

distributed equally among the vessels that landed that species in 2002, the average increase in gross revenue per vessel associated with the preferred quota would be \$5,585 for summer flounder, \$331 for scup, and \$1,998 for black sea bass. The number of vessels landing summer flounder, scup, and black sea bass in 2002 was 796, 499, and 736, respectively.

The overall increase in gross revenue associated with the three species combined in 2004 compared to 2003 is approximately \$6.1 million (assuming 2002 ex-vessel prices) under the Preferred Alternative. If this amount is distributed equally among the 1,041 vessels that landed summer flounder, scup, and/or black sea bass in 2002, the average increase in revenue would be approximately \$5,842 per vessel.

The Council's analysis of the harvest limits of Alternative 2 (*i.e.*, the most restrictive harvest limits) indicated that these harvest limits would produce a revenue increase for 371 commercial vessels, primarily because a large proportion of their revenues were derived from black sea bass, and a revenue loss for the other 670 commercial vessels expected to be impacted by this rule. Assuming 2002 ex-vessel prices as described above, the 2004 quotas in Alternative 2 (after overages have been applied) would increase total summer flounder and black sea bass revenues by approximately \$6,600 and \$400,000, respectively, and decrease total scup revenues by approximately \$2.7 million, relative to 2003 revenues.

Assuming that the total ex-vessel gross revenue associated with Alternative 2 is distributed equally among the vessels that landed that species in 2002, the average change in gross revenue per vessel associated with Alternative 2 would be an \$8 increase for summer flounder, a \$5,343 decrease for scup, and a \$611 increase for black sea bass. The number of vessels landing summer flounder, scup, and black sea bass in 2002 was 796, 499, and 736, respectively.

The overall reduction in gross revenue associated with the three species combined in 2004 compared to 2003 is approximately \$2.2 million (assuming 2002 ex-vessel prices) under Alternative 2. If this amount is distributed equally among the 1,041 vessels that landed summer flounder, scup, and/or black sea bass in 2002, the average decrease in revenue would be approximately \$2,123 per vessel.

The Council's analysis of the harvest limits of Alternative 3 (*i.e.*, the least restrictive harvest limits) indicated that these harvest limits would produce a

revenue increase for all 1,041 commercial vessels. Assuming 2002 ex-vessel prices as described above, the 2004 quotas in Alternative 3 (after overages have been applied) would increase total summer flounder, scup, and black sea bass revenues by approximately \$6.2 million, \$3.0 million, and \$2.2 million, respectively, relative to 2003 revenues.

Assuming that the total ex-vessel gross revenue associated with Alternative 3 is distributed equally between the vessels that landed that species in 2002, the average increase in gross revenue per vessel associated with Alternative 3 would be \$7,748 for summer flounder, \$6,005 for scup, and \$3,032 for black sea bass. The number of vessels landing summer flounder, scup, and black sea bass in 2002 was 796, 499, and 736, respectively.

The overall increase in gross revenue associated with the three species combined in 2004 compared to 2003 is approximately \$11.4 million (assuming 2002 ex-vessel prices) under Alternative 3. If this amount is distributed equally among the 1,041 vessels that landed summer flounder, scup, and/or black sea bass in 2002, the average increase in revenue would be approximately \$10,947 per vessel.

The Council also prepared an analysis of the alternative recreational harvest limits. The 2004 recreational harvest limits were compared with previous years through 2002, the most recent year with complete recreational data.

Landing statistics from the last several years show that recreational summer flounder landings have generally exceeded the recreational harvest limits, ranging from a 5-percent overage in 1993 to a 122-percent overage in 2000. In 2001, summer flounder recreational landings were 11.64 million lb (5,280 mt), exceeding the harvest limit of 7.16 million lb (3,248 mt) by 63 percent. In 2002, recreational landings were 7.96 million lb (3,611 mt), 18 percent below the recreational harvest limit of 9.72 million lb (4,409 mt).

For summer flounder, the adjusted 2004 preferred recreational harvest limit of 11.21 million lb (5,085 mt) in Alternative 1 would be greater than the recreational harvest limits for the years 1993 through 2003. The adjusted summer flounder Alternative 2 recreational harvest limit of 9.25 million lb (4,196 mt) (the status quo alternative) would be less than 1 percent lower than the 2003 recreational harvest limit, and represents a 16-percent increase from 2002 recreational landings. The adjusted Alternative 3 recreational harvest limit of 11.97 million lb (5,430 mt) would be a 29-percent increase from the 2003

recreational harvest limit, and represents a 50-percent increase from 2002 landings. If Alternative 1, 2, or 3 is chosen, it is possible that more restrictive management measures may be required to prevent anglers from exceeding the 2004 recreational harvest limit, depending upon the effectiveness of the 2003 recreational management measures. More restrictive regulations could affect demand for party/charter boat trips. However, party/charter activity in the 1990s has remained relatively stable, so the effects may be minimal. Currently, neither behavioral or demand data are available to estimate how sensitive party/charter boat anglers might be to proposed fishing regulations. Overall, it is expected that positive social and economic impacts would occur as a result of the 21-percent increase in the recreational harvest limit, relative to 2003. The Council intends to recommend specific measures to attain the 2004 summer flounder recreational harvest limit in December 2003, and will provide additional analysis of the measures upon submission of its recommendations in early 2004.

Scup recreational landings declined over 89 percent for the period 1991 to 1998, then increased by 517 percent from 1998 to 2000. In 2002, recreational landings were 3.62 million lb (1,642 mt). Under Preferred Alternative 1 (the status quo alternative), the adjusted scup recreational harvest limit for 2004 would be 3.99 million lb (1,810 mt), less than 1 percent lower than the 2003 recreational harvest limit, and represents a 10-percent increase from 2002 recreational landings. The Alternative 2 scup recreational harvest limit of 2.78 million lb (1,261 mt) for 2004 would be 31 percent less than the 2003 recreational harvest limit, and 23 percent less than 2002 recreational landings. The Alternative 3 scup recreational harvest limit of 5.20 million lb (2,359 mt) in 2004 would be an increase of 30 percent from the 2003 recreational harvest limit and an increase of 44 percent from 2002 recreational landings. With Alternative 2, and possibly Alternative 1, more restrictive management measures might be required to prevent anglers from exceeding the 2003 recreational harvest limit, depending largely upon the effectiveness of the 2003 recreational management measures. As described above for the summer flounder fishery, the effect of greater restrictions on scup party/charter boats is unknown at this time. Although the proposed recreational harvest limit is approximately 20,000 lb (9.07 mt) less