## Area 2C GHL Analysis <br> SUPPLEMENT <br> November 5, 2007

In September 2007, ADF\&G Sport Fish Division released a final estimate of 1.804 Mlb for the 2006 Area 2C charter harvest. The final estimate is approximately $225,000 \mathrm{lb}$ (i.e., 11.3 percent) lower than the 2.029 Mlb projection of 2006 harvest ADF\&G issued in October 2006. ADF\&G bases final estimates on actual Statewide Harvest Survey (SWHS) data provided by a sample of Alaska recreational fishing license holders while preliminary harvest estimates are based on linear projections of prior year SWHS data. ADF\&G's projection of 2006 harvest was equal to 142.1 percent of the 1.432 Mlb GHL while the final 2006 harvest estimate is equal to 126.0 percent of the GHL. Figure 1 shows the relationship between historic charter harvests, the Area 2C GHL, and the preliminary (October 2006) charter harvest estimate.


Figure 1. Historic Area 2C charter harvest compared to the Area 2C GHL and the 2006 preliminary harvest estimate

The Final EA/RIR/RFA for the proposed action in Area 2C was completed using the projected 2006 harvest estimate of 2.029 Mlb . Table 1 updates Table 15 of the Final EA/RIR/RFA using the final 2006 Area 2C charter harvest estimate. Table 1 shows the effect of the analyzed options on 2006 harvest "in conjunction with" or "independent from" the NMFS June 2007 action that limited anglers to one fish of any size and one fish less than or equal to 32 inches in length. If proposed management measures could be combined with the status quo then their estimated effects are shown "in conjunction with" the status quo. Most measures could not be simultaneously enacted with the status quo. For example, a one fish bag limit would conflict with the current regulation that allows a two fish bag limit. Similarly, a reverse slot limit on the second fish could not be enacted at the same time as a maximum size on the second fish. These conflicting measures are considered independent of the effects of the status quo.

Table 1. Estimated effect of analyzed management options

| Management Option | Sub-Option | In Conjunction with, or Independent of, the Status Quo | Post-Option Harvest as a Portion of the GHL (\%) |  | Harvest with Option (MIb) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Less Effective | More Effective | Less Effective | More Effective |
| Option 10. Combine Options 1, 2, 3, and 5. | 50 \& 4 Fish | Independent | 76\% | 74\% | 1.089 | 1.064 |
| Preferred Alternative Under Lowered GHL |  | In Conjunction | 76\% | 53\% | 1.089 | 0.762 |
| Option 10. Combine Options 1, 2, 3, and 5. | 50" \& 5 Fish | Independent | 83\% | 81\% | 1.188 | 1.162 |
| Option 10. Combine Options 1, 2, 3, and 5. | 45 " \& 4 Fish | Independent | 83\% | 83\% | 1.193 | 1.185 |
| Preferred Alternative Under the Current GHL |  | In Conjunction | 85\% | 78\% | 1.210 | 1.114 |
| Option 3. Annual Limit with NMFS 2007 | 4 Fish | In Conjunction | 85\% | 78\% | 1.210 | 1.114 |
| Option 10. Combine Options 1, 2, 3, and 5. | 50 \& 6 Fish | Independent | 88\% | 86\% | 1.257 | 1.232 |
| Option 10. Combine Options 1, 2, 3, and 5. | 45 " \& 5 Fish | Independent | 91\% | 90\% | 1.299 | 1.290 |
| Option 3. Annual Limit with NMFS 2007 | 5 Fish | In Conjunction | 92\% | 84\% | 1.313 | 1.209 |
| Option 7. Combine Options 1, 2, and 5. | $50 "$ | Independent | 95\% | 90\% | 1.362 | 1.282 |
| Option 10. Combine Options 1, 2, 3, and 5. | 45 " \& 6 Fish | Independent | 96\% | 95\% | 1.373 | 1.364 |
| Option 3. Annual Limit with NMFS 2007 | 6 Fish | In Conjunction | 97\% | 89\% | 1.386 | 1.276 |
| Option 5. Minimum Size on the Second Fish | $50 "$ | Independent | 97\% | 92\% | 1.387 | 1.318 |
| Option 8. Combine Options 1 and 2. | None | In Conjunction | 99\% | 91\% | 1.422 | 1.301 |
| Option 1. One Trip per Day | None | In Conjunction | 99\% | 91\% | 1.422 | 1.301 |
| Option 7. Combine Options 1, 2, and 5. | 45" | Independent | 100\% | 90\% | 1.437 | 1.282 |
| 2007 NMFS Rule 1 | None | Status Quo | 101\% | 93\% | 1.448 | 1.333 |
| Option 2. No Harvest by Skipper \& Crew | None | In Conjunction | 101\% | 93\% | 1.448 | 1.333 |
| Option 5. Minimum Size on the Second Fish | 45" | Independent | 102\% | 92\% | 1.464 | 1.318 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32"/50" \& 4 Fish | Independent | 103\% | 92\% | 1.470 | 1.324 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32 "/45" \& 4 Fish | Independent | 106\% | 92\% | 1.518 | 1.321 |
| Option 4. One Fish Bag Limit | July | Independent | 108\% | 99\% | 1.542 | 1.423 |
| Option 4. One Fish Bag Limit | August | Independent | 111\% | 104\% | 1.588 | 1.489 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32"/50" \& 5 Fish | Independent | 112\% | 101\% | 1.598 | 1.452 |
| Option 4. One Fish Bag Limit | June | Independent | 113\% | 108\% | 1.624 | 1.541 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32 "/45" \& 5 Fish | Independent | 115\% | 102\% | 1.650 | 1.454 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32 "/50" \& 6 Fish | Independent | 118\% | 108\% | 1.688 | 1.542 |
| Option 11. Combine Options 1, 2, 3, and 7. | 32 "/45" \& 6 Fish | Independent | 122\% | 108\% | 1.742 | 1.546 |
| Option 9. Combine Options 1, 2, and 7. | 32"/50" | Independent | 123\% | 110\% | 1.766 | 1.576 |
| Option 4. One Fish Bag Limit | May | Independent | 124\% | 123\% | 1.772 | 1.757 |
| Option 4. One Fish Bag Limit | September | Independent | 124\% | 123\% | 1.779 | 1.767 |
| Option 6. Reverse Slot Limit | 32"/50" | Independent | 126\% | 113\% | 1.800 | 1.620 |
| Option 9. Combine Options 1, 2, and 7. | 32"/45" | Independent | 127\% | 114\% | 1.824 | 1.628 |
| Option 6. Reverse Slot Limit | 32"/45" | Independent | 130\% | 117\% | 1.857 | 1.672 |

