

The DAS allocations implemented under the August 2002 rule would continue under the proposed emergency action. The reductions in 2002 DAS allocations impacted all permit categories. There were 1,383 limited access permits with baseline DAS allocations for the 2002 fishing year. Of these permits, 343 received the minimum allocation of 8 DAS. A total of 71, 180 DAS were allocated for the fishing year; a reduction of 45.7 percent compared to the final fishing year 2001 allocations.

The relative reduction in DAS allocations varied by permit category. The total reduction for individual allocation vessels (category A) was 21.7 percent, as compared with 49 percent for category B and 65.9 percent for Category D. Reductions in total DAS allocations for FY 2002 were larger for small vessels (less than 50 ft (15.2 m)), than for medium or large vessels. New York and New Jersey were the two states with the largest reduction in fishing year 2002 DAS allocations. In contrast, under the No Action alternative, the DAS allocations would be markedly larger, with the potential for DAS use to increase above that which was recorded for the 2001 fishing year.

Relative changes to gross revenue were calculated based upon an estimation that DAS use in fishing year 2003 would range from 25 percent to 35 percent less than the number of DAS used during the 2001 fishing year. The estimated revenue loss for the 84 most affected vessels would be 21.3 percent or greater for an assumed 25 percent reduction in DAS, and would be 25 percent for an assumed 35 percent reduction in DAS. For vessels in the 25th to 50th percentile, the estimated revenue loss range from 19.7 percent to 11.5 percent for a 35 percent reduction in DAS use. Revenue loss for the least affected vessels would be no more than 1.5 percent. Relative dependence upon groundfish revenue is an important factor among the various factors that may determine the severity of the impact of the proposed measures on a particular vessel. The greater a vessel's dependence upon groundfish for annual fishing income, the greater the revenue loss is likely to be. The No Action alternative would result in no negative impacts or slightly positive impacts, in comparison with the proposed measures.

With respect to gross annual revenue earned during the 2001 fishing year (pre-settlement agreement), the proposed measures would have the largest adverse economic impacts on vessels in Maine, New Hampshire, and Massachusetts, but among these states,

the estimated impacts would be similar. The No Action alternative would have positive economic impacts on vessels that fish in the GOM and fish in the Western Gulf of Maine specifically. The least adverse economic impacts would be for those vessels from states bordering the Gulf of Maine, and for small gillnet vessels or large hook vessels.

A break even analysis was conducted that estimated a total of 86 vessels that would not have enough DAS to cover overhead costs. The analysis further concluded that if vessels were to make a minimum crew share payment of \$25,000 per person, there would be 268 vessel that would be able to cover overhead costs, but would not have enough DAS to make this minimum labor payment. However, at this relatively low crew payment, DAS leasing could make it possible for vessels to redistribute DAS so that all vessels could operate profitably.

Leasing of DAS would provide individual vessel owners an opportunity to offset and mitigate the impact of the DAS reductions that were implemented in August, 2002 that would be continued under the preferred alternative. On a scale of the fishery as a whole, the aggregate supply of groundfish is not expected to differ under a DAS leasing program, however, changes in the distribution of landings could result in increases in supply in one port while supplies in other ports may decline. Although it is difficult to predict the number of vessels that would participate in a DAS leasing program, two analyses were conducted. The first analysis identified the number of vessels whose fishing year 2002 DAS allocations would not be sufficient to pay fixed costs plus provide a minimum payment to the vessel crew. Under the leasing program, fewer vessels will actually fish, but the profits for all vessels will be higher than if days at sea leasing were not allowed, and all vessels fished their allocation. Vessels which choose to lease all their DAS can greatly enhance their profit, because the owner is getting all the revenue from the lease without incurring any costs, and in particular not having to pay labor costs. Under the analytical scenario where all vessels can fish up to 100 or 150 days, the average profit level for vessels which lease DAS from other vessels is projected to increase from 31 percent to 60 percent (depending on gear sector) compared to what they would earn if they only fished their allocation. These vessels would fish on average from 97 to 149 days, and would lease on average between 37 and 94 days, at an average cost of between \$ 724 and \$ 1,153 per

day. At the same time the number of vessels actively fishing would decline from 41 to 67 percent. Average profit for the vessels which don't fish under this scenario and instead lease all their DAS is projected to increase approximately from 38 percent to 305 percent compared to what they would earn from fishing their allocation of DAS.

The required changes to mesh size were estimated to affect 424 trawl vessels fishing in the GOM or GB area and 221 trawl vessels the fished in the SNE area. The average cost to replace the cod end was estimated to be \$1,250. The mesh changes were estimated to affect 18 day boat gillnet vessels that used tie-down nets fished in the GOM. The average cost to these vessels to replace their nets was \$7,794. The mesh changes were estimated to affect 31 day boat gillnet vessels that used stand-up nets that fished in the GOM. The average cost to these vessels to replace their nets was \$9,300. The mesh changes were estimated to affect 25 trip gillnet vessels that fished in the GOM. The average cost to these vessels to replace their nets was \$18,352. The mesh changes were estimated to affect 32 gillnet vessels that fished in either GB or SNE. The average cost to these vessels to replace their nets was \$8,800.

The required changes to gear limits would affect 30 bottom longline vessels, 72 day gillnet vessels, and 24 trip gillnet vessels. The average revenue loss for these vessels was estimated to be \$21,400.

Under the proposed measures, individuals that provide passenger services to recreational anglers (charter/party vessels) will also be directly affected. Economic impacts are expected to be minimal since the relationship between changes in bag and possession limits and passenger demand has historically been weak. Following implementation of a reduction in minimum fish size in 1997, the number of passengers on charter/party vessels increased.

Relative to the proposed measures, the No Action alternative would mitigate most of the adverse economic impacts associated with the proposed action. In general, gross fishing incomes would increase particularly for vessels operating in the GOM and would have particularly beneficial impact on small vessels and gillnet vessels in general. However, the No Action alternative also would result in unacceptably high increases in fishing mortality rates that could compromise the rebuilding of several GOM stocks, GOM cod in particular. For this reason the No Action alternative would not meet the