

# PUBLIC COMMENTS ON THE DRAFT NATIONAL BEACH GUIDANCE AND REQUIRED PERFORMANCE CRITERIA FOR GRANTS



JUNE 2014

**Comments from  
Maryland Department of the Environment**

## **EPA-820-D-13-001**

# **Comments: National Beach Guidance and Required Performance Criteria for Grants**

### **Chapter 1**

Page 3 (lines 1-30), Page 4 (lines 1-43) Page 5 (lines 1- 6)

Regarding “new” program tools:

#### **CURRENT CRITERIA AS PROTECTIVE AS 2012 CRITERIA AS IT IS APPLIED IN MARYLAND**

- Maryland has used sanitary surveys and required beach managers to use sanitary surveys since 2000 and at most beaches since prior to adoption of the 1986 RWQC. Maryland supports the encouraged use of this effective tool since it can be used to mitigate and eliminate pollution sources impacting beach water quality.
- Predictive models have not worked in Maryland – for several years, MDE worked with NOAA to develop a predictive model, however it was unsuccessful because our waters are too “clean”. There are very few excursions of the Single Sample Maximum or Geometric mean.
- Maryland has already improved notifications. This summer, MDE is launching a Beach Application for smart phone users.
- In Maryland there is no case to be made for rapid, real time data since our beaches have few or no excursions. Extended advisories (more than a couple days) are mostly due to staff resources and not being able to return frequently for additional samples.
- Maryland has ALWAYS emphasized mitigating pollution sources impacting beach water quality as the BEST tool for protecting public health- additional and more rapid testing does not improve water quality or protect public health.
- EPA’s “large scale epidemiological studies” have never linked illness DIRECTLY to water contact, rather have relied on interview surveys of beach goers; EPA’s FIB relationship to illness was mostly tested and had the best fit at beaches impacted by point sources or storm water outfalls from combined sewers. Use of the BAV should not be applicable in Maryland where significant resources have gone into preventing untreated sewage from reaching our beaches and waterways in the first place (i.e.; 24-hour holding, back-up power, system redundancy at sewage treatment plants and sewage pumping stations).
- BEACON provides repetitive and often incorrect data. Maryland has the same information via [www.marylandhealthybeaches.com](http://www.marylandhealthybeaches.com); BEACON assumes that an excursion equates to a pollution source, and does not account for the extreme variability of FIB in the absence of a pollution source. Is wildlife considered a “pollution source”? Currently Maryland applies the same “weight” to beach

monitoring results regardless of the fecal source and also recognizes that excursions cannot always be linked to a pollution source that can be “corrected”. It is frustrating that discussions surrounding the use of FIB tend to disregard assumptions and shortcomings of enterococcus and E. coli as indicators.

Page 7 lines 32-33

- Monitoring results for FIB is a presence absence test and does not provide data related to the amount of feces present or “degree” of contamination or the source of the contamination. In addition, there is an assumption that FIB is distributed evenly. Does EPA have data to support this? The numerical criteria are related to illness rate to swimmers in sewage contaminated waters!

Page 10 lines 39-43 Page 11 lines 1-8

- This section suggests that the 2012 criteria were largely influenced by the use of qPCR from only two beaches\beaches impacted by treated sewage. No information was provided on the type of treatment related to disinfected sewage or type of disinfection, other than secondary treatment. More studies are needed to show how the level of sewage treatment affects pathogen and virus removal. Use of qPCR measures viable and non-viable FIB. These studies do not help to inform or make a case for Maryland to adopt the 2012 criteria since Maryland’s sewage treatment facilities have at least secondary treatment, no beaches are impacted by treatment plant outfalls, and any plants greater than .5 MGD have enhanced treatment, which include sand filters and UV disinfection greatly reducing the risk of viral survival in the effluent.

Page 12 lines 8-17

- This section states that the 2012 criteria offer similar protection as the 1986 criteria. In Maryland, our data show that the public health protection is the **same**. Maryland’s current criteria provide for the protection of the recreational use. Furthermore, since the SSM is applied at only two confidence levels, the current criteria offer the same protection as the 2012 criteria.

lines 24-37

- The BAV is an extension of a statistical value and is ASSUMED to provide additional protection, not based on scientific studies, but based on statistics. Since the BAV is an optional, precautionary, conservative, do-not-exceed value, and is not component of the recommended criteria, it should not be a grant requirement. This cannot be explained to the public since there is no scientific evidence to show that the public is not as protected using the current criteria.
- Since Maryland already does sanitary surveys annually at all beaches and any sources observed are mitigated immediately, use of the BAV could not possibly provide additional public health protection since, in Maryland, we maximize our current resources to eliminate pollution. Use of BAV in Maryland would only fuel public frustration over an exceedance where no human or animal source of pollution exists. The

Chesapeake Bay is a shallow and wind driven system. Sediments re-suspended by wind and waves can cause elevated bacteria levels not associated with potential or actual pathogens (Page 9 lines 16-24). Maryland's use of the current criteria is already precautionary, conservative, and provides a do-not-exceed value that the public understands.

- The only basis for the requirement to use the BAV is consistency which is already achieved using the current criteria or choosing STV in the 2012 criteria. No data was provided to show if and by how much additional protection use of the BAV provides, nor was the BAV a consideration in the draft criteria document, but was added to the final criteria document.
- Having a consistent trigger implies that the United States has consistent water conditions. This is not true—some states struggle with waters impacted by human waste while others need criteria suitable for storm water/non-point source impacted waters. Instead of lowering the threshold across the nation using a criteria that isn't appropriate for waters not impacted with human waste, EPA should 1) place more emphasis on sanitary surveys in order to prevent contamination and exposure to the public, and 2) develop a criteria that is appropriate for non-point source impacted waters.

Page 13 lines 1-3

- Since no Maryland beaches are contaminated by sewage, untreated or otherwise, use of qPCR and rapid notification does not provide additional public health protection to swimmers in Maryland.

Lines 11-21

- A requirement that states accepting the Beach Grant money MUST use the BAV negates any opportunities to use alternative fecal indicators or methods, including development of site specific thresholds utilizing QMRA for making beach management decisions.

