The following tables show the estimated percent decrease in recreational landings under different combinations of minimum size limits and vessel limits that the Council may consider. The tables were generated from dock-side intercept data from 2013-2015 then applied to average landings for 2013-2015. State regulations prior to May 23, 2016, are used in this analysis.

Prepared by Mike Larkin, SERO, 6/15/16.

**Table 1** shows the estimated percent decreases in recreational landings for the entire management area of New York through Georgia, if the minimum size limits and vessel limits were applied in both state and federal waters (i.e., all states adopted the same measures that were required in federal waters).

**Table 1.** Estimated percent decreases in Atlantic cobia landings for a combination of minimum size limits and vessel limits for NY-GA, if limits were applied in both state and federal waters.

|  |  |
| --- | --- |
| Vessel Limit | Minimum Size Limit (FL) |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 45 | 50 |
| 1 | 20.4 | 23.3 | 26.5 | 31.1 | 35.1 | 39.7 | 42.2 | 77.9 | 92.1 |
| 2 | 8.8 | 11.7 | 14.9 | 19.5 | 23.5 | 28.1 | 30.6 | 66.3 | 80.5 |
| 3 | 4.4 | 7.3 | 10.5 | 15.1 | 19.1 | 23.7 | 26.2 | 61.9 | 76.1 |
| 4 | 2.7 | 5.6 | 8.8 | 13.4 | 17.4 | 22.0 | 24.5 | 60.2 | 74.4 |
| 5 | 2.1 | 5.0 | 8.2 | 12.8 | 16.8 | 21.4 | 23.9 | 59.6 | 73.8 |
| 6 | 0.9 | 3.8 | 7.0 | 11.6 | 15.6 | 20.2 | 22.7 | 58.4 | 72.6 |
| 7 | 0.3 | 3.2 | 6.4 | 11.0 | 15.0 | 19.6 | 22.1 | 57.8 | 72.0 |
| 8 | 0.0 | 2.9 | 6.1 | 10.7 | 14.7 | 19.3 | 21.8 | 57.5 | 71.7 |
| 9 | 0.0 | 2.9 | 6.1 | 10.7 | 14.7 | 19.3 | 21.8 | 57.5 | 71.7 |
| 10 | 0.0 | 2.9 | 6.1 | 10.7 | 14.7 | 19.3 | 21.8 | 57.5 | 71.7 |
| 11 | 0.0 | 2.9 | 6.1 | 10.7 | 14.7 | 19.3 | 21.8 | 57.5 | 71.7 |
| 12 | 0.0 | 2.9 | 6.1 | 10.7 | 14.7 | 19.3 | 21.8 | 57.5 | 71.7 |

**Table 2** shows the estimated percent decrease for the entire management area if the minimum size limits and vessel limits were only applied in state waters of Virginia and in federal waters off Virginia, but with harvest limits as status quo (33”FL and 2/person) for all other states except a bag limit of 1/person in North Carolina. This scenario would occur if the Council selected harvest limits that only applied to federal waters off Virginia, and Virginia also adopted identical limits for state waters, and the Council made no changes to harvest limits for the other states.

**Table 2.** Estimated percent decreases in Atlantic cobia landings (New York through Georgia) for a combination of minimum size limits and vessel limits for VIRGINIA, if limits were applied in both state and federal waters.

