



## King County

### Water and Land Resources Division

Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street, Suite 5600  
Seattle, WA 98104-3855

**206-477-4800** Fax 206-296-0192

TTY Relay: 711

6 January 2023

Justin Donahue

Water Quality Assessment Scientist

Department of Ecology

[Justin.donahue@ecy.wa.gov](mailto:Justin.donahue@ecy.wa.gov)

360-628-3630

**RE: Comments on proposed revisions to Water Quality Program Policy 1-11: Freshwater Harmful Algae Blooms Methodology**

Greetings Mr. Donahue,

We at King County appreciate the opportunity to comment on the Department of Ecology's proposed revisions to Water Quality Program Policy 1-11, Section 2D: Harmful Algae Blooms Methodology. Please see below for our comments.

1. Page 2, 1<sup>st</sup> paragraph. There is reference to "a framework for local health jurisdictions to issue public health advisories for waterbodies with active HABs (DOH, 2011)." However the reference cited at the end of the document is from 2021.
2. Page 3, Category 5, Part 1. "The years do not need to be consecutive." Does the qualification stand to place waterbodies in Category 5 even if the advisories occurred many years ago, and/or many years apart? This is unclear, especially when compared to the qualification for Category 1, which has a 3-year timeline. Additionally, what is the justification for selecting the listed timelines? Specifying all timelines and including references for the timelines selected is recommended.
3. Page 3, Category 5, Parts 1 and 2. Assuming the DOH framework is used, all WARNING or DANGER advisories should automatically be in place for a minimum of two weeks. Week 1 the "over" sample is collected, then two consecutive weeks of samples below guidelines must be collected in order for the advisory to lift.

Sample A [over] → one week → Sample B [under] → one week → Sample C [under]

Perhaps a better qualification would be two consecutive weeks of samples over recreational guidelines, as opposed to two consecutive weeks of an advisory remaining in place (since this should always be the case).

4. Page 3, Category 5, Parts 1 and 2. The differentiation between Parts 1 and 2 is unclear. Does the phrase “potentially toxin-producing cyanobacteria” insinuate that a qualitative assessment is being made, as opposed to a quantitative one? Or is the differentiation the two-year vs. two-week timeline qualification? Or whether the advisory has been placed by either DOH or the local health jurisdiction? A more succinct clarification of the distinction between Parts 1 and 2 is needed.
5. Page 3, Category 4. These qualifications are vague. A TMDL or “alternative pollution” remediation program for HABs would potentially, if not likely, involve monitoring a contributing component such as nutrients, dissolved oxygen, or temperature, all of which have existing TMDL processes. How would the remediation programs for HABs differ from these existing programs, and why?
6. Page 4, Categories 2 and 3. A more succinct difference between these two categories is needed. In both instances either one year or one event is recorded – if the distinction is that Category 3 has only one year of data, versus Category 2 in which numerous years of data are available, but only one triggered an advisory, this distinction should be named.
7. Page 4, Category 2, Part 2. “...the listing does not qualify for Category 5.” Again, if the distinction is having a minimum two-week advisory in place, this should always be the case if DOH guidelines are followed (see no.3 above).
8. Page 4, Category 1. The requirements to move a waterbody to Category 1 leave room for a great deal of subjective interpretation and sampling frequency.
9. Regarding appropriate use of data: The samples collected and submitted to the Washington Toxic Algae Program for testing are often reactive and/or purposive, and meant to determine if there is a possible health risk to people and animals at a specific time. Samples are often collected where blooms are the most concentrated to represent the greatest exposure threat to public health. This data may not best serve the purpose of “evaluating the health of contact recreation in the Water Quality Assessment (WQA),” or developing a TMDL or other remediation program which relies on monitoring data.
10. Regarding variability in sample collection and frequency: As stated above, samples submitted for toxin testing are generally done so reactively and often do not follow regular timelines and frequencies. Many other factors can influence how often bloom samples are observed and collected. These include water body and bloom accessibility

and awareness, availability of volunteers or others to collect samples, ability to deliver/mail samples, proper sample handling and storage, etc. This variability will directly influence the frequency with which blooms are not only observed but analyzed for toxins in a given water body, thereby directly influencing the Category placement. How will this variability be addressed?

11. Regarding specific, suitable, and equitable remediation guidelines. The proposed guidelines refer to an EPA-approved TMDL or “alternative pollution control program” with no references or other guidelines provided. With many of the Category qualifications leaning towards subjectivity, what are the implications of instigating a remediation program? What resources would be required, financially and otherwise? The Washington State Toxic Algae Program is publicly funded and generally fully utilized on an annual basis. If multiple remediation programs are instigated, the additional financial and resource burden placed on the program will need to be addressed. What entities would be responsible for the additional resource burden? If resources are not available to execute a remediation program, would a waterbody potentially remain in Category 5 indefinitely? A great deal more discussion and planning regarding the remediation and effectiveness evaluation process is needed.

Again, we at King County appreciate the opportunity to comment on Ecology’s proposed guideline revision. We look forward to continuing to work with Ecology to discuss, develop, and refine regulations to protect our natural resources as well as public health.

Please feel free to reach out to me at 206-477-4845 or [rachael.gravon@kingcounty.gov](mailto:rachael.gravon@kingcounty.gov).

**Rachael Gravon** (she/her)



Water Quality Planner/Project Manager – Limnologist  
King County Science and Technical Support Section  
Office: (206) 477-4845  
[Rachael.Gravon@kingcounty.gov](mailto:Rachael.Gravon@kingcounty.gov)

Rachael Gravon

1/6/2023

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