# North Pacific Fishery Management Council C-9 Halibut Abundance Based PSC Motion October 8, 2017

The Council modifies the Purpose and Need statement as follows:

"The current fixed yield based halibut PSC caps are inconsistent with management of the directed halibut fisheries and Council management of groundfish fisheries, which are managed based on abundance. When halibut abundance declines, PSC becomes a larger proportion of total halibut removals and thereby further reduces the proportion and amount of halibut available for harvest in directed halibut fisheries. Conversely, if halibut abundance increases, halibut PSC limits could be unnecessarily constraining. The Council is considering linking PSC limits to halibut abundance to provide a responsive management approach at varying levels of halibut abundance. The Council is considering abundance-based PSC limits to control total halibut mortality, particularly at low levels of abundance. Abundance based PSC limits also could provide an opportunity for the directed-halibut fishery, and protect the halibut spawning stock biomass, particularly at low levels of abundance. The Council recognizes that abundance-based halibut PSC limits may increase and decrease with changes in halibut abundance."

The Council tasks staff to develop a preliminary analysis focusing on providing additional description of control rules, including discussion of features that best meet the Council's objectives, a qualitative evaluation of the control rule, and performance. Included in the analysis, staff should provide evaluation of the linkage between the index value and the control feature that effects PSC limits. The Council tasks staff to include the following in the analysis:

- 1. Develop strawman ABMs using the EBS shelf bottom trawl survey and IPHC setline survey for area 4ABCDE as indices. Provide examples and analyze indices applied separately using control rule options in Element 2 below.
- 2. Additionally, using strawman ABMs, apply indices to control rules individually to each gear type to establish separate PSC limits. Evaluate and provide a description of the tradeoffs of the following control rule features, as well as the impact on PSC limits:
  - o IPHC Coastwide stock status (30:20) control rule
  - Explicit consideration of the O26 composition of PSC in a control rule
  - Sloped transitions between stair-steps in a decision table
- 3. Investigate and evaluate different index/control rule combinations using various tools (e.g. simulation analysis from April 2016 and 2017 discussion paper) as outlined by the SSC. Provide discussion of the tradeoffs of the different control rules and features as it relates to the Councils objectives. In evaluating this, the Council instructs staff to maintain the existing proportional PSC allocation among sectors.

The Council refines the component elements and options for consideration in ABM development, and instructs staff to confine preliminary analysis to these elements and options.

#### Element 1 – Abundance index and application

Option 1. Apply EBS trawl survey and IPHC setline survey for 4ABCDE separately to establish a single PSC limit

Option 2. Index trawl gear to EBS survey, index fixed gear to IPHC setline survey

Option 3. Index EBS trawl survey and IPHC setline survey to trawl gear

Option 4. Index EBS trawl survey and IPHC setline to fixed gear

#### Element 2 - Control Rules

Option 1. Linear

Option 2. Decision table

Option 3. Multi-dimensional

## Element 3 – PSC limit responsiveness to abundance changes

Option 1. Include IPHC stock status (30:20) as breakpoints in the control rule

Option 2. Sloped transitions between stair-steps in decision table

Option 3. PSC limit varies proportionally (1:1) with change in abundance index.

Suboption – Different variation above and below (1:1)

### Element 4 – Starting point for PSC limit

Option 1. 10% below 2016 PSC use (2,118 mt)

Option 2. 2016 PSC use (2,354 mt)

Option 3. 2016 PSC limit (3,515 mt)

Option 4. 10% above 2016 PSC limit (3,867 mt)

Option 5. Additional value within range of Options 1-4

## Element 5 - Maximum PSC limit (ceiling)

Option 1. 2016 PSC limit (3,515 mt)

Option 2. 2015 PSC limit (4,426 mt)

Option 3. No ceiling

Option 4. Additional value to be selected

# **Element 6 - Minimum PSC limit** (floor)

Option 1. No floor (PSC goes to 0)

Option 2. 2016 use (2,354 mt)

Option 3. IPHC Control Rule - PSC limit goes to zero at 20% stock status

Option 4. Additional value to be selected

The Council directs NMFS to initiate scoping for the preparation of an Environmental Impact Statement(EIS).