



Natural Resources Defense Council
111 Sutter Street, 20th Floor
San Francisco, CA 94104
Tel: (415) 875-6100
Fax: (415) 875-6161

November 3, 2011

Mr. Dan Wolford, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

RE: Agenda Item E.4, Biennial Management Specifications for 2013-2014 Groundfish Fisheries

Dear Chairman Wolford and Council Members:

Please accept the following comments on behalf of the Natural Resources Defense Council (NRDC), in regards to the Council's adoption of OFLs, ABCs, and ACLs for the 2013-14 groundfish harvest specifications.

1. Widow Rockfish

The Council approved a new stock assessment for Widow Rockfish yesterday. That assessment dramatically revises the status of Widow Rockfish upward, making the stock appear fully rebuilt. NRDC has several concerns with respect to this stock, and strongly urges the Council to maintain an ACL for Widow for the 2013-14 specs cycle that is comparable to the status quo.

At the outset, we note that the improvement in Widow's status is driven entirely by a changed productivity value. The assessment authors acknowledge that the Widow model is extremely sensitive to changes in productivity: "The sensitivity analysis in this assessment shows that small changes in the steepness parameter (h) can lead to large changes in point estimates for stock status and management reference points."¹ This is well illustrated by the decision table, which shows current status to be a direct function of the steepness parameter.²

Moreover, the steepness parameter used is based only on an assumption. This year's assessment used a new value of $h = 0.76$, which is significantly higher than values used in the past. The basis for this value is a meta-analysis of all West Coast rockfish species; in other

¹ November 2011 Briefing Book, Agenda Item E.1.a Attachment 3, at 14.

² *Id.* at 16.

words, the value is not specific to Widow Rockfish. Using this value is an assumption, as there are no data suggesting 0.76 is the correct value for Widow steepness. The value is also likely an overestimate for at least two reasons.

First, Widow is believed to be one of the least productive rockfish species, so using a rockfish-wide average will significantly overshoot the actual productivity of Widow. Second, and more importantly, data do exist from which a Widow-specific steepness value can be estimated, and the results come in much lower than the assumed value of 0.76. The Southwest Fishery Science Center calculated a 95% confidence interval for h between 0.22 and 0.54—with a point estimate of 0.38—when only Widow-specific data are used.³ Even incorporating the rockfish-wide average, the resulting posterior yields a point estimate of 0.54, significantly lower than the assessment assumes.⁴

While NRDC is concerned about the scientific decision on Widow productivity, it is the policy implications that are more troubling. Using the value of 0.76 for steepness radically alters the picture for Widow, making the stock appear rebuilt, and revising history such that the stock was never actually overfished. This, in turn, would imply increasing catch limits for Widow. Such an action would be a mistake, however, for several reasons.

First, there is serious uncertainty surrounding the steepness assumption, which is not captured in the sigma value for Widow. Unlike for most stocks, where sigma is based on the results of an inter-assessment comparison done by Dr. Ralston of the Southwest lab, Widow's sigma value was calculated directly off the decision table produced at the end of the assessment. This means it does not capture inter-assessment variability—i.e., the variability that goes with different model structures, different stock assessment authors, and different review panels. What this means in practice is that the sigma for Widow fails to capture the methodological debate about how to calculate steepness, which in this case is a huge source of uncertainty. Therefore any buffer created with this sigma will fail to adequately account for scientific uncertainty.

The second reason why it would be a mistake to believe Widow is fully recovered and raise catch limits is recent recruitment. The past decade of recruitment estimates are dramatically lower than expected, as shown on page 8 of the assessment.⁵ The Southwest Center's white paper helpfully pulls out recent years' recruitment deviations in Figure 6, illustrating a strong downward trend.⁶ Faced with recruitment failure, it would be foolhardy to raise catch limits and start depleting the biomass again. This would set up a situation where, the next time Widow is assessed and the h assumption is changed, the stock is shown to be overfished again and we have to start the whole rebuilding process over.

³ November 2011 Briefing Book, Agenda Item E.1.a Supplemental Attachment 11, at 2.