1 The status quo includes a State of Alaska Emergency Order (EO) that bans skipper and crew harvest and line limits on all charter boats. In order for this ban to remain in effect, ADF\&G must issue a new EO each year. The decision of whether to issue a new EO is internal to ADF\&G. The harvest estimate for the 2007 NMFS Rule includes the effects of this EO. A Federal ban on skipper and crew harvest (along with the 2007 NMFS Rule) are included in the preferred alternative. This ban would be permanent until repealed by the Secretary.

The preferred alternative under the current GHL includes a Federal ban on skipper and crew harvest; line limits equal to the number of paying clients, a two-fish daily bag limit with one fish equal to or less than 32 inches in length, and a four fish annual limit. The preferred alternative under the reduced GHL includes a Federal ban on skipper and crew harvest; line limits equal to the number of paying clients, and a one-fish daily bag limit.

Inclusion of 2006 final charter halibut harvests results in the following:

- The status quo would reduce charter halibut harvest between 93 percent and 101 percent of the GHL under 2006 conditions and final 2006 harvest estimates.
- The Council's preferred alternative would reduce harvest between 78 percent and 85 percent of the GHL under 2006 conditions and final 2006 harvest estimates.
- The Council's preferred alternative would reduce harvest to between 1.114 Mlb and 1.210 Mlb under 2006 conditions and final 2006 harvest estimates. These harvest reductions are also below the reduced GHL of 1.217 Mlb , which might be implemented in 2008 as a result of potential action by the IPHC in January 2008.
- The combination of status quo and a six fish annual limit would reduce harvest between $89 \%$ and $97 \%$ of the GHL under 2006 conditions. Since the Council's preferred alternative under the current GHL was estimated to reduce harvest between $89 \%$ and $99 \%$ of the current GHL in the Final EA/RIR/RFA using projected 2006 harvests, the six fish annual limit best matches the original GHL range selected by the Council during final action.

Finally, preliminary estimates of 2007 charter halibut harvests were provided by ADF\&G to the International Pacific Halibut Commission on October 26, 2007. Preliminary harvest estimates in 2007 for Area 2C are 1.701 Mlb ( $\pm 15$ percent). This is partly due to preliminary estimates of average weight of 17.0 lb for the charter fishery, compared with final average weight estimates of 19.9 lb in 2006.

