

Nick Phelps

Great report - it is a big step in the right direction. Thank you for your effort on this!

It would be helpful to provide a stronger definition/disclaimer/context for two words commonly used in the report: non-urgent and natural. While the nuance is mentioned in a few spots in the report, it could be strengthened by being more explicit. I have repeatedly seen agency folks (state and local) and the public use words like non-urgent and natural to describe fish kills, often in the context of justifying reasons not to report and/or respond. Continued use of these words may unintentionally counteract the legislative mandate to increase reporting of fish kills.

1. Urgent/Non-urgent -- I understand the value of triaging fish kill response, but am concerned the classification as urgent vs non-urgent does not accurately describe what you are trying to achieve. It really isn't about urgency of response, as fish die offs due to pathogens also require urgency if an accurate diagnosis is to be ruled out/in. Instead, perhaps there are tiered response categories... For example: Tier 1-acute toxic events, high importance areas, etc (current 'urgent' category led by MPCA/MDA); Tier 2-significant fish kill/die off not associated with acute event, chemical permitted by DNR (current 'non-urgent' category, but warrant rapid response, led by DNR); and Tier 3-summer/winter kill and/or small fish kills of low-priority species (current 'non-urgent' category, led by DNR). Furthermore, I am concerned that the use of 'non-urgent' may unintentionally leave agency staff and/or the public to misunderstand this categorization as 'non-important', which would be problematic for increasing the goal of reporting and the DNR's ability to effectively and rapidly respond if their responsibility is most often 'non-urgent'.

2. Natural -- While fish (and other aquatic life) will naturally die, the suggestion that mortality events caused by low-DO, warm temp, etc are 'natural' disregard the human-induced impacts to our lakes. I assume the interagency team understands this nuance, but this is a term that will be picked up from this report and used for public communication (it already happens, including in the public presentation). The consequence of this misunderstanding may lead folks to under-report what they may consider a 'natural' event. If you want to continue to use the word 'natural', I suggest including a statement that more directly says something like: "Fish die offs are often associated with low DO, warm temp, and opportunistic fish-specific pathogens. While this report refers to these types of events as 'natural', we recognize that these conditions can be exasperated by human-induced impacts to our water and climate. Reporting fish die offs helps to inform long-term trends and mitigation strategies, both areas of ongoing research and management."

If you have any questions, don't hesitate to reach out.
Nick Phelps, phelp083@umn.edu