPLES - 220 HB, 206 FISH-INDEP MARMAP & 111 COMM
   C. MAXIMUM AGE = 25; FEW FISH > AGE 12 LANDED
2. **BYRON WHITE & SANDRA PALMER (SCDNR 2004) SEDAR 15-RD04**
   1. OTOLITHS CAPE LOOKOUT, NC – KEY WEST, FL, 1979- 2000
   2. # OTOLITH SAMPLES = 1,303
   3. SAMPLES – 472 FISH-INDEP MARMAP & 831 COMM
   4. AGE RANGE FISH-INDEP = 1-22 YRS WITH MEAN = 3.1
   5. AGE RANGE FISH-DEP = 1-45 YRS WITH MEAN = 4.2 YRS
3. **STEPHANIE MCINERNY (UNC WILMINGTON, 2007) SEDAR 15-RD06**
   A. HEADBOAT, TIP & FL FISH & WILDLIFE CONSERV COMM
   B. DATA SET #1 – MANOOCH & POTTS (1997)
   C. DATA SET #2 – AGED BY MCINERNY
      i. YEARS = 1977 – 2006, #OTOLITH SAMPLES = 6,031
      ii. 27 FISH OLDER THAN 25 YEARS
      iii. MAXIMUM AGE = 54 YEARS

PREVIOUS STOCK ASSESSMENT – NMFS/MANOOCH ET AL. 1997

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NEW ASSESSMENT

1. **LANDINGS = 1945-2006**
2. **MAXIMUM AGE = 54 YEARS; MAX OF 53 USED IN ASSESSMENT**
3. **M = SCALED LORENZEN = 0.07-0.17 FOR FISH WITH INCREMENT COUNTS 2 TO 53**
4. **DISCARD MORTALITY INCLUDED**
5. **SPR IN 2006 = 3%; SPR (1995)=2.4%; SPR (1991)=2.5%**
6. **F IN 2006 = 0.84; F (1995) = 1.16; F (1991) = 0.75**
7. **STOCK OVERFISHED & OVERFISHING**

Red Snapper – SEDAR Stock Assessment
SEDAR Assessment – SSC to review June 2008

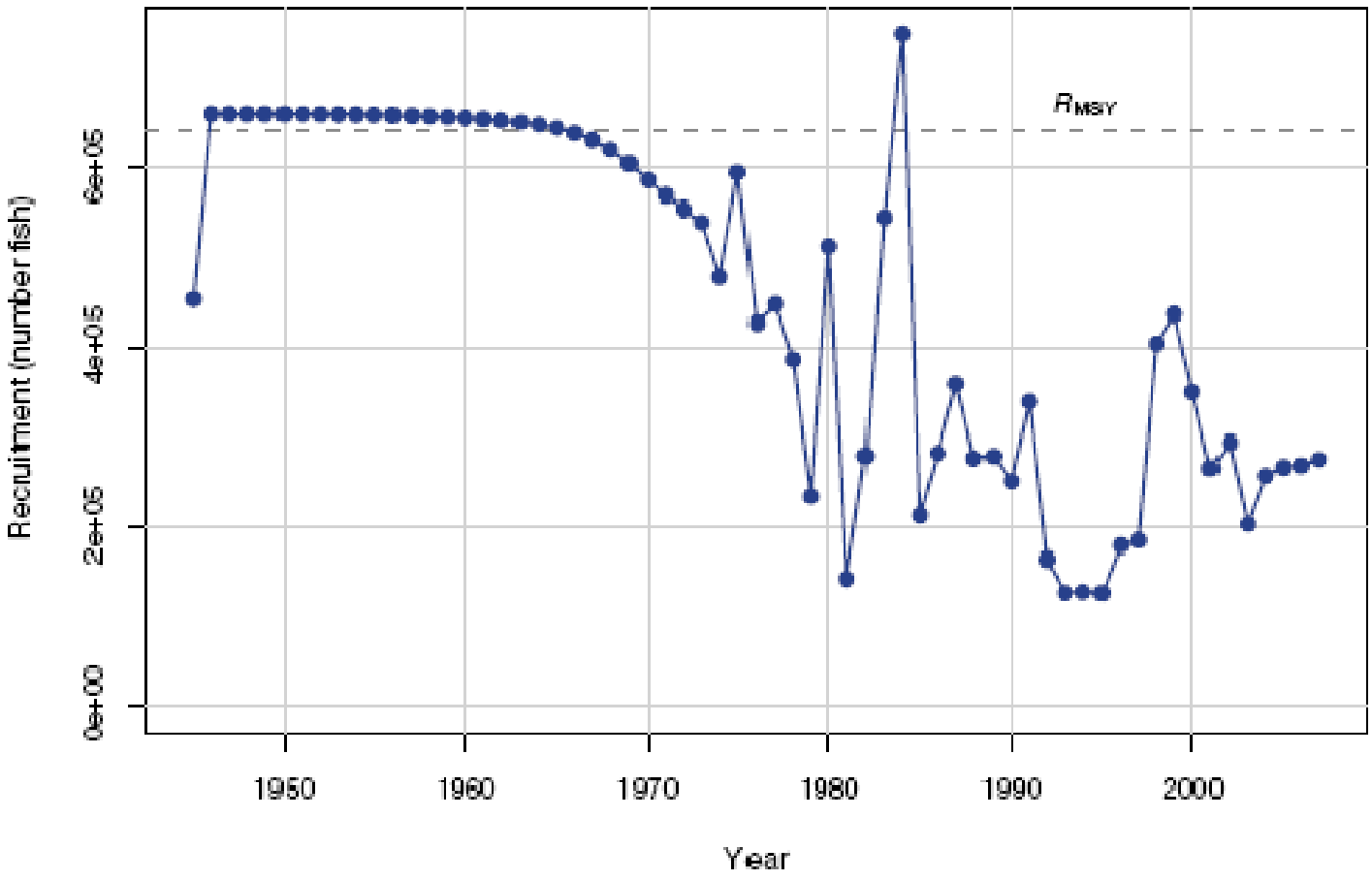
Historical Commercial landings 1927-61 (Historical Catch Statistics, 1879-1989)
Extend commercial back to 1900 by linear interpolation.
Recreational landings do not include Monroe County, FL; MRFSS data 1981 onwards;
Workgroup extended landings back to 1946 for all modes

Table 1. Assessment data availability.