⁴ *Id.*

⁵ November 2011 Briefing Book, Agenda Item E.1.a Attachment 3, at 8.

⁶ November 2011 Briefing Book, Agenda Item E.1.a Supplemental Attachment 11, at 6.

For these reasons, NRDC strongly urges the Council to maintain the 2013-14 Widow Rockfish ACL at a level comparable to the status quo.

2. Sablefish

NRDC has similar concerns about poor recruitment and potential over-harvesting of sablefish. The most recent stock assessment states that “average recruitment is estimated to have declined steadily between the 1970s and 2007. Recruitments during the 1980s were, on average, roughly an order of magnitude higher than the very poor recent cohorts estimated between 2002 and 2007.”⁷ While a few recent year classes appear strong, those estimates still have high uncertainty, and the background trend is one of consistently low recruitment.

Poor recruitment, when combined with status quo catch levels, has resulted in declining biomass for Sablefish. We are currently below the BMSY level, and as noted by the SSC, “There is a strongly and robustly-estimated declining trend in spawning biomass, and there is little likelihood for recovery to the MSY proxy biomass under the catches considered in the decision tables.”⁸

NRDC urges the Council to take proactive steps with Sablefish and implement a strong precautionary harvest reduction in 2013-14. This could take the form of a further reduction in P*—below the level of 0.33 set at the September meeting—or a direct lowering of the ACL.

Reducing Sablefish harvest is not only good from a conservation point of view; it is also economically prudent. The SSC has noted that “there is an appreciable (about 15 percent) probability that [Sablefish] is currently depleted below the overfished threshold.”⁹ This probability will increase in upcoming years, as stock size is projected to decline further.¹⁰ Given the commercial importance of Sablefish, and the strict harvest limits that come with rebuilding, it would create real problems if the stock were declared overfished. Accordingly, the Council should view near-term quota reductions as an investment toward ensuring a stable resource in the future.

3. Spiny Dogfish

Spiny Dogfish is a long-lived species with low fecundity, with females reaching maturity around 35 years old and bearing only a small amount of pups each year. As a result, the species is highly vulnerable to fishing pressure. The stock assessment adopted in September notes, “Life

⁷ September 2011 Briefing Book, Agenda Item G.4.a Attachment 9, at 7.

⁸ September 2011 Briefing Book, Agenda Item G.4.b Supplemental SSC Report, at 3.

⁹ *Id.*

¹⁰ September 2011 Briefing Book, Agenda Item G.4.a Attachment 9, at 13.

history traits of spiny dogfish make the species highly susceptible to overfishing and slow to recover from stock depletion.”¹¹

Due to this slow growth and low fecundity, the assessment found the current FMSY proxy for Spiny Dogfish of 45%SPR to be far too aggressive. Indeed, fishing at this rate will eventually drive the stock to extinction.¹² A proper FMSY, the assessment estimated, would be 77%SPR—a far lower level of fishing pressure.¹³

Now that the Council has an estimated FMSY for Spiny Dogfish, and clear evidence that the current proxy is not only too aggressive but will result in extinction, it is untenable to define overfishing based on the current proxy. To avoid allowing overfishing, NRDC strongly urges the Council to set Spiny Dogfish ACLs for 2013-14 based on the 77%SPR estimated in the stock assessment.

Finally, NRDC supports the recommendation of the GMT that the Council engage in a review of elasmobranch F-proxies, and revise them as necessary to avoid overfishing.

We hope these comments are helpful, and thank you for your consideration.

Sincerely,

Seth Atkinson
Oceans Program Attorney
Natural Resources Defense Council
111 Sutter Street, 20th Floor
San Francisco, CA 94104
(415) 875-6100

¹¹ September 2011 Briefing Book, Agenda Item G.4.a Attachment 7, at 24.

¹² September 2011 Briefing Book, Agenda Item G.4.b Supplemental GMT Report, at 1.

¹³ September 2011 Briefing Book, Agenda Item G.4.a Attachment 7, at 11.