## GROUNDFISH MANAGEMENT TEAM REPORT ON SURPLUS CARRYOVER

The Groundfish Management Team (GMT) was provided guidance and preliminary information from the National Marine Fisheries Service (NMFS) West Coast Region (WCR), regarding eligible surplus carryover quota pounds (QP) from the 2016 fishery. The 2016 data have not been finalized (estimated to be complete in April); however, it is likely that the projected 2017 catch estimates (both with and without surplus carryover) will remain relatively unchanged, unless new information develops. The Council can recommend, for each individual species or species complex, that NMFS: a) issue carryover up to 10 percent, b) issue carryover at some level lower than ten percent (i.e., reduce the eligible carryover percent), or c) forego carryover.

Consistent with NMFS' policies and case law, the GMT conducted quantitative analysis to inform decision-making on the question of whether to issue carryover for all individual fishing quota (IFQ) species where the annual catch limit (ACL) is less than the acceptable biological catch (ABC). The GMT discussed the larger issue of carryover at this meeting and previously (e.g., Agenda Item G.4.a, Supplemental GMT Report 2), including the basis for allowing eligible sablefish surplus carryover, and discussions regarding long-term solutions to carryover provisions, as well as the meaning of exceeding ACLs relative to exceeding overfishing levels (OFLs). The GMT notes that this annual evaluation of carryover does not meet the biological rationale, and management incentives, around which the carryover program was originally designed. Currently, a long-term, simplified solution, which also meets the legal obligations, is on the omnibus list for analysis. Council discussion and further guidance from Agenda Item C.2 on the National Standard 1 Guidelines may be linked with this issue.

Table 1 shows the estimated surplus carryover amount available for 2017 (as of 2/14/2017), catch in 2016 (as of 2/23/2017), percent of IFQ allocation attained in 2016, and whether the ABC is equal to the ACL (i.e., is the species eligible for carryover).

All non-whiting IFQ species where the ACL < ABC (except for sablefish north of 36° N. lat.) have attainment rates lower than 60 percent for 2016, and therefore the probability is low that they will reach their respective trawl allocations, or ACLs in 2017 (based on performance in 2011 through 2016). Therefore, the GMT recommends issuance of the maximum amount of eligible carryover for all of those species.

Table 1: Estimated surplus carryover amount available for 2017, catch and attainment in 2016, and whether the ABC is equal to the ACL (i.e. is the species eligible for carryover). Species shaded in grey are not eligible based on ABC=ACL.

| IFQ Species                               | Surplus<br>Carryover<br>Estimate<br>(lbs) a/ | Catch<br>(lbs) b/ | Percent of<br>2016 IFQ<br>Allocation<br>Attained | 2017<br>ABC/ACL<br>Comparison |
|---|--|-------------------|--|-------------------------------|
| Arrowtooth flounder                       | 533,606                                      | 3,130,359         | 46.8%  | ABC = ACL                     |
| Bocaccio rockfish South of 40°10' N.      | 17,792                                       | 95,235            | 50.8%  | ABC > ACL                     |
| Canary rockfish                           | 7,187  | 47,388            | 48.3%  | ABC = ACL                     |
| Chilipepper rockfish South of 40°10' N.   | 257,181                                      | 166,564           | 6.3%   | ABC = ACL                     |
| Cowcod South of 40°10' N.                 | 289  | 651               | 20.5%  | ABC > ACL                     |
| Darkblotched rockfish                     | 57,921                                       | 271,795           | 42.1%  | ABC = ACL                     |
| Dover sole                                | 9,627,430                                    | 15,864,387        | 15.6%  | ABC > ACL                     |
| English sole                              | 1,407,517                                    | 832,510           | 5.7%   | ABC = ACL                     |
| Lingcod North of 40°10' N.                | 213,352                                      | 574,312           | 24.0%  | ABC = ACL                     |
| Lingcod South of 40°10' N.                | 88,561                                       | 54,570            | 5.9%   | ABC = ACL                     |
| Longspine thornyheads North of 34°27' N.  | 549,183                                      | 1,454,246         | 23.4%  | NA                            |
| Minor shelf rockfish North of 40°10' N.   | 228,696                                      | 75,761            | 3.1%   | ABC = ACL                     |
| Minor shelf rockfish South of 40°10' N.   | 40,173                                       | 9,807             | 2.3%   | ABC > ACL                     |
| Minor slope rockfish North of 40°10' N.   | 257,480                                      | 353,249           | 13.0%  | ABC = ACL                     |
| Minor slope rockfish South of 40°10' N.   | 88,583                                       | 109,994           | 11.7%  | ABC > ACL                     |
| Other flatfish                            | 1,315,012                                    | 1,890,402         | 13.6%  | ABC = ACL                     |
| Pacific cod                               | 207,137                                      | 848,703           | 37.3%  | ABC > ACL                     |
| Pacific halibut (IBQ) North of 40°10' N.  | 16,864                                       | 76,821            | 38.4%  | NA                            |
| Pacific ocean perch North of 40°10' N.    | 24,528                                       | 120,157           | 43.9%  | ABC > ACL                     |
| Petrale sole                              | 136,180                                      | 5,511,006         | 94.9%  | ABC = ACL                     |
| Sablefish North of 36° N.                 | 310,893                                      | 5,070,089         | 95.4%  | NA                            |
| Sablefish South of 36° N.                 | 147,513                                      | 447,857           | 25.8%  | NA                            |
| Shortspine thornyheads North of 34°27' N. | 291,911                                      | 1,647,485         | 47.8%  | NA                            |
| Shortspine thornyheads South of 34°27' N. | 9,689  | 4,389             | 4.0%   | NA                            |
| Splitnose rockfish South of 40°10' N.     | 354,341                                      | 28,874            | 0.8%   | ABC = ACL                     |
| Starry flounder                           | 138,228                                      | 27,972            | 1.7%   | ABC = ACL                     |
| Widow rockfish                            | 227,419                                      | 1,846,488         | 59.0%  | ABC = ACL                     |
| Yelloweye rockfish                        | 202  | 108               | 4.5%   | ABC > ACL                     |
| Yellowtail rockfish North of 40°10' N.    | 847,238                                      | 2,524,742         | 26.2%  | ABC = ACL                     |