Fishery	Landings	Estimated Discards	Indices
Commercial handline	1945-2006	1984-2006	1993-2006
Commercial dive	1984-2006	--	--
Headboat	1972-2006	1984-2006	1976-2006
Recreational (MRFSS)	1981-2006	1984-2006	1983-2006

RED SNAPPER RECRUITMENT

Figure 3.21. Red snapper: Top panel – Estimated recruitment of age-1 fish. Bottom panel – log recruitment residuals.



RED SNAPPER – BACKGROUND INFORMATION

Table 5.5. CPUE of red snapper off the southeastern U.S. based on handline gear reported in commercial logbooks. Columns are year, nominal CPUE (lb/hook-hr), nominal CPUE relative to its mean, standardized CPUE, lower (LCI) and upper (UCI) 95% confidence intervals of the standardized CPUE, annual sample size (N = number of positive and zero trips), and coefficient of variation (CV) of the standardized CPUE.

YEAR	Nominal CPUE	Relative nominal	Standardized CPUE	LCI	UCI	N	CV
1993	0.294	0.888	1.052	0.918	1.205	1862	0.068
1994	0.246	0.745	0.856	0.743	0.986	2058	0.071
1995	0.360	1.087	0.879	0.760	1.017	2293	0.073
1996	0.285	0.861	0.691	0.580	0.825	2104	0.088
1997	0.325	0.983	0.610	0.498	0.748	2013	0.102
1998	0.263	0.795	0.688	0.558	0.847	1782	0.105
1999	0.291	0.880	0.851	0.699	1.035	1596	0.098
2000	0.312	0.943	0.869	0.706	1.069	1571	0.104
2001	0.452	1.366	1.347	1.175	1.545	1869	0.068
2002	0.391	1.181	1.475	1.291	1.684	1758	0.066
2003	0.385	1.162	1.220	1.029	1.446	1446	0.085
2004	0.438	1.323	1.523	1.278	1.815	1369	0.088
2005	0.356	1.075	1.263	1.038	1.537	1354	0.098
2006	0.235	0.709	0.677	0.521	0.878	1269	0.131

RED SNAPPER – BACKGROUND INFORMATION

Table 5.9. CPUE of red snapper off the southeastern U.S. based on headboat data. Columns are year, nominal CPUE (number/hook-hr), nominal CPUE relative to its mean, standardized CPUE, lower (LCI) and upper (UCI) 95% confidence intervals of the standardized CPUE, annual sample size (N = number of positive and zero trips), and coefficient of variation (CV) of the standardized CPUE.

YEAR	Nominal CPUE	Relative nominal	Standardized CPUE	LCI	UCI	N	CV
1976	0.0444	3.328	3.127	0.930	10.511	789	0.666
1977	0.0293	2.193	2.078	0.434	9.963	812	0.921
1978	0.0299	2.242	2.120	0.556	8.081	1419	0.751
1979	0.0276	2.067	2.138	0.537	8.504	1264	0.781
1980	0.0152	1.138	1.129	0.193	6.589	1333	1.085
1981	0.0258	1.934	2.777	0.782	9.866	998	0.703
1982	0.0110	0.823	1.044	0.164	6.629	1282	1.162
1983	0.0185	1.383	1.705	0.401	7.243	1450	0.829
1984	0.0214	1.606	1.554	0.332	7.276	1340	0.902
1985	0.0222	1.663	2.285	0.672	7.770	1643	0.674
1986	0.0072	0.539	0.511	0.059	4.442	2039	1.489
1987	0.0079	0.591	0.612	0.079	4.728	2048	1.357
1988	0.0091	0.678	0.563	0.069	4.580	1942	1.413
1989	0.0137	1.026	0.952	0.148	6.111	1301	1.171
1990	0.0112	0.838	0.987	0.161	6.031	1357	1.126
1991	0.0074	0.553	0.619	0.071	5.374	1384	1.489
1992	0.0025	0.186	0.081	0.003	2.546	2051	4.285
1993	0.0039	0.295	0.213	0.013	3.554	1862	2.498
1994	0.0047	0.353	0.225	0.014	3.732	1513	2.488
1995	0.0053	0.400	0.302	0.022	4.205	1395	2.157
1996	0.0037	0.277	0.202	0.010	4.075	1104	2.927
1997	0.0032	0.239	0.223	0.010	5.195	820	3.302
1998	0.0040	0.298	0.179	0.009	3.503	1465	2.847
1999	0.0060	0.446	0.293	0.021	4.018	1448	2.131
2000	0.0072	0.537	0.389	0.033	4.642	1270	1.911
2001	0.0135	1.010	0.822	0.125	5.400	1460	1.194
2002	0.0167	1.250	1.005	0.173	5.839	1350	1.081
2003	0.0098	0.734	0.518	0.050	5.365	973	1.708
2004	0.0131	0.981	0.969	0.161	5.824	1368	1.112
2005	0.0115	0.859	0.903	0.136	5.998	1190	1.204
2006	0.0071	0.531	0.473	0.043	5.224	1132	1.797

RED SNAPPER – BACKGROUND INFORMATION

Table 5.10. Number of intercepts from MRFSS that caught red snapper or reported red snapper as a targeted species. The index of abundance was computed for 1983–2006, because of total sample size and distribution across states.

