Lake Management Committee's Response Strategy for Lake Roaming Rock Bacterial Testing

This document includes the general recommendations made by the Lake Management Committee [LMC] for testing to establish the presence or absence of bacterial contamination in Lake Roaming Rock. Each testing year, minor changes may not be included in this document. However, should major changes be necessary, or should the criteria used by Ohio Department of Health or the USEPA change, this document should be revised to meet the new criteria. The recommendations presented herein represent a consensus opinion of the current LMC (as of 5/1/2018).

Summary
The lake testing program recommended by the Lake Management Committee [LMC] includes bacterial testing of the water at the two beaches. Testing at additional sites (e.g. a site near the dam) can be evaluated on a yearly basis. The frequency of testing is currently suggested to be on a weekly basis from early May through the end of September (approximately twenty data points per site), which is typical of public beaches in Ohio. Testing results will be shared with the Association via e-blast and archived on the RomeRock Association [RRA] website. Should the value at any testing site exceed 235 cfu/100 mL, the LMC suggests that the Board of Directors of the RomeRock Association (the Board) authorize the posting of a warning sign at the beaches. Removal of the signage should the results drop below the limit is discussed below.

Introduction
Amendments to the Clean Water Act by the Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 directs the USEPA to conduct studies associated with potential exposure to pathogens from fecal matter. In 2012, the USEPA released their revised Recreational Water Quality Criteria (RWQC) which outlines recommendations to be adopted by each state. These recommendations suggest monitoring waters at public and semi-private beaches for the level of *E.coli*. Although E.coli itself is not likely to be of concern, data does suggest that the presence of high levels of E.coli can indicate the presence of other pathogens such as from fecal contamination. These pathogens could then be responsible for illness.

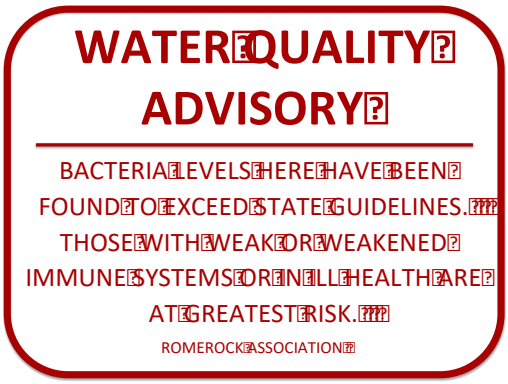
Section 5 of the 2012 RWQC document mentions a Beach Action Value (BAV) of 235 cfu/100mL (or 190 cfu for a more precautionary approach) as a conservative tool for states to use in making beach notification decisions. Since most beach monitoring programs in Ohio (see the BeachGuard web site @ www.odh.ohio.gov/healthybeaches) utilize the former value, the LMC suggested that the 235 value be the basis for the posting of any notifications at Lake Roaming Rock.

Testing Protocols

It is highly recommended that all testing for bacterial contamination be done by a certified environmental laboratory. They should be responsible for both on-site sample collection and transport to the main laboratory for actual analysis. Currently, CWM Environmental (Cleveland, Ohio) has been contracted for this work, however, other laboratories can be substituted assuming they are certified and have been properly vetted for this analysis. Standard EPA methods should be used for the analysis. It is suggested that composite sampling at the beaches (triplicate aliquots) be utilized for each data point.

Notifications - Signage

Should the E.coli level exceed 235 colonies/100 mL at any testing site, an LMC representative will contact the designated member within the Board of Directors upon receipt of the testing report. It is recommended that upon notification, they (the Board) authorize that the appropriate sign (see below) be posted at both beaches. While both beaches may not show results above the limit, due to their proximity and the variability in results day-to-day, posting signs at both beaches is recommended for a degree of precaution.



E.coli values typically vary from day to day. In the past, some data has shown that the results are low at the beginning of the summer but that after early July, a high value may be observed more frequently. Therefore, it is recommended that should a value exceed 235 after July 1, that the signs be posted and remain in place thru Labor Day. After Labor Day, the signs can be removed if the values have been below 235 for at least two consecutive weeks. After September 31, all signs will be removed as the recreational season will be ending and testing will no longer be conducted.

Notifications – Electronic

The testing data should also be shared with the members of the RomeRock Association. Therefore, the data will be submitted for inclusion in the weekly e-blast communication. The same data should be archived on the LMC section of the RRA website.

Prepared for the Board of Directors by

Lake Management Committee