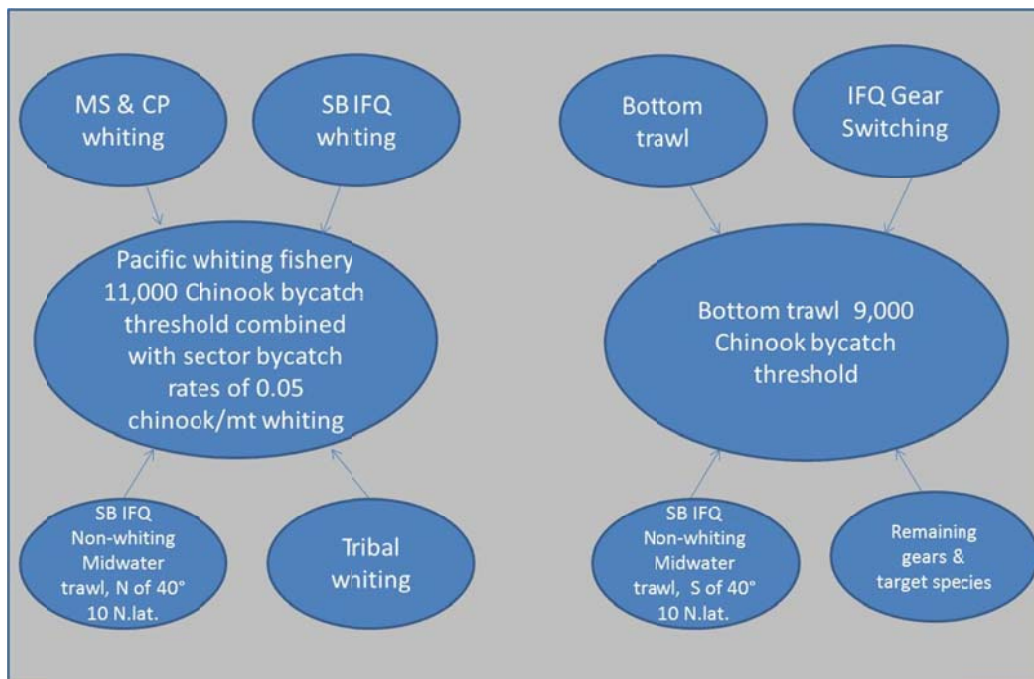


## A Draft Proposal for Managing Salmon Bycatch In The Groundfish Fishery

The current biological opinion addresses the effects of the groundfish fisheries on listed salmonids for the Pacific whiting fisheries (Catcher/Processors (C/P), Motherships (MS), Pacific whiting shorebased individual fishery quota (SB IFQ) program, and tribal) and the bottom trawl fisheries separately. NMFS evaluated bycatch in bottom trawl fishery and all other gears (fixed gears and recreational), combined. Midwater non-whiting trawl effects were not explicitly considered because the fishery was not active. To account for salmon bycatch in the recently emerging non-whiting midwater trawl fisheries, which must occur under Pacific whiting fishery declarations north of 40°10 N. lat., NMFS considers Chinook bycatch to accrue towards the Pacific whiting fishery threshold. That threshold is currently 11,000 Chinook and is the amount of take anticipated in the Pacific whiting fishery under the existing biological opinion. In 2015 NMFS is in the process, through a rulemaking, of defining criteria for Pacific whiting trips and allowing vessels to declare midwater non-whiting north of 40°10 N. lat. Figure 1, shows the current accounting for Chinook salmon in the various groundfish fisheries.

Given the changes that have occurred in the management of the fishery, and industry feedback obtained during the July 29, 2015 work session, NMFS has developed a draft proposal for Council consideration. The proposal is intended to help further define the proposed action for the consultation. However, we recognize that the Council may prefer the existing structure or another yet to be defined structure. This proposal is intended to generate discussion necessary to define the proposed action. NMFS is not advocating any specific approach at this time.