Year	Total	NC	SC	GA	FL
1982	48	0	14	0	34
1983	168	0	29	8	131
1984	398	15	81	7	295
1985	215	18	29	17	151
1986	154	4	4	11	135
1987	196	112	5	17	62
1988	279	134	7	8	130
1989	284	127	49	10	98
1990	114	82	5	0	27
1991	137	62	15	12	48
1992	278	63	0	93	122
1993	180	34	2	93	51
1994	257	76	6	95	80
1995	171	54	0	70	47
1996	98	15	6	53	24
1997	76	0	44	15	17
1998	131	7	23	46	55
1999	386	27	80	47	232
2000	508	16	110	40	342
2001	555	44	22	30	459
2002	567	61	19	23	464
2003	535	47	24	64	400
2004	554	9	38	181	326
2005	400	14	33	115	238
2006	493	25	32	164	272

RED SNAPPER – BACKGROUND INFORMATION

Table 5.11. CPUE of red snapper off the southeastern U.S. based on MRFSS data. Relative CPUE is CPUE standardized to its mean.

YEAR	CPUE (number/ angler-trip)	Relative CPUE	PSE
1983	2.770	1.716	17.6
1984	2.533	1.569	15.3
1985	2.199	1.362	17.4
1986	1.154	0.715	32.2
1987	1.047	0.648	37.0
1988	1.137	0.704	24.9
1989	0.943	0.584	17.1
1990	0.323	0.200	29.9
1991	1.093	0.677	27.3
1992	1.723	1.067	15.2
1993	1.854	1.148	23.3
1994	1.201	0.744	20.9
1995	1.226	0.759	15.8
1996	1.073	0.665	28.0
1997	1.737	1.076	34.7
1998	1.295	0.802	21.5
1999	2.387	1.479	12.9
2000	2.163	1.340	12.2
2001	1.800	1.115	11.4
2002	1.604	0.994	13.7
2003	1.863	1.154	13.6
2004	2.088	1.294	11.7
2005	1.949	1.207	11.1
2006	1.585	0.982	15.5

RED SNAPPER – BACKGROUND INFORMATION

Max. Age Gulf = 57; Atlantic = 54

Table 2.1. Red Snapper: Size (mid-year), sex ratio and female maturity at age. Length is total length, weight is whole weight.

Age	Length (mm)	Length (in)	Weight (kg)	Weight (lb)	Sex Ratio	Female Maturity
1	332.9	13.11	0.5	1.04	0.5	0.237
2	450.5	17.74	1.2	2.66	0.5	0.644
3	543.6	21.40	2.2	4.77	0.5	0.913
4	617.1	24.30	3.2	7.07	0.5	0.984
5	675.2	26.58	4.2	9.36	0.5	0.997
6	721.2	28.39	5.2	11.48	0.5	1.000
7	757.5	29.82	6.1	13.37	0.5	1.000
8	786.3	30.96	6.8	15.01	0.5	1.000
9	809.0	31.85	7.4	16.39	0.5	1.000
10	826.9	32.56	8.0	17.55	0.5	1.000
11	841.1	33.11	8.4	18.50	0.5	1.000
12	852.3	33.56	8.7	19.28	0.5	1.000
13	861.2	33.91	9.0	19.91	0.5	1.000
14	868.2	34.18	9.3	20.41	0.5	1.000
15	873.8	34.40	9.4	20.82	0.5	1.000
16	878.2	34.57	9.6	21.15	0.5	1.000
17	881.6	34.71	9.7	21.41	0.5	1.000
18	884.4	34.82	9.8	21.62	0.5	1.000
19	886.5	34.90	9.9	21.78	0.5	1.000
20	888.2	34.97	9.9	21.91	0.5	1.000

