Lingcod Surplus Carryover Option

In a public notice dated May 7, 2013 (NMFS-SEA-13-08), NMFS announced that it did not issue surplus carryover for lingcod because the Council and NMFS need to consider how reallocations by geographic area affect surplus carryover. In this case lingcod changed from a coastwide IFQ species to being divided north and south of 40°10’ N. lat. The final rule for the 2013/2014 harvest specifications and management measures (78 FR 580, 1/3/2013) highlighted this issue on p.584, stating “the PFMC [Council] and NMFS need to consider how reallocations affect surplus carryover, QS control limits (including aggregate non-whiting groundfish species), and potentially, a different solution to deficit carryover.”

Effective 2013, the line dividing the lingcod ACLs into northern and southern areas was changed from 42° N. lat. to 40°10’ N. lat. However, the lingcod species/area category within the IFQ fishery remained coastwide during 2012, and then changed directly from a coastwide category, to being divided north and south of 40°10’ N. lat. in 2013. For lingcod, methods for converting the surplus coastwide pounds from 2012 into area-specific pounds for 2013 should be recommended by the Council and approved by the NMFS before surplus carryover can be issued for lingcod from 2012 to 2013. NMFS recommends the following method to calculate surplus carryover of lingcod north of 40°10’ N. lat. and south of 40°10’ N. lat. for individual vessel accounts:

1. First, NMFS would calculate the eligible surplus carryover for lingcod (coastwide) from 2012 for an individual vessel account.

2. Next, NMFS would apply the lingcod biomass ratio to split lingcod from coastwide to north and south of 40°10’ N. lat.

**Biomass Ratio:**

- Lingcod North of 40°10’ N.: 3,036 / 4,147 = 0.73210
- Lingcod South of 40°10’ N.: 1,111 / 4,147 = 0.26790

*Note: The database may carry the ratio value out to more digits.*

To calculate the biomass ratio, NMFS would divide the ACL for each area (north and south of 40°10’ N. lat.) by the sum of the two ACLs. The resulting biomass ratio would then be multiplied by the coastwide eligible surplus carryover quota pounds (QP) (from step 1).

**EXAMPLE:** If a vessel account were eligible for 100 pounds of 2012 lingcod surplus carryover, it would be credited to their vessel account as 73 pounds of lingcod north of 40°10‘ N. and 27 pounds of lingcod south of 40°10’ N.
3. Finally, NMFS would apply the lingcod ACL reduction for each area north and south of 40°10’ N. lat. to the eligible surplus carryover QP for each area north and south of 40°10’ N. lat. As specified in regulation at §660.140(e)(5), “If there is a decline in the ACL between the base year and the following year in which the QP or IBQ pounds would be carried over, the carryover amount will be reduced in proportion to the reduction in the ACL.” Because of the change in management line split for the lingcod ACL between years from 42° N. lat. to 40°10’ N. lat., NMFS needs to back calculate what the 2012 lingcod ACL would have been if it was split at 40°10’ N. lat. instead of 42° N. lat. The same methodology used to move the lingcod ACL split from 42° N. lat. to 40°10’ N. lat. during the 2013/2014 harvest specifications and management measures can be applied here (see 77 FR 67974, 11/14/2012, p.67979).

“Lingcod are distributed coastwide with harvest specifications based on two area stock assessments that were conducted in 2009 for the areas north and south of the California-Oregon border at 42° N. latitude. The stock assessments indicate west coast lingcod stocks are healthy with the stock depletion estimated for lingcod off Washington and Oregon to be at 62 percent of its unfished biomass, and lingcod off California estimated to be at 74 percent of its unfished biomass at the start of 2009. The lingcod ACLs for 2013–14 are being proposed for the areas north and south of the current 40°10′ N. lat. management line rather than north and south of the California-Oregon border (42° N. lat.), which is where the stock assessment splits the stocks. Current regulations at § 660.112(b)(1)(vii) prohibit vessels participating in the shorebased IFQ program from fishing in more than one IFQ management area on the same trip. Therefore, if lingcod were to have a geographic split at 42° N. lat. it would create a new IFQ management area that could unnecessarily restrict IFQ program participants. Dividing the lingcod specifications at 40°10′ N. lat. has no biological implications yet is consistent with the management of most other species with north-south specifications. The adjusted specifications for lingcod were based on the NMFS Northwest Fisheries Science Center trawl survey. The swept area biomass estimates calculated annually (2003–2010) in the NMFS Northwest Fisheries Science Center trawl survey indicated that 48 percent of the lingcod biomass for the stock south of 42° N. lat. occurred between 40°10′ N. lat. and 42° N. lat., and the specifications were adjusted accordingly.”

Applying this methodology results in the following ACL reduction ratios:

**Lingcod ACLs:**

- **2012 – Lingcod North of 42° N.: 2,151 mt**
- **Lingcod South of 42° N.: 2,164 mt**
- **Sum = 4,315 mt**

Converted to a split at 40°10’ N. using 48% (1,039 mt) of the lingcod biomass that occurs between 42° N. and 40°10’ N. –

- **Lingcod North of 40°10’ N.: 3,190 mt**
- **Lingcod South of 40°10’ N.: 1,125 mt**
Sum = 4,315 mt

- 2013 – Lingcod North of 40°10' N.: 3,036 mt
  Lingcod South of 40°10' N.: 1,111 mt
  Sum = 4,147 mt

**Lingcod ACL reduction ratio (2012 to 2013):**

- North of 40°10' N.: 3,036 / 3,190 = 0.95172
- South of 40°10' N.: 1,111 / 1,125 = 0.98756

*Note: The database may carry the ratio value out to more digits.*

To calculate the ACL reduction ratio, NMFS would divide the 2013 ACL for north of 40°10’ N. lat. by the 2012 back-calculated ACL for north of 40°10’ N. lat. The same calculation would be done for south of 40°10’ N. lat. The resulting ACL reduction ratio would then be multiplied by the eligible surplus carryover QP for each area (from step 2).

EXAMPLE: Using the example from above, the 73 pounds of lingcod north of 40°10’ N. would be multiplied by the ACL reduction ratio for north of 40°10’ N. (0.95172) resulting in up to 69 pounds of carryover being issued to an individual vessel account. NMFS would not issue surplus carryover QP in excess of daily or annual vessel limits.

This methodology is within the biological impacts analyzed for the 2013/2014 harvest specifications and management measures for lingcod. Dividing eligible surplus carryover lingcod QP from coastwide to north and south of 40°10’ N. lat. would not result in any impacts different than those analyzed for the lingcod ACL north and south of 40°10’ N. lat.

This method or another recommended by the Council could be applied in order to distribute surplus carryover pounds of lingcod to vessel accounts at the next practical opportunity during 2013.

While this is a short-term recommendation to address the lingcod split for surplus carryover during 2013, the Council could discuss a long-term solution (i.e., regulatory amendment) at the September 2013 Council meeting under the agenda item on scoping for future trawl trailing actions. At its September 2013 meeting, the Council could discuss future surplus carryover regulations for IFQ species management area subdivisions, how other reallocations affect surplus carryover (area recombination, area line movement, subdivision of a species group), QS control limits (including aggregate non-whiting groundfish species), and potentially, a different solution to deficit carryover.