## **Chapter 2 Grants and Required Performance Criteria**

- Maryland already meets the 10 performance criterion in Table 2-1 on page 18.

## **Chapter 3 Risk Based Beach Evaluation and Classification Process**

Page 24 lines 10-18

- Maryland has already achieved this process at all beaches including those not included under the BEACH Act with the additional benefit of fixing known pollution sources through annual sanitary surveys.

## **Chapter 4 Beach Monitoring**

Page 38 lines 18-23 & 31-37

- Maryland has been doing this at all beaches since the 1986 criteria were adopted.
- After working closely with Bay Program scientists, no beaches in Maryland are appropriate for predictive modeling. The reason given was that wind is the most

significant factor associated with elevated FIB counts. This suggests that the source is re-growth harbored in bottom sediments and not a recent human source. This also shows that Maryland's current criteria are as protective and are precautionary, conservative, and provide a do-not-exceed value that protects swimmers.

Page 38, lines 38-39 - Please expand on how requirements will depend on status and content of a state's or tribe's new or revised RWQS.

Table 4-1 page 39 – Maryland already meets the specific requirements of these Performance Criteria

Page 40 lines 12 -18

- Maryland not only meets these criteria at Beach Act beaches, we also perform these criteria across the state at all Maryland beaches.

Page 40 Table 4-2 - None of Maryland beaches fit the risk/use categories 1-4; current use of the 1986 criteria ranks beaches and provides the same public health protection as the 2012 criteria

Page 44 lines 14-32

- This discussion on temporal variations ignores the fundamental flaws of any of the FIB : that the results do not provide any information on the source of the FIB and differences in density within a given day can be reasonably explained if the beach manager has done a sanitary survey. If the beach is impacted by combined sewers or an intermittent flow of untreated sewage, this discussion may make some sense, otherwise, it does little to inform public health risk without fully understanding actual and potential pollution sources.

Page 45

Lines 11-27

- In Maryland we issue a standing advisory for swimming after a rain event that is both protective and VERY precautionary. At beaches where we tried to develop predictive models, rain events were not the strongest factor. Again, Maryland beaches were deemed too “clean” for a predictive model to work. This discussion states that increased FIB levels from storm events might come from disturbed sediments and NOT fecal sources – HOW IS THIS A HEALTH HAZARD! Further proof that Maryland's current criteria as protective.

Page 46 Table 4-3 and lines 2-31

- This discussion is useless without emphasizing the importance of a sanitary survey to understand variability of sample results that can be explained by a full understanding by beach managers on what impacts a particular beach. This understanding is KEY to the tiered approach and determining sampling frequency. It does not matter how many “exceedances” are missed if there are no human sources. Earlier in the document, EPA states that the risk from non-human sources is not equal to the risk from human sources.

Again, confirmation that Maryland's current conservative approach using the 1986 criteria provides the same protection as the 2012 criteria.

Page 50, line 121

California is referenced 12 times in this document while there are many states without any reference (ME, NH, MA, RI, CT, NY, NJ, MD, DE, VA, SC, GA, AL, MS, LA, TX, OR, and AL). EPA needs to write a guidance document for the whole nation, not just for California.

Page 62, lines 14-16

Water quality numbers do not tell the whole story of what is going in a water column. A sanitary survey is an essential tool for a beach manager to be able to say with assurance that water quality is "good". Although EPA encourages the use of a sanitary survey it is apparent that EPA does not give this tool its due weight in light of the emphasis EPA has placed on the BAVs.

Page 68 lines 1-7 and 8-22

- FIB should not be considered a pollutant since, as discussed earlier in this document, it can come from "stirring up sediments" (page 50) and is an indicator for the presence of pathogens. If the source is not of fecal origin, it should not carry the same weight as if it was a human source for example.
- This is one reason why Maryland does not agree that the STV should be included for assessment purposes. As already stated throughout this document, if the goal is to protect public health, then it is accomplished with either the 1986 or 2012 criteria because both are precautionary, conservative, and provide a do-not-exceed value important for public notification and protection.
- If the goal is determining attainment of the WQS, these data do not provide information about the FIB source's magnitude, duration, or frequency. It makes more sense to use the geometric mean only over the entire beach season or even more than one beach season in addition to any data or information attained through the sanitary survey for attainment of water quality standards.

Page 69 lines 5-16

- If this approach "encourages" more frequent monitoring, then why have a tiered monitoring approach based on risk? This limits resources and may result in States not monitoring low risk beaches at all since they would carry the same weight as a beach that should be monitored twice weekly due to risk (combined sewers for example).

Pages 70 and 71 – Use of BAV required rather than optional

- Section 3.6.4 under "*Beach Notification Programs*" of the criteria document states the following: "WQC in state WQS are the applicable targets for EPA grant funded state beach notification programs under §406 of the CWA. The BAV is not a component of EPA's recommended criteria, but a tool that states may choose to use, without adopting it into their WQS as a "do not exceed value" for beach notification purposes (i.e., advisories). While the geometric mean and STV would be the applicable WQS, a BAV

could be used at the state's discretion as a more conservative, precautionary tool for beach management decisions. **Similarly, states could also choose to use the STV as a "do not exceed value" for the purposes of their beach notification program, without adopting it as a "do not exceed value" in their WQS.** This clearly states that the use of the BAV is optional and should, in no way, be made a grant requirement as it is inconsistent with the draft guidance document.

- In Maryland, use of the BAV would not provide additional public health protection since the current 1986 criteria already is precautionary, conservative and provides a not-to-exceed value that is coupled with knowledge of the actual and potential sources of FIB at every beach.
- The only explanation EPA has given states to justify its use is for consistency and an assumed additional public health protection. This does not apply in Maryland and is impossible to explain to the public. It may apply in some states where beach goers are exposed to storm drain outfalls from combined sewers. Its use may get some increased public health protection in those cases. However, when the measurement of FIB does not provide any information on the source of the bacteria how can "more stringent" be justified in situations where there would be no additional public health protection? It should remain optional. Requiring the use of a statistical value for a level of indicator bacteria that has no direct relationship to the level of real pathogens present and assuming increased public health protection is poor science and sets a bad principal, diminishing public health official's integrity with the public.
- Using the BAV should not be in the performance criteria and should remain optional.
- Requiring use of BAV prior to States promulgation of new criteria is coercive and an inappropriate mandate for receiving grant funding under the BEACH Act.