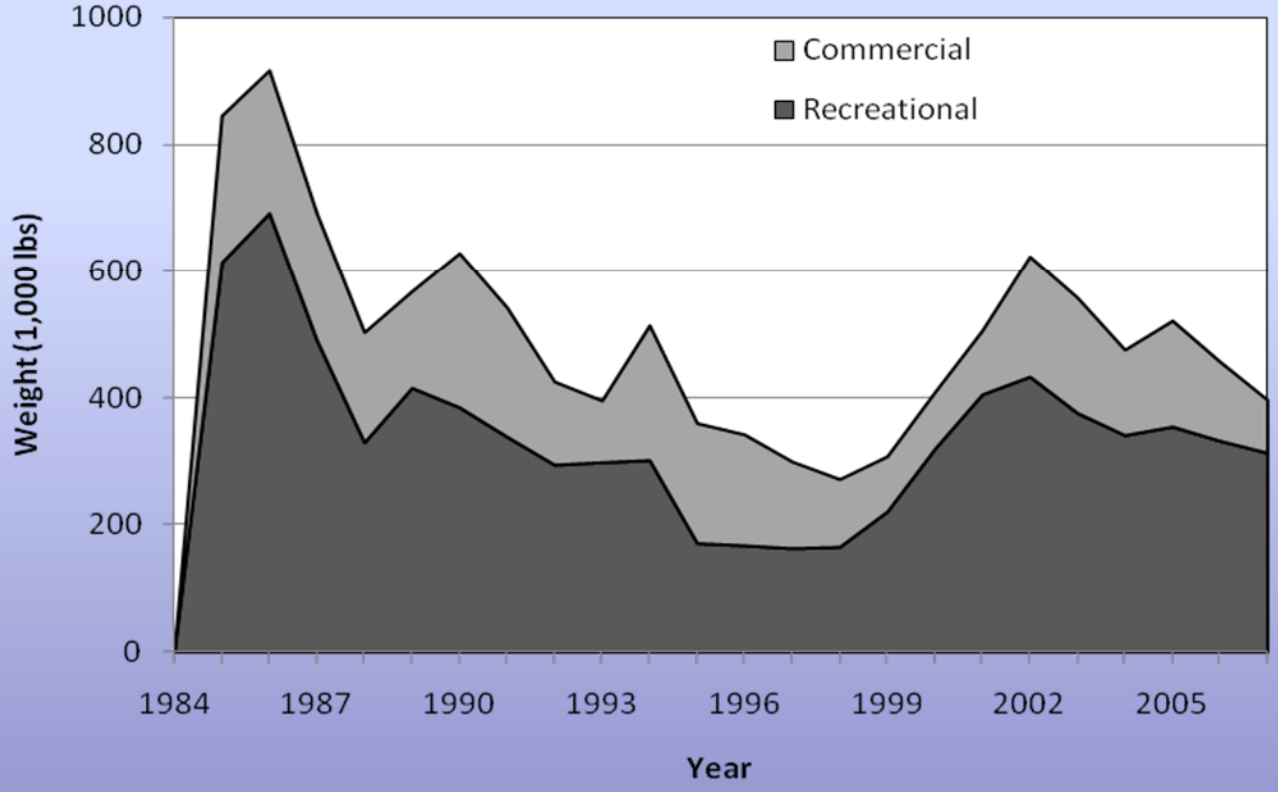
RED SNAPPER – BACKGROUND INFORMATION

- **DISCARD MORTALITY**
  - **GULF REC= 15% @ 20-40m TO 40% @ >40 m**
  - **GULF COM= 71% @ 55m TO 88% @ 83 m**
  - **ATL REC = 40% (30%-50% SENSITIVITY)**
  - **ATL COM = 90% (80% - 100% SENSITIVITY)**

- **SPAWNING**
  - **OCCURS FROM MAY THROUGH OCTOBER**
  - **PEAKED DURING JULY THROUGH SEPTEMBER**

Red Snapper SEDAR Results

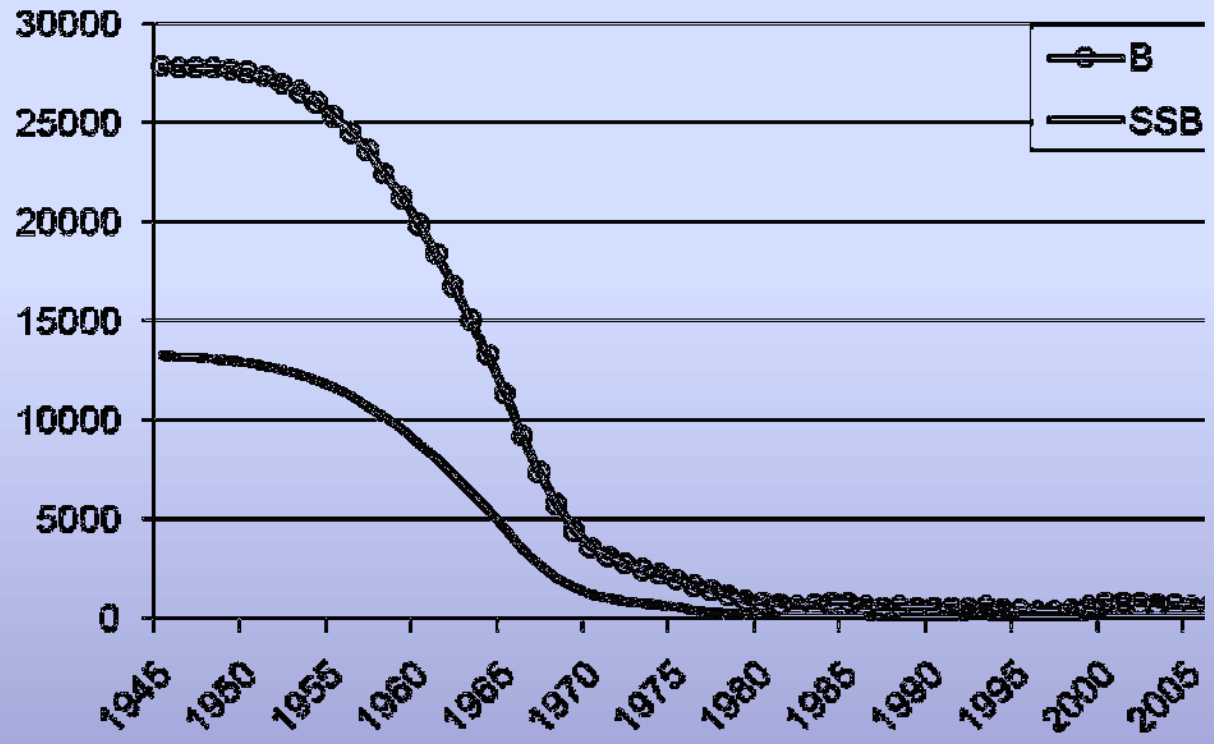
Figure 2. Landings by fishery sector, 1984-2006. (Note: Discards by weight were unavailable in this assessment). Note: (1) 8/31/83 – 4" trawl mesh & 12" TL; (2) 1/12/89 – no trawls; and (3) 1/1/92 – no traps, 20" TL & recreational bag of 2 red snapper.



