## January 18, 2024 Recreational Demand Model (RDM) Decision Support Tool (DST) Working Group (WG) Meeting Summary

The RDM DST Working Group for Summer Flounder, Black Sea Bass, and Scup met for the eighth time on January 18, 2024, via webinar to: (1) address any outstanding questions/issues associated with use of the DST; (2) discuss next steps in regards to use of the DST for the 2025 regulation setting process; (3) Summer Flounder, Black Sea Bass, and Scup Technical Committee (TC) discussion of scup management measures in the southern region.

## Attending

## Working Group Members

| Tracey Bauer | Rachel Sysak |
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| Julia Beaty | Chelsea Tuohy |
| Scott Steinback | Gregory Wojcik |
| Kimberly Bastille | Richard Wong |
| Andrew (Lou) Carr-Harris |  |
| Kiley Dancy | Others |
| Lorena de la Garza Hernandez | Mike Waine |
| Steve Doctor |  |
| Hannah Hart |  |
| Alexa Galván |  |
| Corinne Truesdale |  |
| Sam Truesdell |  |

## Discussion

Scott Steinback: Review of last meeting - No hard and fast rule, but best to maximize the number of runs that meet the target. Change in angler satisfaction is another metric that could be reviewed. Try to minimize the loss in angler satisfaction across top alternatives. Can also look at the estimated number of trips that would occur. There's also the release numbers. Try to minimize dead release pounds. These are all new metrics that you could consider when trying to decide which measures to implement. Since our last meeting it came to our attention that the cloud results for status quo were slightly different. They should have been the same. The original 2024 status quo values were based on runs on Lou's laptop. Using the cloud platform resulted in slightly different numbers. Kim and Lou will fix that for next year, but Kim figured out a workaround for this year. She uploaded the correct values and sent out a spreadsheet that you all could use. Just wanted to check to see if anyone had any other issues and how things went overall with the tool at this point.

No issues reported.

Scott Steinback: In terms of next steps for the tool, Kim came up with the idea to send out a survey to all working group members to obtain feedback on the entire working group process so we can potentially make improvements moving forward. Do we have the right mix of members? Meeting schedule, meeting content? What can we do to make the tool even more user friendly? After today I think we can take a break for several months. The tool will still be available to be used until April, I think.

Kim Bastille: I will check the exact date in the contract.
Alexa Galván: Please let us know when. Since we can't use the MRIP query tool for wave estimates, I'll probably use the RDM for our season modifications if we open in February for black sea bass. That would be in late March or early April.

Scott Steinback: I was thinking we would start meeting again in June. We started meeting in June last year. We'll be well ahead of where we were last year. There's still room for improvement though. Lou has some ideas for improvements that we weren't able to do this year. We will work on speeding up the model even more.

Tracey Bauer: Big thank you to Kim for including the updated status quo values in the tool. That was extremely helpful.

Steve Doctor: I wanted to comment on the percentage of times you will meet your target column in the spreadsheet. It's all over the place. Maybe you want to take a closer look at it.

Scott Steinback: If you were able to find measures that resulted in exactly a $28 \%$ reduction for fluke and a $10 \%$ reduction for scup, the percent under harvest target would be 50 .

Steve Doctor: On the sheet it's got a value for each species and each mode. As an example, for summer flounder for all modes, it's got a $34 \%$ chance, it doesn't seem quite right. You might want to look at it. For most of the fields for MD and DE it's not applicable, I guess because there's not enough data. I wouldn't want to use that measure for setting regulations because it doesn't seem to have consistency.

Alexa Galván: For some of the options I looked at for the southern region, it looks like VA has a higher chance of achieving the target. It might even out across the states to get to that $28 \%$.

Steve Doctor: I definitely feel like that's what's going on for the percentage reduction. But as far as that percentage chance of making it, I wouldn't want to have to use it for measures setting.

Scott Steinback: We can take a closer look at that.
Steve Doctor: It's definitely coming in higher for VA. Could be because you have more fish.
Scott Steinback: For the Gulf of Maine cod and haddock model, that's the field we use to set the regulations each year. The measures chosen have to have at least a $50 \%$ probability of achieving the target. We've been using that for 10 years to set the regs.

Steve Doctor: Say you run the model and you get a $28 \%$ reduction, do you get $50 \%$ or does it vary? And what makes it vary?

Scott Steinback: Since in this case it's the median values, if you run it 100 times, half the model runs came in above the target, half below, that's how you get right at that $50 \%$ number. Each model run you end up with a different estimate of harvested pounds because it's simulating and pulling in randomly from all the distributions of the values that are pulled in. You never get the exact same number across the runs.

Steve Doctor: Let's say I'm shooting for a $28 \%$ reduction. The output says I get a $28 \%$ reduction. Is there going to be a situation where that final column says something like $10 \%$ of runs meet that reduction?

Scott Steinback: No. If it's exactly $28 \%$, it should say 50.
Steve Doctor: In some cases, I'm getting a number that's really close to the target but the percentage of runs can range anywhere from 4 to 100. It doesn't seem correlated. It does seem related to the interactions, the number of fish.

