

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE REPORT ON LEGISLATIVE MATTERS

In March, the Council encouraged the Legislative Committee (LC) to follow through on its recommendation to revisit four issues related to reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) at this meeting. Two of those issues relate to past Council comments on the MSA's rebuilding provisions, including the issue of replacing "possible" with "practicable" and issue of the 10-year and mean generation time based timelines.¹

During Council discussion in March, our representative recommended that the LC review the recommendations of the 2014 National Research Council report, *Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States* ("NRC report").² There are two key findings from that report that we wish to highlight:

1. Policy makers should realign expectations about rebuilding timelines based on an understanding of what science can deliver in terms of stock assessments and forecasts.
2. The net long-term social and economic costs of rebuilding are not directly weighed when implementing the current law and the assumption that rebuilding as quickly as possible is a "win-win" for conservation and economics does not hold for many real world situations.

Beyond the general recommendation of giving more attention to the findings and recommendations of the NRC report, we have the following recommendations for the LC and Council:

- The existing rebuilding provisions should be recalibrated with the best available fisheries science and economics. At a minimum, interpretations of the current law relating to "disastrous" or "severe" consequences for fishing communities should be addressed.
- The Council should rethink its past support for "practicable" and recommend that Congress undertake this fuller evaluation.
- Short of that fuller evaluation, removing the 10 year cap and using the mean generation time based standard would be an improvement.

These recommendations are in line with the feedback we have given on reauthorization independent of the Council at the request of Washington congressional members. What follows below is discussion of the two findings with brief explanation of how they relate to issues and concerns we have noted during the Council's extensive experience rebuilding groundfish. Our primary motivation is to ensure the best available science is considered in the policy discussion on rebuilding.

¹ https://www.pcouncil.org/wp-content/uploads/2018/03/C4a_Sup_LC_Rpt1_Mar2018BB.pdf

² National Research Council. 2014. *Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/18488>.

Concerns and views on the current rebuilding law

WDFW remains supportive of strong rebuilding policies weighted toward a high probability of returning stocks to higher abundance. At the same time, the “needs of fishing community” piece of the current law has raised several concerns throughout the Council’s rebuilding experience and remains a concern, especially with yelloweye rockfish.

In brief, the origins of “the needs of fishing communities” are lost and have drifted from the scientific foundations of rebuilding. Its interpretation remains vague. Of most concern are the interpretations that require the Council to provide a high level of proof showing that consequences for fishing communities are “disastrous” or perhaps “serious” to justify fishing opportunity.

The National Marine Fisheries Service is on record as opposing the “disastrous” interpretation. Yet the intensity they are looking for to achieve consistency with the law remains unclear. The solutions the Council has proposed for providing stability to fisheries under high management uncertainty and variability in catches have been met with skepticism and disapproved in the past.

The matter of how quickly to rebuild a stock is a policy choice and one on which stakeholders can reasonably hold different views. Yet the current law does not help facilitate good public debate. Deliberations on how quickly to rebuild a particular stock could be greatly improved by encouraging the Councils to directly weigh the trade-off between short-term social and economic needs and long-term conservation goals. This is the original intent of rebuilding. It was designed to address the primary trade-off of taking harvest now versus at some point in the future.

As highlighted in the NRC report and discussed below, this type of analysis can be impeded by current readings of the law. Failing to look at long-term tradeoffs leaves people in the dark about the consequences of accounting for the short-term needs of fishing communities.³ In some circumstances, it is possible that the law will force the Council to rebuild in a manner that is contrary to the core foundations set by National Standard 1 and National Standard 8.⁴

Expectations for rebuilding timelines scientific uncertainty

The NRC report was authored by the Committee on Evaluating the Effectiveness of Stock Rebuilding Plans of the 2006 Fishery Conservation and Management Reauthorization Act (the “Committee”), which was convened and funded by the National Marine Fisheries Service (NMFS) under a request by members of Congress. The Committee consisted of 11 experts, including Dr. André Punt of the Council’s Scientific and Statistical Committee (SSC).

While identifying concrete benefits of the rebuilding law, the Committee characterized the overall U.S. experience with rebuilding since it was enacted in 1996 as showing “mixed” or “variable”

³ Currently, the long-term consequences are only measured by the difference in the expected number of years to reach the rebuilding target. As seen in management strategy evaluations and elsewhere, there are far better performance metrics to consider when comparing different harvest strategies.

