



City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

January 3, 2012

Sent via email to commentletters@



State Water Resources Control Board
Attn: Jeanine Townsend, Clerk to the Board
PO Box 100
Sacramento, CA 95812-2000

RE: January 10, 2012 Board Meeting, Item 5 – Consideration of Proposed Resolution to Commit \$305,090 from Proposition 50 Coastal Nonpoint Source Pollution Control Grant Funds for a Predictive Beachwater Quality Modeling Project

Dear Members of the State Water Resources Control Board:

The City of Malibu is pleased the State Water Resources Control Board is considering funding research to advance the potential opportunities that could provide early warning of potential health risks to users of California beaches. As noted in the project proposal from Stanford University and Heal the Bay, there are more reliable methods being implemented in other parts of the nation and California should be able to utilize the same cutting edge predictive modeling. The City has been consulting with various scientists and reviewing the best available scientific literature about this subject for many months and considers the environmental characteristics along the Malibu coast to provide a unique opportunity to confirm some early research.

The City of Malibu supports this proposed grant to provide Proposition 50 funding for beach water quality modeling and wants to help ensure that this is successful. The City has invested significant time and resources to study water quality, to rule out anthropogenic sources of persistent bacteria at many locations along its coastline and to determine the most likely cause of bacteria in the area. Given the City's breadth of experience in water quality research in this area, the City of Malibu would like to actively participate in, and contribute its expertise to, this research project. Therefore, the City requests to be included in any technical advisory committee that may be formed for this project according to Task 6 in the project proposal.

There are few coastal watersheds that have received as much attention, investment and active involvement as the North Santa Monica Bay. As described in the proposal, it is important to have the local health agencies and beach managers involved because they are responsible for providing health notices to the public. However, these entities have a limited role. They are not solely responsible for the costs of the monitoring, investment in education and outreach to control sources of bacteria, or most of the capital improvement projects that are constructed to eliminate potential contamination of local beaches. In particular, the latter two activities are primarily the responsibility of local municipalities without beach manager involvement. Therefore, it is imperative that municipalities with direct knowledge of those activities and regulations be included on the project team.

In reviewing the project proposal, the City has also identified items that should be included in the grant agreement's scope of work. Including these items would ensure that the project will be most relevant and aligned with the best available science, and that the investment of State funds can be leveraged with the active involvement of local municipalities and incorporation of other relevant research studies. The specific conditions that should be included in the project scope in the grant agreement are as follows:

1. Require specific collaboration with ongoing, relevant research projects to maximize leveraging of resources

This project must also include collaboration with other projects concurrently investigating sites with persistent bacteria, such as the Southern California Bight '08 natural source study and the Source Identification Protocol Project (SIPP). Alexandria Boehm and Mark Gold, both involved on this proposed project, are two of the primary researchers on the SIPP study. It would be beneficial to both projects if the results of the SIPP were considered or incorporated into the predictive model for validation since some of the same beaches are being studied.

2. Expand the list of beaches included in the project

The City of Malibu would like to expand the list of beaches that are included in the modeling project. Therefore, the proposed selection of beaches may warrant additional review to ensure appropriate inclusion of the variety of conditions present. The City requests adequate flexibility in the grant agreement to allow for an expansion of the study if warranted after further review and input by the TAC or from the Beach Water Quality Working Group. The current proposal at Table 1 states that "an additional 5 open beach sites will be included." The City requests that the scope instead specify that at least 5 additional beach sites (including a combination of open and other beach types) will be included in the study.

3. The parameters used in the development of the predictive model must include adequate physical habitat characteristics to be effective.

The proposal states that "information about how water quality relates to environmental factors can be used for prioritizing beaches for cleanup action, identifying sources of contamination or designing adaptive monitoring programs (that target periods of highest fecal indicator bacteria (FIB) concentrations) or microbial source tracking programs." Contributory land characteristics, such as watershed size, land use, and open space characteristics, are important factors that should be considered and potentially incorporated into a reliable predictive model.

4. The model validation process must be expanded to include the impacts of tidal influence, natural organic matter, beach sand disturbance by wave action and rainfall discharges.

The City has expended extensive resources to identify sources of FIB and has reliable data from studies conducted by the United States Geological Survey demonstrating that levels of FIB are dramatically affected by natural processes and habitat conditions outside of anthropogenic sources or rightful control. The City supports the concept that using environmental factors will provide reliable information to predict when FIB will increase. The predictive model approach

is far more reliable as a public health warning than the current practices. The historical accounting of monitoring results is a practical way to target source identification studies and sanitary surveys to rule out anthropogenic sources of bacteria. However, if California desires to evaluate when elevated FIB becomes a public health risk, the scope of work of this proposed project should be expanded or the researchers must consider existing scientific evidence that can assist beach managers and public health agencies. There is no indication in the project proposal that the research and intentions of the United State Environmental Protection Agency (US EPA) regarding the quantitative microbial risk analysis to fully evaluate the level of human health risk based upon the source of FIB will be incorporated into the project. The new US EPA-proposed recommendations that support predictive modeling must be tied in with the other US EPA recommendation that risk analysis should be part of the future. Failure to incorporate the EPA's research and recommendations may result in limited public investments being wasted on low or no risk sites. Making this a requirement of the grant agreement would emphasize the importance of this collaboration and help ensure the success of this project.

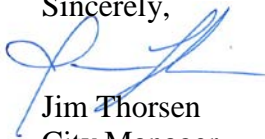
5. Data and modeling tools generated under this study must remain available

The project proposal includes that the model "may be used by Heal the Bay, local health agencies and the State Water Resources Control Board to disseminate forecast information on health risks along the shoreline to the general public." The grant agreement should be explicit in requiring that all historical data collected and all the modeling tools must also be made available to local municipalities to increase active participation and collaboration on these complex issues.

As mentioned above, the City of Malibu is supportive of this project and makes these suggestions to help ensure the long-term success of the project. It is critical that the models be developed in active partnership with the local municipalities that are working on these issues every day. To that end, if included as a TAC participant, the City may be willing to contribute additional funding in order to ensure that the research is comprehensive with respect to persistent bacteria along this unique coastline.

Thank you for this opportunity to share our concerns. If you have questions, please contact Jennifer Brown, Senior Environmental Programs Coordinator, at (310) 456-2489 extension 275 or jbrown@malibucity.org.

Sincerely,



Jim Thorsen
City Manager

cc: Vic Peterson, Environmental Sustainability Director
Jennifer Brown, Senior Environmental Programs Coordinator
Sam Unger, Executive Officer, Los Angeles Regional Water Quality Control Board
Patricia Leary, Division of Financial Assistance, State Water Resources Control Board, (via email to pleary@waterboards.ca.gov)