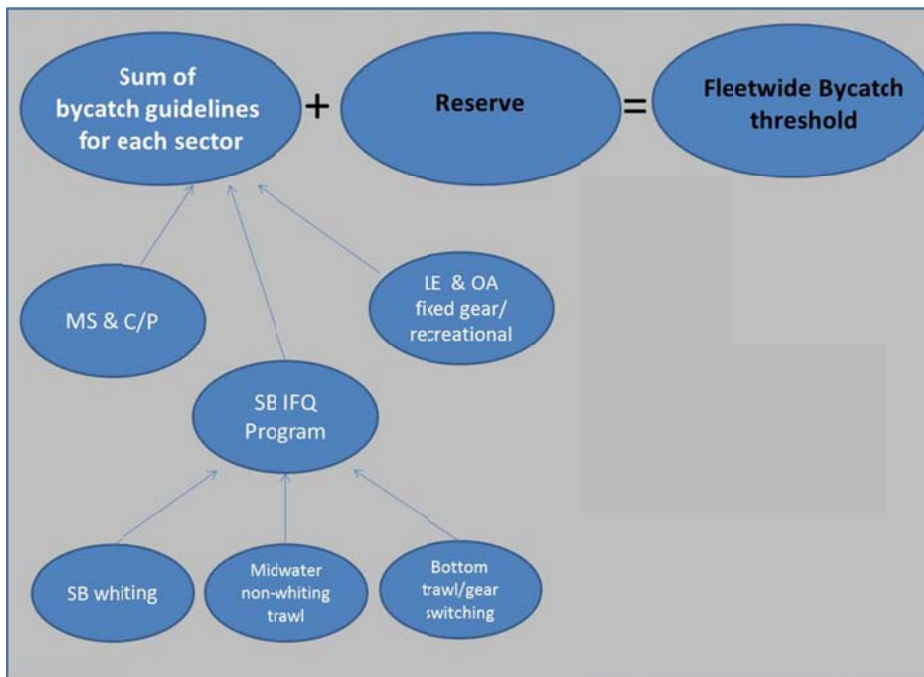
**Figure 1.** Accounting of Chinook salmon under current biological opinions in 2015.

## Draft Proposal

During the July 29<sup>th</sup> work session, an individual commented that one possibility would be establishing a fleetwide reinitiation threshold where a specified proportion would be held in reserve. Bycatch guidelines would be established for each sector of the groundfish fishery or group of sectors. The sum of the bycatch guidelines would equal the fleetwide threshold minus the reserve. Under specified terms, a portion of the reserve could be made available inseason to a trawl sector that exceeds its guideline. Fixed gear and recreational fisheries would continue to be managed post season. Historically salmon bycatch in this sector has been very low and the fishery is expected to remain stable, so an overage is unlikely, but any overage would be counted against the reserve.

Catch data from 2002 to 2014 show that the Pacific whiting sectors and bottom trawl fishery have never exceeded their respective bycatch thresholds in the same year. Therefore, using a fleetwide reinitiation threshold with a reserve is expected to result in fewer years where reinitiation is triggered. Effective bycatch guidelines for each sector would be necessary to prevent vessels from rushing to catch target species before the fishery is restricted by salmon bycatch. Given the seasonality of different gear sectors and target fisheries, without effective bycatch guidelines for each sector, high salmon catch in early fisheries could result in restrictions for later fisheries. Figure 3 displays a draft strawman proposal for managing salmon bycatch. Bycatch guidelines would be specified as a number of Chinook.

Under the draft proposal, bycatch guidelines would be established for the MS and C/P Pacific whiting sectors (at-sea sectors), and the Shorebased (SB) IFQ Program, and all other fisheries (Figure 2)<sup>1</sup>. These three bycatch guideline groupings, combine fisheries with similar data availability and management structure. Given the historical differences in salmon bycatch, seasonality, and fishing location, the SB IFQ program could have three sub-guidelines, 1) SB whiting fishery, 2) midwater trawl, and 3) bottom trawl/gear switching. Sub-guidelines in the SB IFQ fishery could be used to balance the differences in