**Comments from  
Connecticut Department of Energy  
& Environmental Protection**

May 23, 2014

Ann Rodney  
Beach Program Coordinator  
US EPA Region 1  
5 Post Office Square, Suite 100  
Mail Code: OEP06-1  
Boston, MA 02109-3912

Dear Ms. Rodney:

Thank you for the opportunity to comment on the draft National Beach Guidance and Required Performance Criteria for Grants, EPA-820-D-13-001.

The Connecticut Department of Environmental Protection (DEEP) has conducted beach monitoring at 23 State Park designated swimming areas for over 20 years. As such, the Department has extensive experience conducting beach monitoring and implementing a notification program to the public. We find that the document is well written and contains useful information to beach programs. We also find that there are some requirements that will prove challenging to beach programs who select to receive funding under the Beach Act if these draft guidelines become final as published.

We offer the following comments for your consideration and see these as technical challenges to implementing these requirements of the National Beach Guidance.

Page 12

*“Beginning with FY 2014 beach grants that are awarded after this document is final, these states and tribes must use the Beach Action Value (BAV) in EPA’s 2012 RWQC that corresponds to the 32 NEEAR gastrointestinal illness (NGI) per 1,000 recreators to trigger their notification actions. The BAV is a precautionary, conservative, do-not-exceed value that states and tribes receiving BEACH Act grants must use as their beach notification threshold. EPA is establishing this new grant performance criterion as an interim measure while states and tribes are developing new or revised RWQS. It is important to have a nationally consistent trigger for BEACH Act beach notification actions based on the same illness rate (i.e., 32 NGI per 1,000 recreators) until a state or tribe adopts and EPA approves new or revised water quality standards based on the 2012 RWQC. After a state or tribe receiving a grant under CWA section 406 adopts and EPA approves new or revised RWQS, requirements will be based on the content of the approved RWQS.”*

*“Consistent with the goals of the BEACH Act, EPA also wants to promote use of a similar metric nationally while retaining a relationship between the BAV used and the applicable state or tribal water quality standard. Accordingly, EPA is requiring a new grant condition for FY 2014 grants awarded after this document is final and beyond, that states and tribes use the BAV as a precautionary, conservative measure to protect public health.”*

This new requirement listed on page 12 and page 70 is inconsistent with the State of Connecticut Guidelines for Monitoring Bathing Water and Closure Protocol (Beach Protocols) developed jointly by DEEP and the Connecticut Department of Public Health. While the Beach Protocols recommend evaluating the single sample exceedance criterion and the geometric mean criterion, beach closures are generally made based on the single sample exceedance criterion.

*A comparison of required Beach Action Value and State Guidelines from Monitoring Bathing Water and State of Connecticut Water Quality Criterion.*

Indicator	Water Type	Recreational Water Quality BAV	Single sample maximum criterion in Connecticut Water Quality Standards and State Guidelines for Monitoring Bathing Water
<i>E.coli</i>	Freshwater	190 cfu	235 cfu
enterococci	Saltwater	60 cfu	104 cfu

- Requiring beach grant recipients to use the BAVs will result in significantly more beach closures without any apparent justification other than EPA desires a “nationally consistent trigger”. While the Department understands that using the BAV could provide a nationally consistent approach those accepting the Beach Grant in the future, we are unaware of any epidemiological studies that would require the use of these BAVs to be the only number that is acceptable to use to inform beach closures.
- Please clarify whether EPA expects states to use BAV values for 303 d listing decisions? If this is the intention, more beaches will be listed as “impaired” without scientific justification.
- Requiring beach grant recipients to implement these BAV’s sends a mixed message to towns and others responsible for beach sampling in the already imperfect science of using indicator bacteria to inform beach closures. This is unfortunate at a time when coastal states like Connecticut are promoting the use of outdoors through programs like “*No Child Left Inside*” ([www.ct.gov/deep/ncli](http://www.ct.gov/deep/ncli)).
- Water Quality Standards in Connecticut are adopted as regulations and are contained in Sections 22a-426-1 through 22a-426-0 of the Regulations of Connecticut State Agencies. Changing the Water Quality Standards in Connecticut involves a public process including reviews by Legislative Regulation Review Committee. The Department can evaluate the

recommended recreational criteria EPA's 2012 Recreational Water Quality Criteria document and draft National Beach Guidance and Required Performance Criteria for Grants during the next triennial review process. However, it is not possible for this to occur in time for the FY14 Beach Grant. This creates policy problems with implementing changes to the beach program that are not consistent with our Water Quality Standards.

Finally, we concur with the comments provided to you by the Connecticut Department of Public Health (dated 5/23/2014-from Suzanne Blancaflor to Ann Rodney). It is especially important to emphasize Summary Point #7, page 5 of their very thorough analysis of the implications of the draft National Beach Guidance. The current beach program in Connecticut is truly a collaborative relationship between EPA Region 1, DEEP, DPH and the coastal Connecticut towns. It works because of the flexibility we now have to administer the program and is a model of how a federal, state, and local governments can work together to provide a great service to beach going public. We also find that the requirements of the draft National Beach Guidance will be a major point of friction and could compromise this collaborative working relationship.

We hope that you strongly consider revising the draft National Beach Guidance and Required Performance Criteria for Grants.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert Hust".

Robert Hust  
Assistant Director  
Planning and Standards Division  
Bureau of Water Protection and Land Reuse

**Comments from  
State of Michigan  
Department of Environmental Quality**



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



DAN WYANT  
DIRECTOR

May 22, 2014

VIA E-MAIL

United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW (1101A)  
Washington, DC 20460

Dear Sir or Madam:

Thank you for the opportunity to comment on the revised, draft *National Beach Guidance and Performance Criteria for Grants (Guidance)*.