Red Snapper SEDAR Results

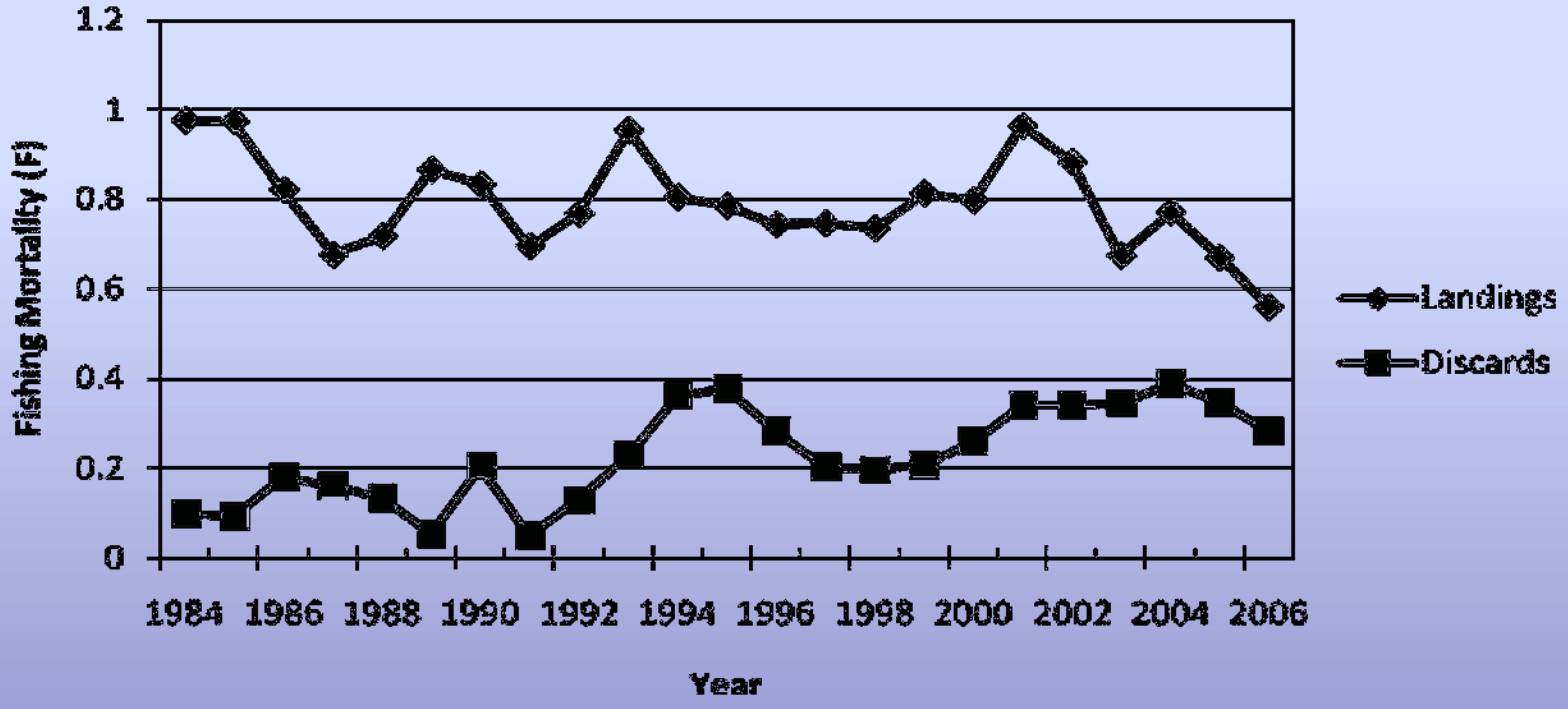
Figure 1. Biomass and Spawning Stock

Biomass (metric tons) (MSST=7,275 MT).



Red Snapper SEDAR Results

Figure 3. Fully recruited fishing mortality.
Note: (1) 8/31/83 – 4" trawl mesh & 12" TL; (2) 1/12/89 – no trawls; and (3) 1/1/92 – no traps, 20" TL & recreational bag of 2 red snapper.



Red Snapper SEDAR Results

Figure 4. Fishing Mortality (F)/Fishing Mortality at Maximum Sustainable Yield ($F_{40\%}$) Ratio. Note: (1) 8/31/83 – 4" trawl mesh & 12" TL; (2) 1/12/89 – no trawls; and (3) 1/1/92 – no traps, 20" TL & recreational bag of 2 red snapper.