a/ Estimates as of 2/14; DRAFT

b/ IFQ accounts queried on 2/28; DRAFT

## Sablefish North of 36° N. Lat.

Sablefish north of 36° N. lat. is consistently a highly attained species, and therefore the decision whether or not to recommend carryover is explored independently here. Table 2 shows the GMT's best estimates of sablefish north mortality for 2016, compared to each of the sector allocations, set-asides, and the ACL. Attainment of the 2016 ACL (5,241 mt) for sablefish north of 36° N. lat. is currently estimated at 93 percent (4,848 mt).

| Sector               | 2016 Catch<br>Estimate | 2016<br>Allocations | 2016<br>Attainment (%) | 2017<br>Allocations | 2017<br>Predictions |
|----------------------|------------------------|---------------------|------------------------|---------------------|---------------------|
| EFP a/               | 0                      | 1                   | 0%                     | 1                   | 0                   |
| Tribal b/            | 480                    | 524                 | 92%                    | 525                 | 481                 |
| Research c/          | 26                     | 26                  | 100%                   | 26                  | 26                  |
| Recreational d/      | 1.6                    | 6.1                 | 26%                    | 6.1                 | 2                   |
| LE DTL               | 211                    | 267                 | 79%                    | 268                 | 212                 |
| LE Primary           | 1,409                  | 1,515               | 93%                    | 1,518               | 1,412               |
| OA DTL               | 393                    | 440                 | 89%                    | 441                 | 394                 |
| Shorebased<br>IFQ f/ | 2,300                  | 2411                | 95%                    | 2,416               | 2,305               |
| At-Sea<br>Whiting    | 27.38                  | 50                  | 55%                    | 50                  | 27                  |
| Totals               | 4,848                  | 5,240.1             | 93%                    | 5,251.5             | 4,858               |

| Table 2: Best estimate of 2016 sablefish north of 36° N. lat attainment and predictions for |
|---|
| 2017.   |

The 2016 total catch estimates, allocations, total available pounds including eligible surplus, and corresponding attainment rates used to inform 2017 IFQ projections for sablefish north of 36° N. lat. are shown in Table 3. Attainment of the 2016 IFQ allocation (not including surplus carryover from 2015 to 2016) for sablefish north is currently estimated at 93 percent. Note that 64.5 mt surplus carryover was allowed for sablefish from 2015 to 2016, and catch did not exceed the total available pounds for IFQ in 2016. Attainment of total available pounds was 93 percent (including surplus carryover). For coastwide projections to be compared against the OFL (discussed later), projections for sablefish south of 36° N. lat. are also included.