The Guidance does well to explain and encourage the use of new tools such as rapid methods (i.e., Quantitative Polymerase Chain Reaction), sanitary surveys, predictive tools, and electronic media, including Web sites and Smartphone applications (e.g., BeachGuard and BeachCast, respectively) to improve public health protection at beaches. The Michigan Department of Environmental Quality (MDEQ) was fortunate to receive funds from the Great Lakes Restoration Initiative (GLRI) to develop and implement these tools at 224 Great Lakes beaches. Together, these tools helped local beach managers identify and mitigate sources of pollution at beaches and led to the development and implementation of remediation plans for more than ten Michigan beaches.

We strongly support the use of these tools. There are many successful projects in the Great Lakes region that provide evidence of their effectiveness. These projects required significant financial support from the GLRI. For example, the collection of data for sanitary surveys, development and implementation of predictive models, deployment of rapid methods, and implementation of best management practices for remediation efforts cost \$10, \$1.5, \$1, and \$12 million, respectively.

The \$24.5 million investment for Great Lakes beaches was tremendous and the results are impressive not just in water quality improvements but also revenue. The Michigan Economic Center finds that the impact of environmental restoration is from 3:1 to 6:1 (e.g., the return of \$1 invested in water quality improvement brings at least \$3 to \$6 in return).

The Beaches Environmental Assessment and Coastal Health Act (BEACH Act) is intended to protect public health, but support for BEACH Act funding has been lacking. Since 2000, Congress has authorized \$30 million but only appropriated \$10 million, and for the past three years, President Barack Obama proposed no funding for the BEACH Act. Furthermore, the General Accounting Office reported that Michigan received less than an equitable share of the funds.

The new tools have proven to be effective and successful in the Great Lakes states. However, with limited funding, it is overly ambitious for the Guidance to build up expectations to incorporate the tools into their already struggling monitoring programs. Furthermore, the Guidance is perceived to be coercive since it requires states to immediately adopt the most restrictive Beach Action Value of 190 *E. coli* per 100 milliliters (ml) until they can promulgate new water quality standards (WQS) based on the 2012 Recreational Water Quality Criteria (RWQC). Currently, the WQS for most states is 235 *E. coli* per 100 ml and 300 *E. coli* per 100 ml for Michigan. The United States Environmental Protection Agency (USEPA), Region V, recently (2014) reviewed Michigan's existing WQS and determined that they are consistent with the 2012 RWQC, which recommends a geometric mean and a statistical threshold value, yet Michigan would not be able to obtain BEACH Act funds without changing our already consistent WQS.

The MDEQ supports efforts to improve beach water quality and protect public health using effective and successfully proven tools and strategies. However, requiring states to adopt a Beach Action Value as a condition of a grant is inconsistent with the intent of the BEACH Act. It would pull precious staff time and resources away from the protection of public health by requiring states to initiate the lengthy process of updating WQS. The Public Health Code would also need to be modified since R 333.12544 of the Public Health Code, 1978 PA 368, as amended (Act 368), requires that the WQS used by a local health department to assess whether the water is safe for swimming conforms to the official state WQS adopted by the MDEQ.

Clearly, it would be impossible for Michigan to implement the required changes to state law and rules in the time available for a grant award. Even if the required changes were possible in the available time frame, this effort would have minimal impact on the protection of human health at beaches since the difference between the Beach Action Value (190 *E. coli* per 100 ml) and the current 235 or 300 *E. coli* per 100 ml WQS is only 45 or 110 *E. coli* per 100 ml, respectively. The United States Geological Survey evaluated data from freshwater beaches in Chicago, Illinois, over a nine-year period (2000 to 2008) and determined that lowering the threshold criteria from 235 to 190 *E. coli* per 100 ml would have resulted in an increase in swimming advisories of only 3.4 percent, which amounts to an extra 500 beach-days of advisories over that nine-year period.

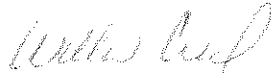
We have evidence showing that the GLRI provided significant advances in protecting public health at beaches by supporting the implementation of successful methods and tools. Monitoring and sanitary survey data have shown that storm water is a major source of pollution that causes acute elevations in bacteria counts. Michigan has 11 years of historical monitoring data and existing WQS that helped us identify beaches with impaired waters. In addition, the USEPA has reported that approximately 1,200 (40 percent) of the Nation's beaches have issued beach advisories, postings, or closures. We believe the most effective strategy to protect public health is to focus efforts to restore these beaches.

Rather than require states to initiate a resource-intensive effort to make minor modifications to *E. coli* WQS with minimal additional human health protection, we believe the best way to protect public health and improve water quality is to expand and refine the use of sanitary surveys, rapid methods, and forecast models to identify, correct, and eliminate sources of pollution. Michigan is committed to these efforts regardless of the availability of funds from the BEACH Act. Governor Rick Snyder and the Legislature are preparing a budget for the MDEQ

that includes the Water Quality Initiative, which will support the statewide implementation of real-time beach testing methods.

Again, thank you for this opportunity to comment on the Guidance. Should you require further information, please contact Dr. Shannon Briggs, Beach Coordinator, Surface Water Assessment Section, Water Resources Division, at 517-284-5526; [briggss4@michigan.gov](mailto:briggss4@michigan.gov); or MDEQ, P.O. Box 30458, Lansing, Michigan 48909-7958; or you may contact me.

Sincerely,



William Creal, Chief  
Water Resources Division  
517-284-5470

cc: Mr. Dan Wyant, Director, MDEQ  
Mr. Jim Sygo, Deputy Director, MDEQ  
Ms. Maggie Datema, Director of Legislative Affairs, MDEQ  
Ms. Dina Klemans, MDEQ  
Mr. Dennis Bush, MDEQ  
Dr. Shannon Briggs, MDEQ  
Ms. Sylvia Heaton, MDEQ



**Comments from  
Lake County, Ohio  
General Health District**



# Lake County General Health District

May 23, 2014

## Lake County General Health District

### Comments concerning the Draft National Beach Guidance and Required Performance Criteria for Grants – April 18, 2014

The Lake County General Health District (LCGHD) would like to take this opportunity to comment on the above referenced document and the impacts that it will have on the Ohio Bathing Beach Water Quality Monitoring Program and Lake County. The Ohio Department of Health delegates beach monitoring responsibilities to our organization and others via a RFP response and contractual agreement and partially funds the contract programs from USEPA beach funding. The LCGHD has been conducting a beach monitoring program in Lake County since 1999 and in our neighboring county of Ashtabula since 2009.