⁴ As to the long established principle established by National Standard 1 and National Standard 8:

All other things being equal, where two alternatives achieve similar conservation goals, the alternative that provides the greater potential for sustained participation of such communities and minimizes the adverse economic impacts on such communities would be the preferred alternative.

50 C.F.R. § 600.345(b); *Natural Resources Defense Council, Inc. v. Daley*, 209 F. 3d 747 (2000).

performance.⁵ The Committee attributed this mixed/variable performance partly to stock assessment and forecasting uncertainty. Yet, as emphasize above, the Committee equally emphasized the “mismatch between policy maker’s expectations for scientific precision and the inherent limits of science.”⁶

In essence, we read the NRC report as the science side of the fisheries management community telling the policy side that we should reconsider our expectations about precise rebuilding schedules. The Committee cautions that the current law places “unrealistic demands on the science and forces reliance on forecasts and estimates of biomass-based reference points, which may be very uncertain.”⁷ The Committee instead recommends focusing on fishing mortality based targets and reference points.⁸

The Committee provides extensive discussion on harvest control rules and related challenges. The discussion of discontinuities and the abrupt changes and disruption caused by scientific uncertainty are especially important. Following their discussion and discussions around the Council, we believe the recommendation of the fisheries science community would be to follow smoother rebuilding trajectories than have very large transitions in harvest once a stock reaches its rebuilding target.⁹

The Committee’s findings about the volatility and disruption in assessment and forecasts resonates with the Council’s experience rebuilding groundfish. For instance, we question how much weight we give to forecasts that have a stock rebuilding by 2026 in one alternative and 2027 in another. In light of the uncertainty, such forecasts are interpreted as indistinguishable by many.

Fortunately, much of the volatility in stock assessment estimates and rebuilding projections has been for the better in recent cycles. If a focus on fishing mortality rate targets is a better means of addressing stock assessment uncertainty, we encourage a close evaluation of how the MSA can be amended to follow this advice from the scientific experts.

The long assumed “win-win” of rebuilding is really a “it depends”

The NRC report’s discussion of scientific uncertainty and rebuilding times are of key importance for policy makers to better understand. At the same time, the focus on fishing mortality rates does not address the key policy question—how to choose the appropriate target in the first place. For instance, with the major change in the yelloweye rockfish rebuilding projections, it does not make immediate sense why the Council should stick with a fishing mortality target that was set when forecasts had the stock needing six or seven decades to rebuild as when the latest forecast cuts that

⁵ NRC report at p. 2.

⁶ NRC report, also at p. 2.

⁷ NRC report at p. 7.

⁸ NRC report at p.2:

Rebuilding plans that focus more on meeting selected fishing mortality targets than on exact schedules for attaining biomass targets may be more robust to assessment uncertainties, natural variability and ecosystem considerations, and have lower social and economic impact.

⁹ Note the disparity in the harvest policies for two stocks that are between B30% and B40% where one has never crossed the overfished threshold and one has. The fishing mortality rates for sablefish and canary rockfish when it was rebuilding, for example, were hugely different. The disparity cannot be justified on grounds of optimum yield.

time by more than half. The Council's choice of the rebuilding harvest control rule was made when circumstances were substantially different.

As noted, the original intent of rebuilding is to address the trade-offs between short-term economic needs and long-term conservation goals, which include social, economic, and ecological considerations under the principle of optimum yield. The choice of a rebuilding target is best grounded in this trade-off. The current law is not. We examine short-term economic impacts without putting them into the proper context of trade-offs to long-term conservation goals.

The "win-win" assumption is the likely explanation for this approach. It is a widely held belief that fastest rebuilding trajectory produces the best result for fishing communities and conservation. For a number of years now, the fisheries economics community has advised policy makers that the "win-win" outcome is based on a number of assumptions that likely do not hold for many stocks and fisheries. This point is made clear in the NRC report:

Yet while the natural and human outcomes of fish stock rebuilding are often closely aligned, they are not necessarily so; . . . Whether these long-run gains offset the short-run costs depends on numerous factors including how the rebuilding actions are instituted, the characteristics of the fishery, and the assumed discount rate.¹⁰

The fact that rebuilding might not be a win-win situation on economic grounds should be made more widely known. Many reasons for rebuilding stocks exist, such as ecological considerations and providing future stewards of the resource with more options for managing fisheries, yet it is misleading to use economics to justify faster rebuilding where the prospects of economic payoff are low.