|  |  |
| --- | --- |
| Vessel Limit | Minimum Size Limit (FL) |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 45 | 50 |
| 1 | 4.6 | 5.5 | 7.6 | 9.8 | 12.6 | 15.7 | 15.7 | 26.2 | 33.2 |
| 2 | 2.3 | 3.2 | 5.3 | 7.5 | 10.3 | 13.4 | 13.4 | 23.9 | 30.9 |
| 3 | 0.9 | 1.8 | 4.0 | 6.1 | 8.9 | 12.0 | 12.0 | 22.5 | 29.6 |
| 4 | 0.9 | 1.8 | 4.0 | 6.1 | 8.9 | 12.0 | 12.0 | 22.5 | 29.6 |
| 5 | 0.4 | 1.3 | 3.5 | 5.6 | 8.4 | 11.5 | 11.5 | 22.0 | 29.1 |
| 6 | 0.4 | 1.3 | 3.5 | 5.6 | 8.4 | 11.5 | 11.5 | 22.0 | 29.1 |
| 7 | 0.4 | 1.3 | 3.5 | 5.6 | 8.4 | 11.5 | 11.5 | 22.0 | 29.1 |
| 8 | 0.0 | 0.9 | 3.0 | 5.2 | 8.0 | 11.1 | 11.1 | 21.6 | 28.6 |
| 9 | 0.0 | 0.9 | 3.0 | 5.2 | 8.0 | 11.1 | 11.1 | 21.6 | 28.6 |
| 10 | 0.0 | 0.9 | 3.0 | 5.2 | 8.0 | 11.1 | 11.1 | 21.6 | 28.6 |
| 11 | 0.0 | 0.9 | 3.0 | 5.2 | 8.0 | 11.1 | 11.1 | 21.6 | 28.6 |
| 12 | 0.0 | 0.9 | 3.0 | 5.2 | 8.0 | 11.1 | 11.1 | 21.6 | 28.6 |

**Table 3** shows the estimated percent decrease for the entire management area if the minimum size limits and vessel limits were only applied in state waters of North Carolina and in federal waters off North Carolina, but with harvest limits as status quo (33”FL and 2/person) for all other states. This scenario would occur if the Council selected harvest limits that only applied to federal waters off NC and NC also adopted identical limits for state waters, and the Council made no changes to harvest limits for the other states.

**Table 3.** Estimated percent decreases in Atlantic cobia landings (New York through Georgia) for a combination of minimum size limits and vessel limits for NORTH CAROLINA if limits were applied in both state and federal waters.

|  |  |
| --- | --- |
| Vessel Limit | Minimum Size Limit (FL) |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 45 | 50 |
| 1 | 12.0 | 13.6 | 14.9 | 16.7 | 18.1 | 19.9 | 21.2 | 39.1 | 45.2 |
| 2 | 5.8 | 7.4 | 8.6 | 10.5 | 11.9 | 13.7 | 15.0 | 32.9 | 38.9 |
| 3 | 3.0 | 4.6 | 5.8 | 7.6 | 9.1 | 10.9 | 12.2 | 30.0 | 36.1 |
| 4 | 1.6 | 3.2 | 4.5 | 6.3 | 7.7 | 9.5 | 10.8 | 27.8 | 34.8 |
| 5 | 1.4 | 3.0 | 4.2 | 6.0 | 7.5 | 9.3 | 10.6 | 28.4 | 34.5 |
| 6 | 0.5 | 2.0 | 3.3 | 5.1 | 6.5 | 8.3 | 9.6 | 27.5 | 33.6 |
| 7 | 0.5 | 2.0 | 3.3 | 5.1 | 6.5 | 8.3 | 9.6 | 27.5 | 33.6 |
| 8 | 0.2 | 1.8 | 3.0 | 4.9 | 6.3 | 8.1 | 9.4 | 27.3 | 33.4 |
| 9 | 0.0 | 1.6 | 2.8 | 4.6 | 6.1 | 7.9 | 9.2 | 27.0 | 33.1 |
| 10 | 0.0 | 1.6 | 2.8 | 4.6 | 6.1 | 7.9 | 9.2 | 27.0 | 33.1 |
| 11 | 0.0 | 1.6 | 2.8 | 4.6 | 6.1 | 7.9 | 9.2 | 27.0 | 33.1 |
| 12 | 0.0 | 1.6 | 2.8 | 4.6 | 6.1 | 7.9 | 9.2 | 27.0 | 33.1 |

**NOTE:** Due to time restraints, analyses to compare changes for only state and federal waters for South Carolina and Georgia were not included in this paper, but will be included in the amendment.