

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NATIONAL HEALTH AND ENVIRONMENTAL EFFECTS RESEARCH LABORATORY ATLANTIC ECOLOGY DIVISION 27 TARZWELL DRIVE • NARRAGANSETT, RI 02882

OFFICE OF RESEARCH AND DEVELOPMENT

January 25, 2016

Editor, F1000Research London, England

To whom it may concern,

Please accept, for your review, "Associations between chlorophyll a and various microcystin-LR health advisory concentrations" to be published in F1000Research. In this article we detail a conditional probability analysis of the USEPA's 2007 National Lakes Assessment in which we identify chlorophyll a concentrations that are associated with several microcystin-LR health advisories. Making these associations is important because it allows identification of a large number of lakes that may be posing a public health hazard because of high concentrations of cyanotoxins. Direct measurements of microcystin-LR are becoming more commonplace, but at the current time they are still relatively rare. Chlorophyll a measurements are much more common and can be used to help identify potential problems. We are also pleased to submit this to F1000Research as we are proponents of practicing open science. Towards that end all of the data and source code for this manuscript are available as an R package via GitHub (https://github.com/USEPA/microcystinchla). Any questions or concerns about this submission, please do not hesitate to contact us.

Sincerely,

Jeffrey W. Hollister 401 782 9655 hollister.jeff@epa.gov

Betty J. Kreakie kreakie.betty@epa.gov