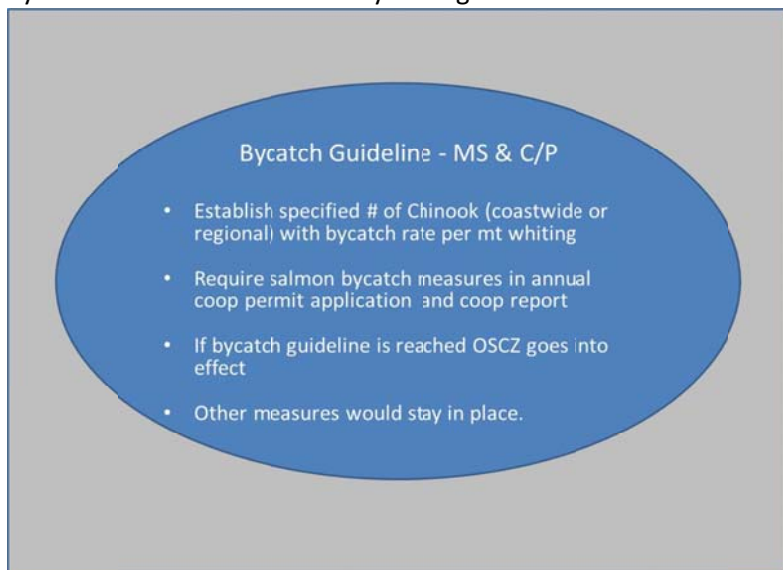


Chinook bycatch between the SB-IFQ sectors. For the at-sea sectors of the Pacific whiting fisheries, the work session discussion indicated that the current coop structure provided for a rapid response to bycatch concerns and has individual accountability that some stakeholders felt were effective. The coop agreements and expectations are based on bycatch rates (# of Chinook/ mt Pacific whiting).

**Figure 2.** Draft proposal for managing salmon bycatch in the groundfish fishery

<sup>1</sup> Further discussion with the tribes will be required regarding the development of options for tracking salmon bycatch.

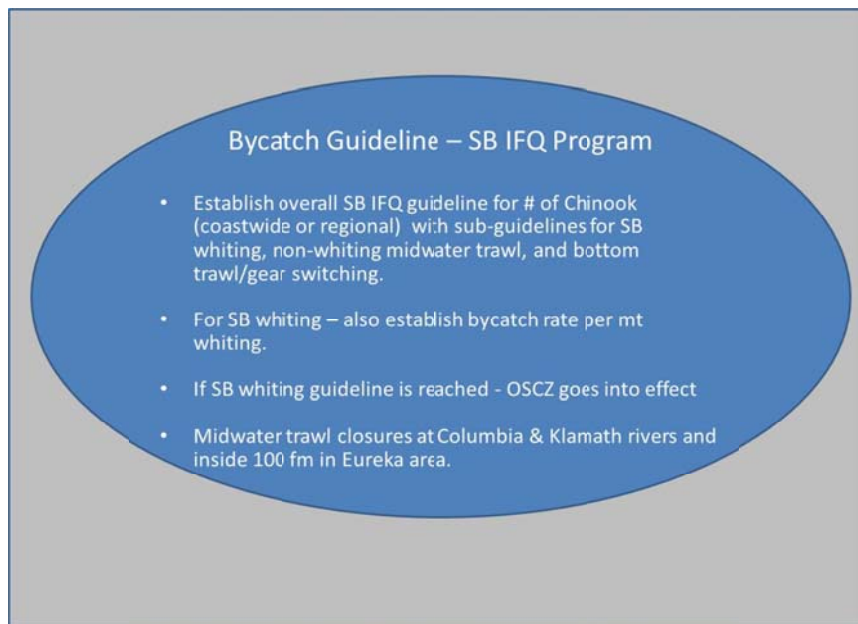
Therefore, the bycatch guideline should maintain a bycatch rate in addition to an overall number of Chinook. The proposal would require coops to provide specific information on bycatch measures and require the annual coop report to assess the effectiveness of the coop measures in reducing salmon bycatch. The structure of the bycatch guidelines for the at-sea sectors is shown on Figure 3.



Although its effectiveness in recent year is questionable, the stakeholders stated that the Ocean Salmon Conservation Zone (OS CZ) should be effective when the bycatch guideline is reached, and other measures in previous opinions and regulations that are intended to reduce salmon catch should remain in place. Progressive depths (100 fm, 150 fm, 200 fm) could be considered by the Council in the event the initial depth constraint was not effective in reducing bycatch.

**Figure 3.** *Bycatch Guidelines for the Pacific whiting at-sea sectors*

For NMFS to evaluate the impacts of the coop bycatch measures, the specific measures need to be provided to NMFS. The regulations pertaining to annual coop application would be amended to require submission of salmon bycatch measures. Regulations pertaining to the annual coop report would be amended to require the reporting of coop performance relative to salmon bycatch.