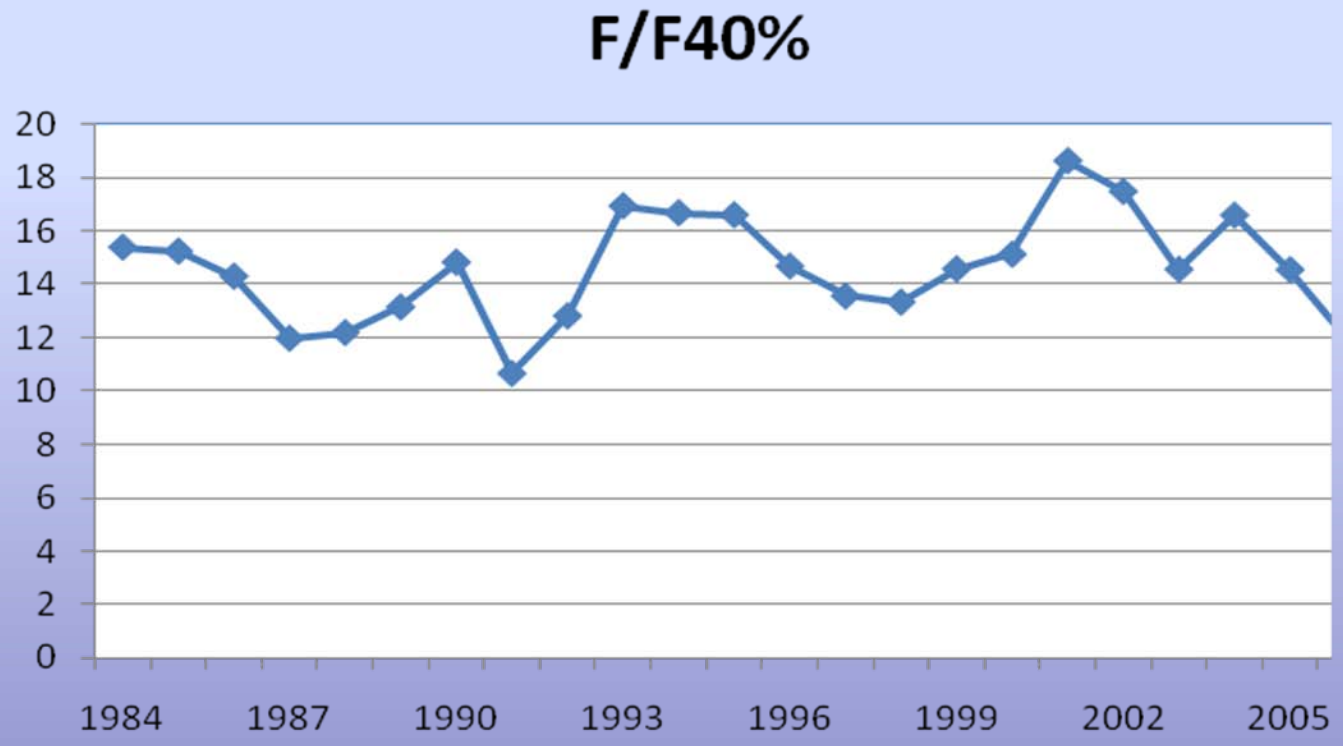
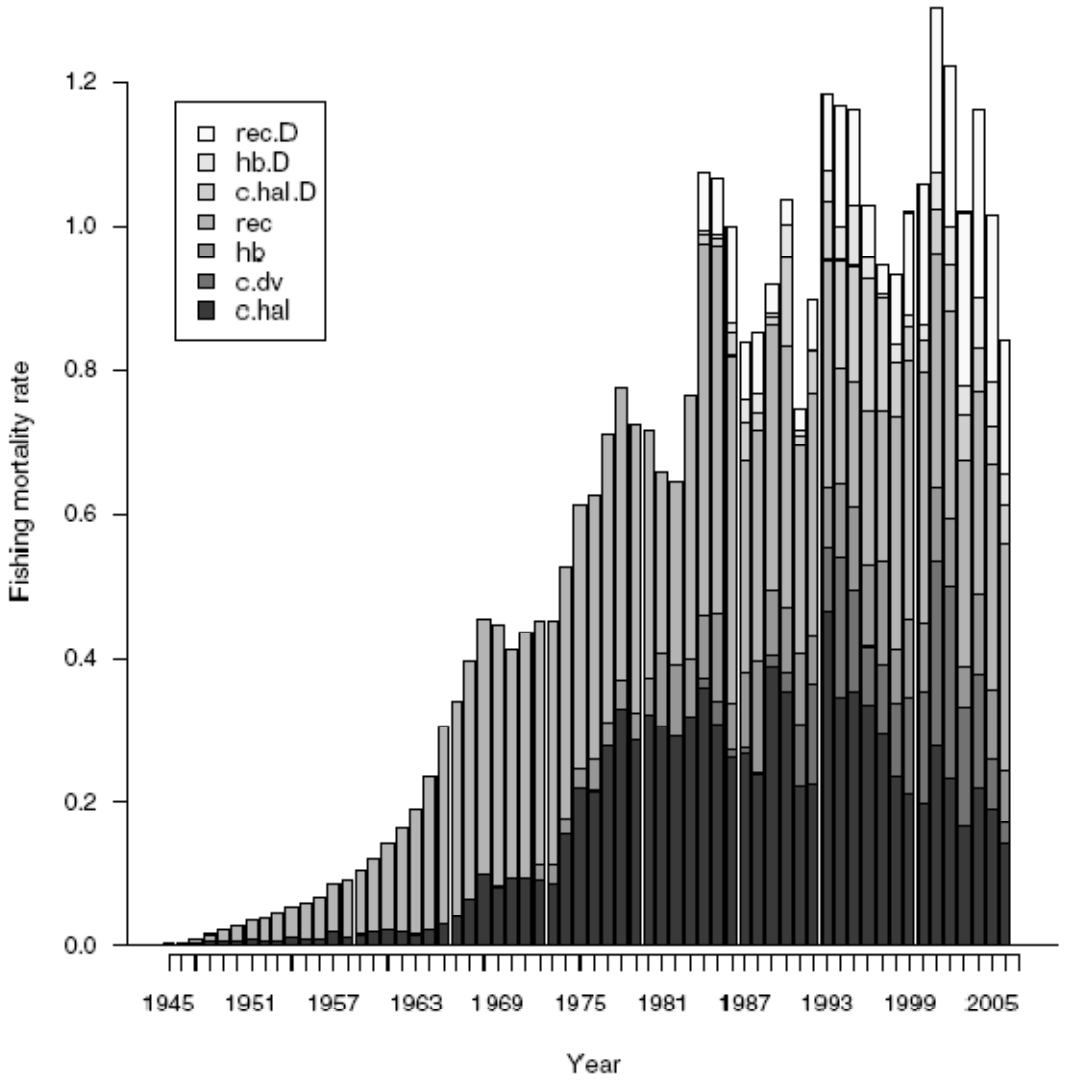
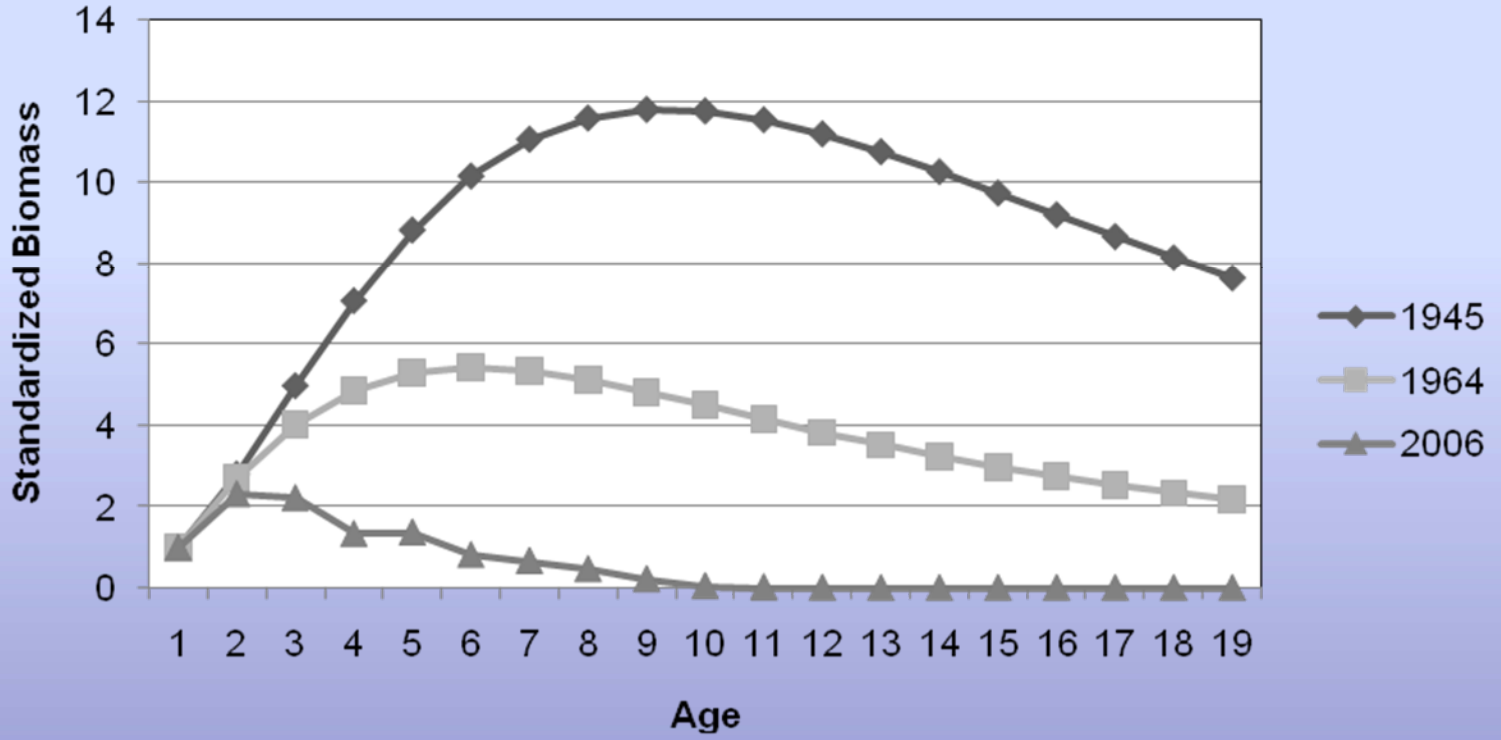