In reviewing this document, we have several concerns regarding the draft criteria as follows:

1. The draft criteria requires the states to use a Beach Action Value (BAV) of 190 cfu in order to receive funding once the draft document has been adopted by EPA. It is our understanding that the 190 cfu BAV is to be used until the states adopt the revised RWQS based on the 2012 RWQC. States will have the choice to adopt BAVs based on a 32/1000 or 36/1000 estimated illness rate once the revised standards are approved. It is unclear when the revised standards will be approved and whether they will actually be the proposed numbers indicated in the draft criteria. Ohio's current water quality standards are very similar to the recommended 2012 RWQC as currently we have a seasonal geometric mean of 126 and a 235 single sample maximum /100 ml that cannot be exceeded in more than 10% of the samples within a 30 day period. The legislative process in Ohio for a rule change takes at least 18 months, therefore new standards could not be adopted before the 2015 recreation season. It makes absolutely no sense and is a huge waste of resources to lower the BAV to 190 cfu temporarily when the Ohio standard is generally in compliance with the proposed standards for a 36/1000 estimated illness rate. Lowering the standard and then changing it back to 235 cfu after approval of the criteria will only confuse the public and the beach operators. They will also lose confidence in the reliability of the standard.
2. The draft document clearly holds the states "hostage" in **requiring** the use of the 190 cfu BAV in order to receive beach grant funding. It is obvious that if the EPA does not accept Ohio's current water quality standards then Ohio would not be permitted to apply for and receive beach grant funding. The beach grant funding that is passed from the ODH to the local beach programs provides approximately 75% of the financial support needed to run effective programs. If the funding ceases, the existing beach monitoring programs will likely cease as well. In this stressed economy, locals **do not** have the resources to continue provide services for non-mandated state programs. Should this scenario exist across the country, and the states do not have the capacity to continue with beach monitoring programs, it is doubtful that EPA can do the program or can contract out a national beach program for the \$10 million dollars that Congress managed to

appropriate after the original funding cut. Elimination of funding to the states will directly result in jeopardizing the public health of the beach goers for which the 190 cfu standard was proposed.

3. The draft document allows a minimum sampling frequency of once per week for a Tier I beach however most of Ohio's Tier I beaches are sampled much more frequently. Lake County sampled its beaches daily in 2013 and will go to the beaches **daily** to collect data for the predictive models that were developed for use in 2014. We will validate the models with sample analysis three days per week. Because Ohio beaches are sampled more frequently, we are able to predict more accurately the actual advisory days and hence more effectively protect the public health.

Every year the NRDC produces a national beach report where they continue to criticize Ohio's beaches because of the frequency of advisories, when they historically do not compare apples to apples when rating beaches. The draft acknowledges in several locations that the FIB densities in water are highly variable across time and location at a beach and that the water quality can change dramatically from one day to the next. The Lake County daily sampling frequency can more effectively predict the variability in FIB. We compared our past data for the last three bathing beach seasons to determine how lowering the BAV to 190 cfu would have affected our beaches. Due to the frequency of our sampling, the lower BAV would have resulted in an increase in exceedances of 10 to 23% over the last three years depending on the beach.

The public health difference between 190 and 235 is the potential of four additional bathers in 1000 could potentially become ill. The draft acknowledges that people who acquire an illness from swimming in contaminated water do not always associate their illness to swimming. Conversely, someone swimming at the beach during the day may go out to dinner in the evening and become ill with gastrointestinal symptoms in the next day or two and it could have actually been from the dinner they ate. The point here is that the 32/1000 or 36/1000 is **just an estimate and could be a statistical anomaly**. It is irresponsible to possibly increase the number of potential exceedances based on an estimate that could dramatically affect the tourism dollars in Lake County and not necessarily realize an increase in the protection of the public health.

In closing, the Lake County General Health District strongly recommends that the EPA consider all the comments that they receive and revise the draft criteria accordingly. Further we implore the EPA to continue to fund the beach monitoring program and appropriate the adequate funding for states to implement the final revised criteria. Should you have any questions regarding these comments please feel free to contact Laura Kramer Kuns at 440-350-2543.

**Comments from**  
**Alabama Department of**  
**Environmental Management**



Alabama Department of Environmental Management  
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

May 27, 2014

Ms. Denise Hawkins, Chief  
Fish, Shellfish, Beach, and Outreach Branch  
Office of Science and Technology, Office of Water  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

Re: Comments to EPA Draft National Beach Guidance  
and Required Performance Criteria for Grants

Dear Ms. Hawkins

Provided herein is relevant commentary regarding the draft update on the National Beach Guidance and Required Performance Criteria for Grants. These comments were compiled by Field Operations Division and the Water Division, the key Divisions within The Alabama Department of Environmental Management, ADEM, to be affected by these proposed program modifications.

**General Comments:**

1. Using the BEACH program as a means to mandate criteria without proper rulemaking is unacceptable and undermines the program's primary objectives. Promulgation of water quality standards should be made through existing mechanisms in the Clean Water Act, not through the BEACH program.
2. Making grant availability contingent upon accepting numeric pseudo-criteria is questionable at best and not the proper legal avenue for instituting numeric criteria. If implementation of the Beach Action Value is required to continue receiving grant money, removal or reduction of grant money will negatively affect future beach monitoring programs.
3. It seems as though the Beach Action Value (BAV) (as well as its required inclusion as a grant prerequisite) was added in the 11<sup>th</sup> hour as to limit public participation and states' ability to contest the mandate.
4. Allowing States' to develop site specific criteria could/will be considered a wish list item for States since the cost of epidemiological studies is prohibitive.
5. The following is an excerpt from the draft 2012 Criteria. I find no reference in my re-reading of the document of a BAV nor do I see GM defined as the value of one sample. In fact it recommends a longer period and greater number of samples in order to improve the accuracy of the measurement.