Table 3: Estimated eligible surplus carryover for sablefish north and south of 36° N. lat. from 2016 to 2017, based on 2016 attainment with and without carryover.

|  | Excluding 2016 Surplus Carryover<br>(pounds that rolled from 2015 into<br>2016 vessel accounts) |                           | Surplus<br>Carryover        | Including 2016 Surplus Carryover<br>(pounds that rolled from 2014 into<br>2015 vessel accounts) |                                     |                                       | Eligible<br>Surplus                                  |                                  |
|--|---|---------------------------|-----------------------------|---|-------------------------------------|---------------------------------------|--|----------------------------------|
| Area   | 2016<br>Allocation<br>(lbs)   | 2016<br>Catch (lbs)<br>a/ | 2016<br>Attainment<br>(lbs) | Issued in<br>2016<br>(lbs)  | 2016<br>Total<br>Available<br>(lbs) | 2016<br>Total<br>Catch<br>(lbs)<br>b/ | 2016<br>Attainment<br>of Total<br>Available<br>(lbs) | Carryover<br>2016<br>(lbs)<br>c/ |
| North  | 5,315,874   | 4,933,248                 | 93%                         | 142,280   | 5,458,154                           | 5,074,924                             | 93%  | 310,893                          |
| South  | 1,736,140   | 347,130                   | 20%                         | 154,324   | 1,890,464                           | 447,857                               | 24%  | 147,513                          |
| a/ Excluding catch of surplus carryover pounds issued in 2016 (tracked separately).  |   |                           |                             |   |                                     |                                       |  |                                  |
| b/ Including catch of surplus carryover pounds issued in 2016.   |   |                           |                             |   |                                     |                                       |  |                                  |
| c/ Eligible surplus carryover is calculated per regulations at 50 CFR 660.140(e)(5), and is based on used and unused quota pounds in 2016 vessel accounts. NMFS provided an estimated surplus carryover amount for this meeting based on the 2016 catch and balance data as of 2/14/16, but 2016 data are not yet final. |   |                           |                             |   |                                     |                                       |  |                                  |

With issuance of carryover, the GMT's best estimate for attainment of the 2017 sablefish north ACL is 93 percent; without issuance of eligible surplus carryover, the projection decreases to 91 percent of the ACL (Table 4). The GMT acknowledges there are many variables that could influence projected attainment of the shorebased IFQ allocations and the ACLs (e.g., market conditions, weather, etc.), and that there is uncertainty in the estimates. Our projections for 2017 make the assumption that each sector has the same attainment level as in 2016 (as seen in Table 2); for shorebased IFQ, this includes surplus carryover.

| Area  | 2016<br>IFQ<br>Attain. | Carryove<br>r to be<br>Issued in<br>2017 | 2017 IFQ<br>All.<br>(lbs) | Potential<br>2017<br>Carryover<br>(lbs) | 2017 IFQ<br>Total<br>Available<br>(lbs) | 2017 IFQ<br>Projected<br>(lbs) | 2017 ACL<br>(lbs) | 2017 All<br>Sectors<br>Projected | 2017 All<br>Sectors<br>Projecte<br>d Attain. |
|-------|------------------------|--|---------------------------|---|---|--------------------------------|-------------------|----------------------------------|--|
| North | 93%                    | Full                                     | 5,327,250                 | 310,893                                 | 5,638,143                               | 5,242,275                      | 11,578,678        | 10,871,510                       | 94%  |
| Norui | 93%                    | None                                     | 5,327,250                 | 0                                       | 5,327,250                               | 4,953,211                      | 11,578,678        | 10,582,445                       | 91%  |
| South | 24%                    | Full                                     | 1,721,369                 | 147,513                                 | 1,868,882                               | 442,744                        | 4,109,417         | 1,427,389                        | 35%  |

 Table 4: Projections for 2017 Attainment Based on Full or No Carryover.

Table 5 provides a summary of GMT projections for all-sectors' attainment of the coastwide sablefish OFL in 2017 under two scenarios: (1) full issuance of eligible surplus carryover for sablefish north of 36° N. lat., and (2) zero carryover from 2016 to 2017 for sablefish north of 36° N. lat. is assumed to have full eligible carryover issued, since attainment was low in 2016 (Table 3). Therefore, the GMT's best estimate for harvest relative to the coastwide OFL is 69 percent with carryover and 68 percent without carryover.

## Table 5: Sablefish OFL Attainment Projections for 2017.

| Amount of Carryover Issued                                   | 2017 Sum/Coastwide<br>Projected Mortality (mt) | 2017<br>OFL (mt) | % 2017<br>OFL |
|--|--|------------------|---------------|
| All eligible for Sablefish N.; all eligible for Sablefish S. | 5,579  | × 050            | 69%           |
| Zero for Sablefish N.; all eligible for Sablefish S.         | 5,448  | 8,050            | 68%           |

Based on the information presented above that there is a low risk of exceeding the ACL or OFL, the GMT recommends issuance of the maximum amount of eligible carryover for sablefish N. of  $36^{\circ}$  N. latitude for 2017.

## **Recommendations**

1. The GMT recommendations issuing the maximum amount of eligible carryover for all species, including sablefish N. of 36° N. lat, where ACL < ABC.

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