

GROUND FISH MANAGEMENT TEAM SUPPLEMENTAL REPORT REGARDING
REDUCTIONS IN THE PINK SHRIMP FISHERY SET-ASIDE OF DARKBLOTCHED
ROCKFISH IN THE 2015 SCORECARD

Set-aside overview: Set-asides are off-the-top allocations that are used to accommodate removals from sectors outside the realm of Council oversight, such as research and incidental open access fisheries (such as state-managed pink shrimp, California halibut). The preseason practice for assigning set-asides for incidental open access fisheries in 2015-2016 is to use the highest historic catch on record; however, if catches are projected to be less than the set-aside, the Council may transfer residuals to other sectors through routine inseason action. The Groundfish Management Team (GMT) recommends the Council consider the following criteria for adjusting set-asides but looks to NMFS guidance for emergency rulemaking for transferring set aside yield from one sector to another:

- 1) There is compelling scientific evidence that supports reduction of a set-aside;
- 2) There is no conservation concern (i.e., exceeding an annual catch limit or overfishing limit);
- 3) There is adequate rationale to waive the public input process through routine inseason action; and
- 4) There is purpose and need (e.g., to prevent adverse economic impacts).

The GMT outlines the following new information relative to this criteria that the Council may consider relative to the estimate of darkblotched in the OA pink shrimp fishery and the whether or not the 2015 year-end mortality of darkblotched rockfish for the pink shrimp fishery could be within the set-aside established in regulation (18.4 mt), thus allowing the Council to consider potential transfer of the residual to the mothership whiting sector (MS).

1. Scientific Evidence

Using historic high removals as set-asides has been standard Council practice and is based on the precautionary principle. The GMT often recommends adjusting set-asides inseason when there is a fishery need and there is less uncertainty in the removals that set-asides accommodate.

The GMT believes that there may be new information for the Council to consider to adjust the 18.4 mt set-aside of darkblotched rockfish in 2015 since impacts in the pink shrimp fishery could be lower than the previous historic high (18 mt) used to establish the set-aside or the preliminary 2014 estimate (24 mt). First, use of bycatch-reducing light emitting diode (LED) lights was believed to have been widely adopted by the pink shrimp fishery in the latter part of 2014 following a 2014 research study suggesting that the use of the LED lights reduces the bycatch of juvenile darkblotched rockfish by 82 percent (Hannah et al. 2015). Second, the larger than projected removals of darkblotched rockfish in 2014 were indicative of the large model-estimated 2013 recruitment of juvenile darkblotched rockfish (reproduced from the 2015 stock assessment) that may no longer be small enough to pass through the ¾" excluders since the fish are now a year older and larger. However, the GMT hasn't seen length compositions from the 2014 WCGOP data to confirm this.

Although the LED lights were shown to greatly reduce bycatch in the pink shrimp fishery, the GMT recognizes the need to further examine assumptions regarding use of the LED lights and to determine whether 2015 bycatch is less than 2014 as hypothesized. This would require the use

of West Coast Groundfish Observer Program (WCGOP) observer data that are not yet available for 2015. This data would be of great value for analysis when it becomes available (tow-by-tow or extrapolated estimates).

The GMT stresses that until the actual 2015 bycatch of darkblotched rockfish in the pink shrimp fishery can be examined, there is a possibility that catches could remain at a similarly high level to what was observed last year - especially given the recent high catch and effort in the pink shrimp fisheries across all states.

2. Conservation Concern

Removal of darkblotched rockfish relative to the ACL has routinely been only 45 percent or less since the inception of IFQ in 2011 (Table 1), by approximately 200 mt each year. Accordingly, a transfer of a portion of the 2015 set-aside in regulation (18.4 mt) is not expected to result in any conservation concerns even if the pink shrimp fishery catch of darkblotched rockfish in 2015 remain near status quo levels.

Table 1. Total mortality (landings and discard mortality) of darkblotched rockfish prior and subsequent to IFQ in 2011.

Year	ACL (mt)	Total Mortality (mt)	Percent of ACL
2010	330 ^{a/}	332	101%
2011 ^{b/}	298	133	45%
2012	296	105	35%
2013	317	133	42%

a/ In 2010 this is the overfishing limit (OFL) not an ACL.

b/ The trawl rationalization program went into effect in 2011.

3. Rationale

The GMT believes that this question can be best addressed by the Groundfish Advisory Subpanel (GAP; as representatives of the affected pink shrimp and mothership sectors – but also all sectors). Preliminary input by stakeholders to the GMT has been supportive, and a suggestion was made to transfer a small amount now, and more at the November Council meeting (as it is still uncertain whether or not the mothership sector will exceed their allocation of darkblotched rockfish). The GMT supports this adaptive management strategy.

The proposal is not expected to adversely affect the 2015 pink shrimp fishery, which is not managed inseason for darkblotched rockfish or other constraining species. Accordingly, potential overages in the pink shrimp fishery beyond their set-aside would be deducted from underages in the other sectors (with total removals expected to stay within the ACL) – and not result in any closures or reduced opportunity in the pink shrimp fishery.

4. Purpose and Need

Without the proposal, there could be significant economic impacts to mothership participants and coastal economies, as there is potential that the mothership sector could once again reach their darkblotched allocation, as occurred in 2014, resulting in closure of the fishery. The potential economic ramifications of an inseason mothership sector closure are documented by the Midwater Trawlers Cooperative and United Catcher Boats in [Agenda Item H.9.b. Public Comment](#).

References:

Gertseva, V., S. Matson, and J. Thorson. 2015. Status of the darkblotched resource off the Continental US West Coast in 2013. http://www.pcouncil.org/wp-content/uploads/2015/05/D8_Att3_Darkblotched_2015_FULL-E-Only_JUN2015BB.pdf

Hannah, R.W., Lomeli, M.J. and S. Jones. 2015. Tests of an artificial light for bycatch reduction in an ocean shrimp trawl: strong but opposite effects at footrope and near bycatch reduction device. *Fisheries Research* 170:60-67.

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