Lou Carr-Harris: What Scott said is correct. If you get the $28 \%$ reduction, that number of runs will be 50 . I'll share a figure to help explain this variability when close to $28 \%$. I showed this to the Council for estimates under status quo for each species. Each of these dots is one run of the model. There's 100 dots for each species. Each output has some distribution. If you look at the summer flounder output, it's a lot more clustered. The scup data is more spread and variable. The variability in that percentage of runs column can just be due to this variability in the output. It could be that the MRIP data for MD is more uncertain than for other states.

Steve Doctor: So it's basically a measure of central tendency? It's estimating the variability. The further you are from the target, the more variability with less chance of meeting it.

Rich Wong: I also want to say thank you to the group again. Something to think about, is it possible to build in some functionality where if you set the desired reduction, you can input two of the regulation changes, say a size and bag, and the tool can solve for the third regulation to get the desired reduction?

Lou Carr-Harris: I love this idea. We've talked about this before. It would be potentially doable. I don't think there's enough computing time for the model to solve for all three regulations, but we could think about if it could solve for one of the three. Don't want to make any promises. But we can look into it. We could also start to think about an optimization problem, optimizing angler welfare. If there are different sets of measures that get to the same reduction, which maximizes angler welfare. We can think about that.

Alexa Galván: That's a great idea. I would also add holding the season open or close date constant as well. For example, if you open on May 1, when does the season run to? Setting a season start or end date could help.

Lou Carr-Harris: I know people have been changing the seasons to start in January in some cases. I just wanted to remind people that there's no MRIP data in January and February so you
won't see any change in harvest. The model is assuming no January-February harvest. I would advise caution in considering season openings in January and February.

## TC meeting

Chelsea Tuohy: We mostly wanted to meet today to obtain feedback on the scup reduction in the southern region. We need a $10 \%$ reduction, but with the RDM, scup reductions don't always show up in those runs. I think it's because there is so little scup harvest in those states. We talked with Board members. They indicated they want to see some proposed changes in the southern region.

Alexa Galván: From running the summer flounder reductions, everything we do shows our base case for scup has a harvest of 0 .

Chelsea Tuohy: Last year the southern states matched the federal waters measures. But this year, since we got rid of that federal waters closure, matching the federal waters measures would be a liberalization for the southern states. So it's mostly an equity concern. Even if the model is showing no change in harvest. The FMP does not allow recreational de minimis, but the TC can recommend some sort of bycatch measures that would always be in place to address this issue. The TC would need to recommend something today. A 30-40 fish bag limit would probably not pass the test to the Board of standard bycatch measures.

Steve Doctor: We were in a similar situation a few years ago. We agreed to go from a 50 to 40 creel. I've talked to a few states, we're willing to go from 40 to 35 fish.

Rich Wong: I support that. We can't use the RDM or even the MRIP raw data to evaluate changes. We're almost relegated to doing an ad hoc reduction like Steve suggested. For DE, we'd have to reduce our state landings by 600 fish. It's a really small amount of fish. It's going to have to just be a gesture. A qualitative reduction. If the northern states are really stuck on making us do this. We usually don't have to go through this paper exercise to satisfy the Board.

Scott Steinback: I just wanted to comment about the MRIP wave data not being available. It's not on the website, but you can still use the raw data. However, in Rich's case you're talking about very small sample sizes. Very high uncertainty with the raw data as well. But the raw data are still available. You can use it to get monthly data. You just can't access it with the query tool.

Lorena de la Garza (in the chat): NC would be ok with that option also ( 35 fish).
Alexa Galvan (in the chat): Virginia, being the most restrictive, would plan to remain at 30.
Corinne Truesdell: Going from 40 to 35 fish, I'd be fine with that, but if it's something to achieve $10 \%$, going from 40 to 35 fish gets us a very small reduction in the northern region. If we want to get to something that could be $10 \%$, I don't think that would be it.

Chelsea Tuohy: It's up to the TC if you want to support this small reduction as a gesture, if it feels appropriate. We need the group to make a recommendation.

Rich Wong: I would also appeal to the group here that the $28 \%$ reduction that we're taking for summer flounder is definitely not going to increase the scup harvest. It will decrease it. But it's not quantifiable. Just take that into consideration along with the 5 fish reduction in the bag.

Steve Doctor: I'd like to give background on what I'm thinking. A 5 fish reduction isn't going to do anything, I realize that. A few years ago, we came down 5 fish, then a little later we did it again. Over time it's coming down to where we need to be. If we ever do have scup someday, we'll be closer to where we need to be.

Tracey Bauer: With the RDM not showing any scup harvest in the southern states this year compared to last year when we had some, is that due to how we are averaging the MRIP catch per trip data?

Lou Carr-Harris: I can't remember off the top of my head, but I know there were zeroes for scup catch in some states. For some states where the total catch estimate was very small, that created some difficulties in the model so we essentially set those to zero.

Rich Wong: I thought we had zeros for scup last year as well.
Tracey Bauer: Does anyone think they won't be able to send in their measures by tomorrow's deadline?

Alexa Galván: Do you need anything besides the set of measures and the reduction? Do you need any other RDM outputs?

Tracey Bauer: Just the harvest numbers. We have the status quo. If you give us what you supplied last year with the status quo number and the reduction in harvest, that will help us in the coastwide calculations.

Greg Wojcik: Did you want us to just use the same formatting in the email you sent earlier?
Tracey Bauer: That would be very helpful for us.