EPA recommendations no longer include a recommendation to calculate the GM criterion over a period of 30 days..." "EPA recommends States select a duration for both the GM and the STV between 30 days and 90 days."

6. Additionally the criteria provided below are reflective of Alabama's Current Water Quality Standards for swimming designated waters. This is taken directly from the 2012 Draft:

Marine criteria

**Magnitude:** Culturable enterococci at a GM of 35 cfu per 100 mL and an STV of 104 cfu per 100 mL measured using EPA Method 1600, or any other equivalent method that measures culturable enterococci. EPA believes that in order to be consistent with EPA's recommended criteria, the State Water Quality Standards need to include both the GM and STV.

**Duration:** For calculating the GM and associated STV, EPA recommends duration between 30 days and 90 days. The duration for calculating the GM and the associated STV should not exceed 90 days. The duration is a component of a water quality criterion, and as such, would need to be explicitly included in the State's Water Quality Standards. Sampling of waterbodies should be representative of meteorological conditions (e.g., wet and dry weather). If a State is not sampling during or immediately after a rain event, the State should advise the public to the risks of primary contact recreation.

**Frequency:** EPA recommends a frequency of zero exceedances of the GM and  $\leq 25$  percent exceedance of the STV, over the duration specified for calculating the GM and STV. The frequency of exceedance is a component of a water quality criterion, and as such, would need to be explicitly included in State's WQS.

7. The inclusion of the BAV in the 2012 final RWQC as a mandatory trigger for posting beaches appears to be a statistical shell game as States' were unable to comment on it during the draft comment period. Such is the same for the change in the GM definition. This insertion of the BAV mandate after the comment period leads one to believe that the other tools provided and described in the guidance as optional will also become requirements in order to receive grant funds, creating increased overhead for an already stressed resource.

**Back Action Value Comments:**

1. **The data on which the BAV is based is fundamentally biased and not representative of nationwide beach monitoring stations.** The BAV is based on statistical analyses performed on a relatively small dataset from three POTW-impacted beach monitoring stations located in Alabama, Mississippi, and Rhode Island. It is highly unlikely that these results are representative of every beach monitoring station nationwide and using only POTW-impacted sites introduces significant bias in statistical models. Furthermore, using a pooled dataset from locations that differ greatly in geographic location, climate, hydrology, and many other environmental factors is untenable.
2. **A BAV is confusing and sends mixed messages to the public as well as state environmental agencies.** Since the BAV is lower than the 2012 USEPA-recommended water quality criteria for bacteria that many states have already adopted, it is contradictory to state

Ms. Denise Hawkins  
U.S. Environmental Protection Agency  
Page 3

water quality standards. The latest guidance document is unclear in stating if the BAV is still necessary for states that have already adopted the 2012 RWQC criteria and fails to elaborate on how to determine if the BAV will apply. Some USEPA documentation, including page 12 of the 2014 [document](#), seem to indicate the BAV will only apply if state water quality criteria do not meet/exceed the 2012 RWQC. However, later in the document, it is stated explicitly that the BAV will apply regardless. Discussions with USEPA staff have also resulted in ambiguity.

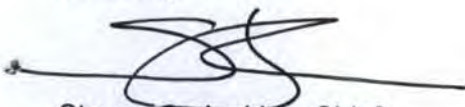
3. **The BAV will cause policy issues with regard to water quality assessment and listing of impairments.** Since the BAV is significantly lower than Alabama's promulgated water quality criteria for bacteria, there will be instances where single-sample measurements that are below Alabama's bacteria criteria but exceed the BAV will result in advisories/closures issued by the Alabama Department of Public Health. This may result in a segment being listed as impaired when it is meeting applicable water quality criteria and fully supporting its designated use classification(s). This would be based on USEPA-mandated guidance, not duly promulgated state water quality standards and numeric criteria. Furthermore, this potential listing would be based on a statistical model that has not been proven to be representative of a particular sampling location and by definition has a lower level of confidence that it is accurate to begin with.

#### Rapid Testing Techniques (qPCR):

1. Rapid testing techniques such as quantitative polymerase chain reaction (qPCR) have not been fully evaluated for use with all water quality indicators, in all environments, and have shown extreme sensitivity to interference, an increased level of relative uncertainty, and have the documented potential to overestimate the amount of culturable Enterococcus bacteria by several orders of magnitude.
2. USEPA itself states in [Method 1611](#) that "The highly variable recoveries observed during these studies should be taken into consideration when analyzing results from Method 1611." This shows that there is still work to be done for these types of tests to be utilized as reliable early warning signals.
3. The required cost and resources required for rapid testing may not be feasible given current budget constraints
4. The current laboratory services provider is not equipped with qPCR capabilities. Even if they had the ability it would not be feasible because of the distance from sampling locations

I trust that EPA will take these comments into consideration moving forward with this process. Should you have any questions concerning these comments, please contact Mark Ornelas at 251-450-3419.

Sincerely



Steven O. Jenkins, Chief  
Field Operations Division

**Comments from**  
**The State of Alaska**  
**Department of Environmental Conservation**





THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

**Department of Environmental  
Conservation**

**DIVISION OF WATER**  
Water Quality Standards, Assessment  
and Restoration Program

610 University Avenue  
Fairbanks, Alaska 99709  
Main: 907.451.2726  
Fax: 907.451.2187

May 28, 2014

Denise Hawkins  
Fish, Shellfish, Beach and Outreach Branch  
U.S. Environmental Protection Agency  
Office of Water (4305T)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Attention: *Draft National Beach Guidance and Required Performance Criteria for Grants* EPA-820-D-13-001

Dear Ms. Hawkins:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the U.S. Environmental Protection Agency's (EPA) *Draft National Beach Guidance and Required Performance Criteria for Grants* (dated April 18, 2014). ADEC appreciates the opportunity to provide input on this important matter and offers the following comments on this guidance.

ADEC appreciates the detailed information on sanitary surveys, predictive modeling and rapid analytical methods that are included in the draft guidance, as well as suggestions on improved public communication choices. We will be updating our grant workplans accordingly to meet the performance criteria and incorporate this beneficial aspects of the draft guidance.