Figure 3.31. Red snapper: Estimated instantaneous fishing mortality rate (per year) by fishery. c.hal refers to commercial handline, c.dv to commercial diving, hb to headboat, rec to general recreational, c.hal.D to commercial discard mortalities, c.hb.D to headboat discard mortalities, and rec.D to general recreational discard mortalities.



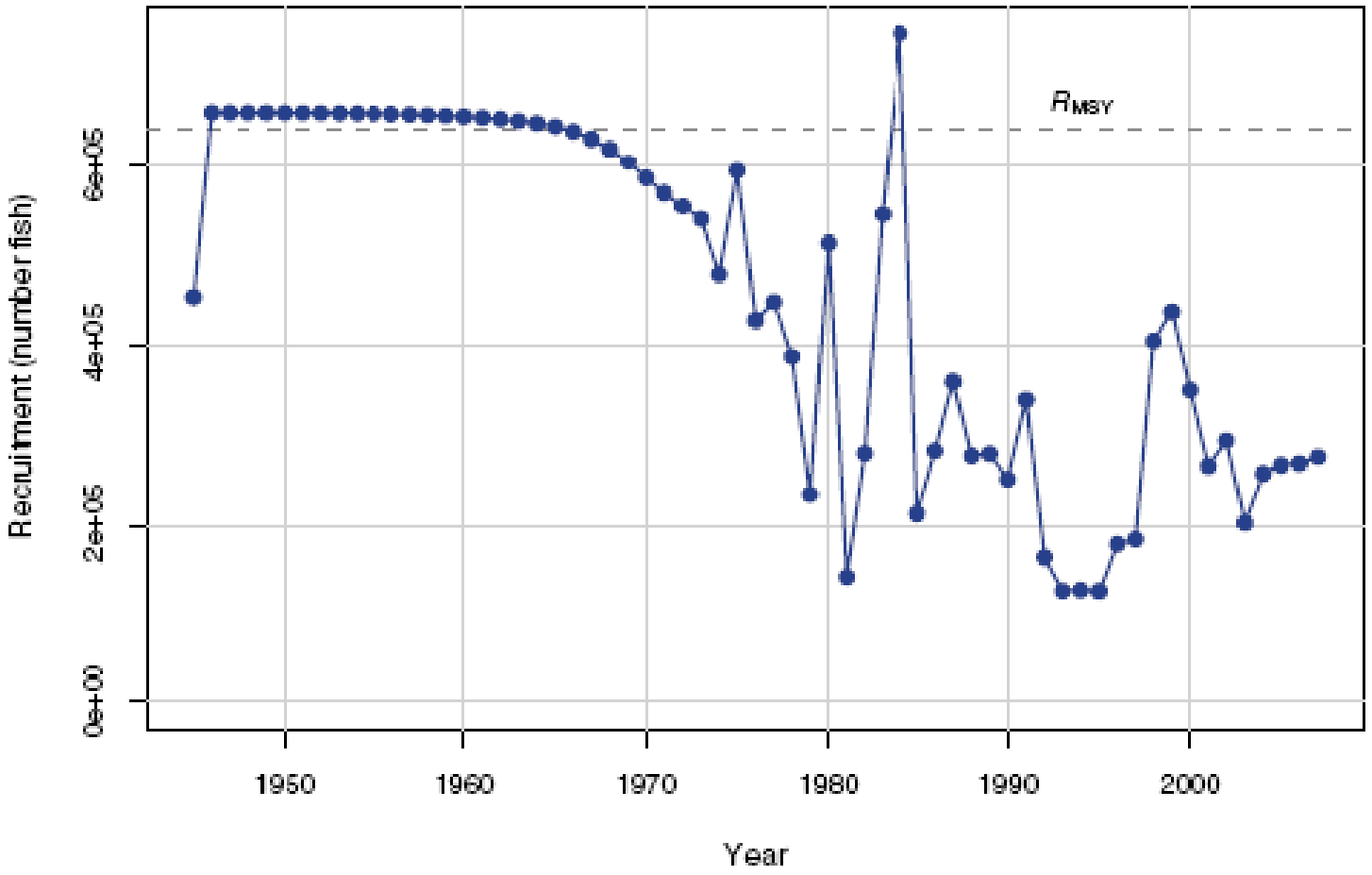
Red Snapper SEDAR Results

Figure 5. Age structure of the population (standardized to year-1 biomass). Note: (1) 8/31/83 – 4" trawl mesh & 12" TL; (2) 1/12/89 – no trawls; and (3) 1/1/92 – no traps, 20" TL & recreational bag of 2 red snapper.



