September 21, 2023 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 fourth time on September 21, 2023, via webinar to discuss: (1) enhancements made to the draft DST design template; and (2) to provide a progress update on moving the DST to the cloud to better support the processing needs of the RDM and to take advantage of cloud computing scalability.

Attending

Working Group Members

Tracey Bauer
Julia Beaty
Scott Steinback
Kimberly Bastille
Andrew (Lou) Carr-Harris
Kiley Dancy
Lorena de la Garza Hernandez
Steve Doctor
Alexa Galván
Hannah Hart
Emily Keiley

Mark Terceiro
Samuel Truesdell
Rachel Sysak

Others

Adam Nowalsky
Greg DiDomenico
Sabrina Lovell

Discussion

Scott Steinback: Since our last meeting, Kim and Lou have continued to work on updating the model code to reflect improvements made to the model since last year (e.g., incorporating MRIP uncertainty). They are close to finalizing the updated code. Kim has also continued to work on the draft DST and has spent a considerable amount of time working with the Microsoft Azure team to figure out how to move the DST to the cloud.

Kim Bastille: Model updates: Measures selection panel the same as last meeting. Still just running for NJ. Showed example of summer flounder and scup at current measures with higher black sea bass bag limit. Results show total kept and released by mode with difference from status quo predictions. In weight and pounds. Results tab also shows measures that were selected. Additional table showing angler welfare and total number of trips. Model now also outputs dead discards in weight and total number of fish. Including differences from status quo. Avidity and angler age incorporated into the model. Still working on some testing. Still working on documentation tab - will include FAQs and other info.

Steve Doctor: Are the sector specific outputs summed anywhere?

Kim Bastille: Yes, at bottom of table. Currently labeled as "NA" for mode but that labeling will be updated.

Scott Steinback: How do people save results?

Kim Bastille: Eventually there will be a way to email the contents of the results tab.

Scott Steinback: Would it have to be a separate email every time they make a change?

Kim Bastille: Yes, every time you hit the "run me" button, it would send a separate email.

Rachel Sysak: Is the email format going to be a csv, html? Most of us would probably want a spreadsheet type format.

Kim Bastille: Haven't gotten that far yet. However, it could be a spreadsheet where each tab is one of these tables.

Rachel Sysak: That would be great.

Kim Bastille: That should be doable. I will explore that.

Scott Steinback: What if users want to see multiple states? Would you get one email for all the results?

Kim Bastille: Yes, the output tables will have a new column for each state, so it would just make these tables longer.

Rachel Sysak: The headers for some columns are easy to understand, but the discard mortality and other ones aren't as intuitive. Our state has been wanting, for a while, to have workshop meetings with industry where we talk about measures. We haven't been able to do anything dynamic though. Instead, we've brought a bunch of options. People always ask for options we didn't consider. This would help us dynamically look at options with a small group of folks. Plain language helps.

Kim Bastille: We can modify the column headings any way you like. If anyone has any suggestions as to new column headings let me know.

Scott Steinback: This year we're going to be limited to a certain number of people being able to access the tool once this goes online. You would have access. You would have to be there at that meeting to run it for the others though.

Rachel Sysak: Yes, that was the intent. This is a great way to help illustrate why some desired options might not work.

Julia Beaty: Would be helpful to include a table somewhere to spell out what everything means. When I hear "discard mortality," I think of the discard mortality rate. I normally think of what this is showing as "dead discards."

Kim Bastille: We can add definitions for the column headings.

Kim Bastille: Working with Azure (Microsoft). They have a version of the code and the data. Helping build the infrastructure so when we have the most updated version of the code, things will work well. There will be a login page. Will open an instance when you login and close it out when you log off. That approach will help keep the costs down.

Rachel Sysak: What is the run time for each iteration?

Kim Bastille: Model will run 100 times. Parallel processing. Goal is to have it run within 5 minutes from hitting "run me" to results displaying. For one state.

Scott Steinback: One of the issues has been finding a way so that everyone can run the DST in parallel so that up to 30 people could run it at one time. It's more complicated to have it set up that way. Hasn't been done in NOAA yet. Lots of meetings. It seems to be coming together, but we have two months to make this work. We are bumping up against our timeline. The NOAA cloud office and the Azure team seem pretty determined to make this work and show it can be done. We are setting the stage for future work with the cloud in NOAA. I'm hoping by our next meeting, Oct 19, we will have NJ up and running in the cloud so everyone can log on and demo that. By our next meeting in Nov have it scaled up to all the states. If it doesn't work out, we will still have the tool up and running on Kim's machine. Would still be easier to run than last year since we will have the tool.

Kim Bastille: By our October meeting, we'll have a pretty good idea if we'll be able to pull it off by November. I could even run it on my machine for the types of meetings Rachel was talking about.

Non-work group members

Adam Nowalsky: No microphone this morning, thanks for accommodating my input via chat. 2 comments and 2 questions - 1) If generating csv for e-mail of results, a download button from results page could be useful. 2) Once cloud based, good idea to load test with at least 6-8 users (or more) simultaneously generating results so that in a meeting like Rachel mentioned there would be confidence that things would run timely. If things can't run timely enough, user base would need to know to try to avoid concurrent needs. 3) If cloud based doesn't work, could code base be distributed through Github or other means to have technical people run locally? 4) Given the conversations about rec management and interest in F based management, how flexible is the model to generate F based results and then how accommodating would the DST be to support F based output?

Kim Bastille: Download button instead of email is a good idea. I have done that before. Code is available on Git Hub. Some data files are too big for Git Hub limit. Could share with technical folks in other ways such as through a google drive for people to download and run locally.

Julia Beaty: Short answer to the F question is no. RDM not set up to output a fishing mortality rate. I don't think we're expecting the model to be able to do that in the future.

Kim Bastille: Hoping we can do some beta testing in October. If not, maybe after this cycle.

Rachel Sysak: Having access to that github and repo would be fantastic!

Scott Steinback: If we get the cloud part up and running before our next meeting, we will get everyone login access to the DST before then.