However, ADEC is very concerned about using the proposed Beach Action Value (BAV) of 60 enterococci per 100 mL based on 2012 EPA recreational water quality criteria (RWQC). Using the proposed BAV to trigger beach advisories, as required in the draft guidance, would effectively implement water quality criteria that have not yet been promulgated by EPA or adopted by Alaska. ADEC advisories are based on bacteria criteria of 200 fecal coliform per 100 mL in Alaska Water Quality Standards (WQS) and 276 enterococci per 100 mL (single sample maximum for lightly used beaches) promulgated by EPA in the 2004 Bacteria Rule (69 FR 67217) to protect contact recreation use for marine waters in Alaska. DEC has no authority to use the proposed, more stringent BAV to issue warnings to the public. Moreover, the large increase in resulting beach advisories with no standards to support them would send a confusing message to our communities. Alaska estimates that implementing the recommended BAV would result in an increase in beach advisories of 370 percent based on Alaska beach monitoring data collected from 2005-2013 (see enclosed).

ADEC strongly urges EPA to revise the draft guidance to allow use of alternative BAVs based on current state criteria and the 2004 Bacteria Rule until such time as states adopt the new RWQC bacteria criteria or EPA promulgates such criteria for states. As noted in the draft guidance, beach monitoring grants awarded after the guidance is final requires states and tribes to meet the guidance

performance criteria in order to receive a grant under section 406(b). ADEC is in the process of reviewing EPA's nationally recommended 2012 RWQC including implementation issues such as beach monitoring and advisories. Consequently, DEC does not yet have the authority to implement the BAV until Alaska WQS are revised and approved by EPA. If the guidance is finalized without allowing alternative BAVs based on current state criteria, Alaska will have no choice but to discontinue involvement in the BEACH program, which is the only current source of funding for beach monitoring in Alaska.

Based on the 2004 Bacteria Rule and EPA *National Beach Guidance and Required Performance Criteria for Grants* (dated June 2002), the WQS for pathogen and pathogen indicator population density vary depending on the level of use at recreational beaches. A single sample standard for "high-use" beaches may not exceed 104 enterococci per 100 mL. For "moderately" or "lightly" used beaches, the single-sample standards are 158 and 276 enterococci per 100 mL, respectively. ADEC determined that Alaska's beaches are mainly in the "lightly used" category; therefore, the ADEC implements the single-sample standard of 276 enterococci per 100 mL for the BEACH program. In addition, the DEC also implements the criterion stating that a geometric mean for a 30-day period may not exceed 35 enterococci per 100 mL.

ADEC is concerned with implementation issues associated with the 2012 RWQC due to elimination of the tiered criteria structure that was part of the 2004 Bacteria Rule. Alaska has colder water temperatures and less dermal exposure than states in warmer climates, as well as much lower population density on Alaska beaches than other states. The lower 2012 bacteria criteria and associated BAV in the draft guidance would treat all U.S. beaches the same without regard to geographic location, water temperature, type of recreational water use, and length and extent of exposure. Alaska's recreational use mainly consists of fishing, boating, and beach combing, with only limited swimming areas. The tiered structure gave the state the ability to implement the Beach program with state-specific circumstances in mind.

In order to effectively protect public health, EPA and DEC should be focused on defining and limiting pathogen sources in areas where there is significant potential for human exposure. The use of the proposed BAV would substantially increase advisories and create unnecessary concern for Alaskan recreational beach users based on our colder environmental conditions and distinctive uses. The BAV criteria would create a less effective program because it would misrepresent realities on the ground. A higher number of advisories will also result in less funding for beach sampling and the number of beaches that can be monitored with the currently available funding.

ADEC appreciates the opportunity to comment on the draft guidance. If you have any questions regarding ADEC's comments, please feel free to contact me or Gretchen Pikul at (907) 465-5023 or [gretchen.pikul@alaska.gov](mailto:gretchen.pikul@alaska.gov).

Sincerely,



Nancy Sonafrank  
Program Manager

Enclosure

cc Paula VanHaagen, EPA Region 10  
Rob Pedersen, EPA Region 10  
Janette Knittel, EPA Region 10

### Differences in Exceedances of Recreational Water Quality Criteria (60 and 276 BAV)<sup>1</sup>

Year	# Beaches	# Samples	# Exceed 60	# Exceed 276	# Difference	% Exceed 60	% Exceed 276	% Increase in Exceedances
2013 <sup>2</sup>	8	117	29	8	21	25	7	262
2012 <sup>3</sup>	8	192	13	2	11	7	1	550
2011	11	71	30	10	20	42	14	200
2010	11	301	63	8	55	21	3	687
2009	5	85	6	2	4	7	2	200
2008	17	142	5	0	5	4	0	-
2007	7	25	2	0	2	8	0	-
2006	3	44	7	2	5	16	5	250
2005	2	34	5	2	3	15	6	150

<sup>1</sup> BAV = Beach Action Value of 60 and 276 enterococci per 100 mL for marine waters

<sup>2</sup> 8 advisories (2013); 18 advisories with BAV of 60

<sup>3</sup> 1 advisory (2012); 9 advisories with BAV of 60

- Total additional exceedances: 126
- Average additional exceedances per year: 14
- Overall percent increase in exceedances if BAV 60 vs 276: 370%

**Comments from  
Commonwealth of the  
Northern Mariana Islands  
Bureau of Environmental and Coastal Quality**

CNMI Bureau of Environmental and Coastal Quality's Comments to the Draft National Beach Guidance and Required Performance Criteria for Grants

Clarissa Tanaka Bearden <clarissabearden@deq.gov.mp>

Tue 5/27/2014 11:03 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: frankrabauliman@deq.gov.mp <frankrabauliman@deq.gov.mp>; Goldstein, Carl <Goldstein.Carl@epa.gov>; Nimbus Environmental <nes.pacific@gmail.com>; Fran Castro <francastro.crm@gmail.com>; Kate Fuller <katefuller@deq.gov.mp>; Kathy Yuknavage <kathyuknavage@deq.gov.mp>; Roser, Sara <Roser.Sara@epa.gov>;

📎 1 attachment

AS-EPA response to Draft Beach Guidance Criteria 2014 0525.docx;

To Whom it May Concern:

I am writing in response to your request that we adopt Beach Action Values (“BAV”) as the Beach Notification Threshold as part of our Water Quality Standards (“WQS”). The Commonwealth of the Northern Mariana Islands (CNMI) Bureau of Environmental and Coastal Quality (BECQ) has recently completed our Tri-ennial review of the CNMI WQS. Our review resulted in the CNMI’s decision to update the BECQ single sample Statistical Threshold Value (“STV”) to match EPA’s recommended STV from EPA’s most recent triennial review conducted just this year. The CNMI adopted the new STV for beach notifications as the threshold because it is supported by new scientific data. We believe that it would be impudent to adopt a more stringent criterion that has not been given the same rigorous scientific validation.