Red Snapper SEDAR Results

Figure 3.21. Red snapper: Top panel – Estimated recruitment of age-1 fish. Bottom panel – log recruitment residuals.



Red Snapper SEDAR Results

Table 2. Status Summary Table (conditioned on the base run of the model).

Quantity	Units	Estimate
MFMT ($F_{40\%}$)	per year	0.07
$B_{40\%}$	mt	17347
$SSB_{F40\%}$	mt	7891
$MSST_{F40\%}$	mt	7275
$MSY_{F40\%}$	1000 lb	2314
$D_{F40\%}$	1000 fish	37
F_{MSY}	per year	0.112
$F_{2006}/F_{40\%}$	–	12.021
$SSB_{2006}/SSB_{F40\%}$	–	0.025
$SSB_{2006}/MSST_{F40\%}$	–	0.027

Red Snapper SEDAR Results

Tables 3a & 3b show the results of the 12 projection scenarios. What the discard-only projections show is that in order to rebuild the stock, the total catch (landings and discards) of red snapper will need to be reduced, not just the landings.

Red Snapper SEDAR Results – Table 3a.

Projection Scenario	Projected Recovery Date
F = 0 (assumes we can really limit all sources of mortality to zero; unrealistic in a multispecies fishery like the snapper grouper fishery)	**2020**
F = $F_{current}$ (reflecting 2004-2006) (best estimate of the current fishing mortality rate)	**0.3% of recovered value by 2040**
F_{MSY} (assumes fishing at the fishing mortality rate that produces maximum sustainable yield)	**97.5% of recovered value by 2040**
$F_{65\%MSY}$ (assumes fishing at65% of the fishing mortality rate that produces maximum sustainable yield)	**2025**
$F_{75\%MSY}$ (assumes fishing at 75% of the fishing mortality rate that produces maximum sustainable yield)	**2027**
$F_{85\%MSY}$ (assumes fishing at 85% of the fishing mortality rate that produces maximum sustainable yield)	**2030**
$F_{Rebuild}$ ($F_{Rebuild}$ = 0.109, about 97% of F_{MSY}) (assumes fishing at the fishing mortality rate that rebuilds the stock by the recovery deadline of 2040)	**2040**

Red Snapper SEDAR Results – Table 3b

Discard Only Scenarios: Commercial diving excluded and assumed that all fish expected to be caught as bycatch associated with targeting other species were released and they were subject to various levels of discard mortality; assumed that any individual fish could be caught only once per.	
F = $F_{current}$ **Discard mortality: Com = 0.9, Rec = 0.4** (these are the discard mortality rates recommended for use in the assessment)	**15% of recovered value by 2040**
F = $F_{current}$ **Discard mortality: Com = 0.8, Rec = 0.2** (discard mortality rates lower than used in the assessment)	**25% of recovered value by 2040**
F = $F_{current}$ **Discard mortality: Com = 1.0, Rec = 0.6** (discard mortality rates higher than those used in the assessment)	**9.8% of recovered value by 2040**
F = $F_{Rebuild}$= 0.262 **Discard mortality: Com = 0.9, Rec = 0.4** (these are the discard mortality rates recommended for use in the assessment)	**2040**
F = $F_{Rebuild}$= 0.286 **Discard mortality: Com = 0.7, Rec = 0.4** (if the commercial discard mortality rate is lower than that recommended for use in the assessment)	**2040**

Red Snapper – Potential Management Measures

Given the need to reduce total fishing mortality (landings and discards) by at least 87% (from F=0.841 to F=0 .109), the Council is considering the following measures to end overfishing and rebuild red snapper:

PRESENTED AT SCOPING:

Emergency/interim rule - prohibit all harvest and possession of red snapper. If the Council approved this request at the June 2008 meeting, the estimated effective date would be around January 1, 2009. The Council is also considering a measure in Snapper Grouper Amendment 16 that would reduce recreational and commercial bycatch mortality by requiring the use of venting and dehooking tools and non-offset, non-stainless steel circle hooks when using natural baits to fish commercially or recreationally for snapper grouper species. The estimated effective date for Amendment 16 is January 1, 2009.

Red Snapper – JUNE 2008 COUNCIL ACTIONS

1. MOVE RED SNAPPER INTO AMENDMENT 17
2. APPROVED MOTION: THE COUNCIL DIRECTED STAFF TO DEVELOP A LETTER TO THE REGIONAL ADMINISTRATOR REQUESTING THE REGIONAL OFFICE DEVELOP AN **INTERIM RULE CLOSING HARVEST OF RED SNAPPER** AND IMPLEMENTING THE REDUCTIONS IN FISHING MORTALITY AS SPECIFIED IN THE PREFERRED ALTERNATIVES IN AMENDMENT 16 FOR GAG GROUPER, VERMILION SNAPPER, BLACK GROUPER, AND RED GROUPER. THE COUNCIL'S INTENT IS THAT THE INTERIM RULE WOULD BE BROUGHT BEFORE THE COUNCIL FOR CONSIDERATION AT THE SEPTEMBER 2008 MEETING. [LETTER GEIGER TO CRABTREE, 7/26/08]
3. INTERIM RULE (2ND BB MAILING) – **ATTACHMENT 20**

Amendment 17 Schedule

- Scoping through February 2008
- Council Review Scoping – March 2008
- SSC/AP Review Scoping & Options – June 2008
- Council Works on Options – June & Sept. 2008
- SSC Reviews Draft Amendment – Dec. 2008
- Council Approves for Public Hearing – Dec. 2008
- Public hearings – February 2009
- Council Review PH Input & Finalize – March 2009
- SSC/AP Rev. & Council Approve – June 2009
- Estimated Effective Date – January 1, 2010