

Maryland Oyster Restoration Workgroup Meeting Agenda

Nov 21, 2022 9:30am - 12:30pm

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Agenda

- -Quickly revisit the draft monitoring plan regarding how to integrate the Rapid Assessment Protocol into fall 2022 monitoring (pasted below, blue highlights). Is this still a good way forward?
- -Biological monitoring progress update
- -Structural monitoring discussion: See the rough plan Stephanie and Jay drafted below- yellow highlights.

Seeking input from the group on this.

- -Discussion for 2022 Annual Update: final 2022 planting numbers-- when will they be available? Anything in particular to highlight as we begin drafting this? Assume we will need to wait until early Jan to know which Manokin reef will have been constructed, since construction is ongoing- is that correct?
- -Check in on DNR Manokin ground truthing-- see Laurinda's 10/17 email. Any discussion needed?
- -March 2023 National Shellfisheries Association conference-- anyone presenting? Attending?
- -Harris retrospective document discussion: Jay offered a revised format; Stephanie had some questions about purpose, audience, main take homes, content, what happens to the document when we finish it, what is our time frame, etc. Need to determine what we are doing here.

Doc: https://docs.google.com/document/d/1zqO3jlRWlk35Z13OcrfNtYQQ2pkx_JMh/edit#heading=h.gjdgxs

Draft 2022 monitoring plan:

-don't go to STM this year, re: all sentinel reefs are year 0, which we've never monitored before; DNR fall survey will pick up mortality if it happens this year.

-Focus the capacity that would have gone into STM on a RAP-to-traditional comparison on Tred; do the 2022 3 and 6 year cohort with both types of monitoring. Why? We can look at RAP on 3 and 6 year reefs (SERC work was mostly on older reefs), in a low spat set scenario, potentially a high box area- we can learn how or if that skews the RAP; can also try to figure out if RAP can be used to determine need for second seedings. All this can inform how we use RAP in future years.

Research questions from testing in TA:

- Can determine whether a 2nd seeding is required?
- Can determine whether scores persist even if most oysters are dead?
- Can we identify whether spat are present in video images?
- Can we identify high substrate (i.e. loose shells) with low live density video images and how does RAP rank these?
- What does a 3 year old reef look like vs. a 6 year old reef?

Goals: Use these data to help inform which scenario (1 or 2) is most appropriate

DRAFT structural monitoring plan for fall 2022:

- First priority is to survey any reefs that have not yet have had any survey work, to inform charts (ie, 'as builts', even if they are several years late)
- Next priority are the 2022 3 and 6 year check ins. For these, we may go to a sampling approach rather than our current census approach (ex: survey several lines across the reef, rather than surveying the whole reef). Justification: we've sampled a LOT of reefs with a census approach, and we are not finding any reefs that don't meet the structural metrics. This indicates it would be reasonable to adapt to a sampling approach. (Do we need any kind of analysis around this?)
 - o Min of 4 transects, at 90 degree angles. And/ or, for long skinny reefs: one long transect and, ex, 3 short transects;
- For the 'Covid years' (2020 and 2021), how much value is there in going back and getting these? Re: we can't go back in time and determine what these reefs looked like at the 3 or 6 year intervals. Also, per above, none of the reefs we surveyed prior to Covid failed the structural metrics, so it is unlikely that any of the reefs that needed monitoring in those two years would have failed. If we do go back and get these reefs, it would be a sampling approach (not census). Conclusion: do not go back and get the older 3-and-6-year data from 2020 and 2021.
- (for 3-and 6 year check ins, eventually): Ultimately, we are working toward replacing some/ all structural monitoring sonar surveys with RAP anyway. Given that we've seen no failures relative to structural metrics, it seems logical to adapt from the early, proof-of-concept, full census surveys to sampling surveys (with some Covid years data gaps), to RAP. The storyline is we started with an incredibly heavy 'burden of proof' mindset, then, onced that was 'proven', we got leaner as we learned more, adapted, and developed new, leaner methodologies.

From Jay via email on 11/16/22

^{*}The plan above gives a general prioritization of acquiring backlogged data. However, practicality might dictate that we collect data on reefs in close proximity to each other at the same time. This might override the priority order on occasion.