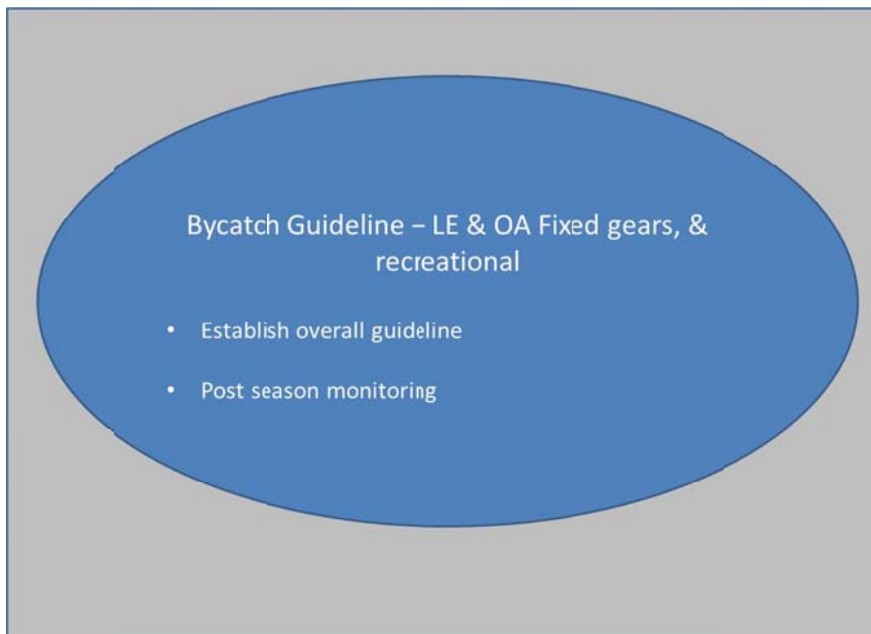


Only minimal stakeholder discussion on effective bycatch guidelines for the SB IFQ Program occurred at the work session. Keeping the SB whiting fishery bycatch guidelines separate from non-whiting was suggested by a stakeholder. There is a growing interest in using midwater trawl to harvest widow and yellowtail rockfish combined with large unknowns about possible salmon interactions. This is in contrast to the SB whiting IFQ fishery where historical catch data are readily available to understand Chinook bycatch.

**Figure 4.** *Bycatch Guidelines for the Shoreside IFQ Program*

Given changes that are likely to occur with rockfish conservation areas (RCAs) as a result of key overfished species being rebuilt, the bottom trawl fishery is likely to move into areas that have not been fished in recent years and use of different gear may increase. Discussion indicated that the RCA changes come with an unknown aspect relative to salmon bycatch. Establishing sub-guidelines for the SB IFQ program may encourage fishermen to work cooperatively and exchange catch information to avoid areas of high salmon catch. Discussion indicated that increased cooperation through the formation of risk pools was already occurring. Establishing sub-guidelines for the fisheries in the SB IFQ program would likely promote further cooperation similar to that seen in the at-sea fisheries. The Council may want to further consider mechanisms that allow these areas to be developed slowly. Close cooperation between participants may be important to reduce the risks, particularly in southern areas. Figure 4 shows the bycatch guideline structure for the SB IFQ Program.

An overall SB IFQ bycatch guideline would be established with sub-guidelines (number of Chinook). Given the availability of inseason data from catch monitors and observers, the best available data would be used to estimate catch in each fishery for managing inseason to their respective guideline. The SB whiting IFQ fishery would have a bycatch rate specified. If the SB whiting IFQ fishery reached its bycatch guideline, the OSCZ would apply. Other measures in previous opinions and regulations that are intended to reduce salmon catch would remain in place. The bottom trawl fishery would include IFQ vessels involved in gear switching and would be managed to its bycatch guideline using the best available inseason data from the Observer Program. The non-whiting midwater trawl would be managed to its bycatch guideline using the best available inseason data from the Observer Program. Applicable measures that currently exist for the Pacific whiting fisheries and which are intended to reduce salmon bycatch would be adopted for the non-whiting midwater trawl fishery, including closures at the mouths of the Columbia and Klamath rivers and restrictions on fishing inside the 100 fm contour in the Eureka area.



There were no fixed gear or recreational stakeholders at the workshop. This proposal is to establish an overall bycatch guideline which includes all of the fixed gear and recreational sectors. These fisheries would be monitored post season using data from the West Coast Groundfish Observer program. Historical data shows that the catch of Chinook salmon in these sectors has been very low. Therefore, the need for inseason management is reduced.

**Figure 6.** *Bycatch Guidelines for the limited entry and open access fixed gear fisheries, and the recreational fisheries.*

**Distribution of the Reserve**

Distribution of the reserve would be least disruptive to the groundfish fishery if done as an automatic action through pre-established rules. This is in contrast to distribution through inseason action which requires Council consideration and publication in the Federal Register. For NMFS to use automatic action authority there has to be a clearly defined action “if X then Y” which has been analyzed prior to taking action. There was no specific discussion at the work session about how a distribution would occur if a sector reaches or is projected to reach its bycatch guideline, or what added performance measures may be necessary to prevent the overall bycatch threshold from being exceeded. Development of this alternative relative to the concept of a reserve, and distribution of such a reserve needs further guidance from the Council.