More importantly, as noted above, the current law requires an unknown level of proof to be shown on short-term social and economic impacts. Some interpretations say the impacts have to be "disastrous" or "severe." In a rebuilding plan where the long-term gains do not offset the short-term impacts, this approach may be irrational and draconian.

Perhaps the most concerning finding in the NRC report is that the manner in which the current law is implemented:

can preclude the discussion, analysis, and implementation of fishery management alternatives that could provide greater potential economic benefits across commercial and recreational sectors . . . and could reduce adverse community impacts."¹¹

The MSA's major strength is that it is a science-based law. It is therefore very concerning that it is implemented in a way that prevents the best available analysis of trade-offs.

With the level of uncertainty involved in forecasting biological and economic conditions, we are skeptical that optimal paths through rebuilding can be identified. Uncertainty over successful rebuilding should be given high weight. Again, the purpose of rebuilding is as a means of achieving

¹⁰ NRC report at p. 97.

¹¹ NRC report at p. 98.

optimum yield. And ignoring direct evaluation of long-term gains and short-term costs may mean some rebuilding plans will work against that purpose by causing disproportionate social and economic consequences.

Conclusion

WDFW has supported the Council's recommendation for substituting "practicable" for "possible" to date because the change might address some of the more concerning interpretations out there, like the "disastrous consequences" interpretation noted above. Yet the legal effect of the change would be uncertain and the means of justifying a target rebuilding year may differ little from what the Council does now. There are better means of recalibrating the MSA.

Also, we do believe there is room for more flexible interpretations of the current law. These interpretations would treat the "needs of fishing communities" more consistently with National Standard 1 and National Standard 8. The leading court decision on rebuilding contains the seed of what could be a very sensible standard for rebuilding, one that focuses on "measured proportionality" between considerations for short-term economic considerations and long-term conservation benefits.¹²

Yet, as noted by the NRC report, implementation of the law takes a prescriptive approach. The Committee identified some benefits of this approach, like forcing action and "limit[ing] the potential use of short-term socioeconomic costs as an argument to justify delay of rebuilding plans that would, if successful, provide long-term socioeconomic benefits."¹³ Yet there's a trade-off to the current law in that it can "leave little room for flexibility or innovation (e.g., use of alternative stock-specific reference points), and preclude tailoring rebuilding plans to the specifics of each stock and its fisheries."¹⁴

The situation is a classic trade-off between rule- and standard- based approaches to law and policy. Rules are clear and simpler to follow. At the same time, they can prevent superior outcomes in some situations. The 10 year cap is a perfect example of an overly rule-bound approach and one presumably based on the idea that most stocks would be able to rebuild within 5 years.¹⁵ Such a rule may produce good outcomes for stocks that can rebuild within 5 years but does directly address the trade-offs for stocks that cannot.

In conclusion, we believe the MSA can be amended using a standards-based approach that achieves the same benefits noted as arising from the prescriptive, rule-based way the law is implemented now. A properly crafted legal standard, grounded in the updated findings of fisheries science and economics, could allow direct weighing of trade-offs on a stock by stock basis. This standard could give NMFS clear criteria on which to evaluate consistency and disapprove rebuilding plans that exact too high of a cost in terms of long-term social, economic, and ecological goals.

¹² NRDC v. NMFS, 421 F.3d 872, 881 (9th Cir. 2005).

¹³ NRC report at p. 178.

¹⁴ NRC report also at p. 178.

¹⁵ Safina, C. et al. (2005), "U.S. Ocean Fish Recovery: Staying the Course," *Science* 309(5735) <https://doi.org/10.1126/science.1113725> ; Patrick, W. and J. Cope (2014) Examining the 10-Year Rebuilding Dilemma for U.S. Fish Stocks. PLoS ONE 9(11): e112232. <https://doi.org/10.1371/journal.pone.0112232>.