The CNMI strongly concurs with comments provided by American Samoa’s Environmental Protection Agency that are attached herein.

Thank you for the opportunity to respond on this important matter.

Sincerely,

Clarissa Tanaka-Bearden  
BEACH Grant Manager, and  
Water Quality and Surveillance/Non-Point Source Branch Manager  
Bureau of Environmental and Coastal Quality  
Phone: 670-664-8531  
Fax: 670-664-8540

**Comments**  
**on**  
**“2014 National Beach Guidance and Required Performance Criteria for Grants-Draft”**  
**by**  
**American Samoa Environmental Protection Agency**

With regard to Section 4.7.2, the American Samoa Environmental Protection Agency (AS-EPA) strongly disagrees with the requirement that BEACH Act grant recipients must use Beach Action Values (BAV) as the Beach Notification Threshold.

EPA states in the draft beach guidance criteria that the BAV is not a component of EPA’s recommended criteria for adoption into state or tribal water quality standards (WQS), but is rather a tool that states and tribes *may* use as a “do not exceed value”. EPA further states that because the BAV is more stringent than the WQS, states and tribes using this threshold continue to satisfy the statutory requirement for a notification action on an exceedance or *likely* exceedance of the WQS.

AS-EPA has recently adopted EPA’s recommended Statistical Threshold Value (STV) in the most recent triennial review (2014) WQS partly based on the following statements in the recommended criteria:

- “a BAV could be used at the state’s discretion as a more conservative, precautionary tool for beach management decisions issues”.
- “For states that do not use a BAV, EPA suggests using the criteria STV value as do not exceed values for beach notification or retaining their current beach notification values in their WQS”.

AS-EPA has chosen to use the STV value as the “do not exceed value” for beach advisories.

AS-EPA considers it contradictory to require BEACH Act grant recipients to use BAV when the recommended criteria states that use of BAV is optional.

AS-EPA considers that an exceedance of the BAV does not substantially indicate or suggest that an exceedance of the WQS will likely occur.

AS-EPA considers that use of the BAV is overly conservative and will lead to overly cautious beach advisories.

AS-EPA considers that use of a BAV criteria for notifications that is different from the WQS without any scientific or public health basis other than an additional and marginal measure of precaution, will cause confusion for the public and will erode public confidence in state/territory environmental agencies.

AS-EPA considers that implementation of the BAV will lead to negative economic impacts. An increase in beach advisories is expected as a result of the BAV implementation. Tourists may develop a negative perception from increased beach advisories, which will impact the tourism component of local economies. This is especially important for the small developing economies of the Pacific Islands. An increase in beach advisories may also lead to a negative perception by artisanal fishers and gatherers, which could lead to a loss of socio-economic benefits of wild harvest and seafood consumption. The potential socio-economic impacts from implementation of the BAV are not justified by the marginal increase in public health protection that the BAV may provide.

AS-EPA considers that the imposition of the BAV requirement on BEACH Act grant eligibility will lead to a reduction of beach monitoring programs nation-wide. Many state/territory agencies will not be able to implement the BAV because of local conditions and/or public perception and acceptance. Agencies that rely on BEACH Act grants to support beach monitoring programs, but cannot implement the BAV requirement, will be required to discontinue an important program for protection of public health. The arbitrary selection of the 75<sup>th</sup> percentile (BAV) as opposed to the statutory based 90<sup>th</sup> percentile (STV) and the Geometric Mean, for a possible marginal increase in recreation protection does not warrant the risk of loss of beach monitoring programs.

Lastly, AS-EPA questions the wisdom of imposing the “action values” when statutory based standards have been developed and implemented based on sound science and regulatory due process. All EPA programs for the protection of public and environmental health are standards based, e.g., drinking water, pesticides, hazmat/hazwaste. Is it the intention of EPA to establish a precedent that standards are not sufficient and thus action values must be super-imposed on science based values? Such a precedent will surely erode public confidence in EPA’s scientific process and undermine EPA’s credibility as an objective and due process driven regulatory body.



**Comments from  
Grand Traverse County  
Health Department**



## GRAND TRAVERSE COUNTY HEALTH DEPARTMENT

COMMUNITY HEALTH  
2600 LaFranier Rd Ste A  
Traverse City, MI 49686  
231-995-6111

ENVIRONMENTAL HEALTH  
2650 LaFranier Road  
Traverse City, MI 49686  
231-995-6051

EMERGENCY MANAGEMENT  
2600 LaFranier Road  
Traverse City, MI 49686  
231-995-6059

ADMINISTRATION  
2600 LaFranier Rd Ste A  
Traverse City, MI 49686  
231-995-6107

[www.gtchd.org](http://www.gtchd.org)

May 27, 2014

Environmental Protection Agency  
Beach Program Grants

RE: 2014 Draft Guidance for Beach Grants

Dear EPA Beach Partners,

I am writing this correspondence to express my concerns regarding the Environmental Protection Agencies (EPA's) 2014 "Draft Guidance for Beach Grant" document. As Director of Environmental Health for Grand Traverse County, I wanted to let you know how much the Northwest region of Michigan depends upon continued funding for monitoring surface waters at our public beaches. As I understand, the "Guidance" would require states to immediately adopt the new "Beach Action Value" (BAV) as a trigger to post beach advisories or closures for Great Lakes beaches. I also understand the states may have to decline their grant allocation of the FY14 fund since most states (like Michigan) are not in a position to quickly use this new criteria and would not be able to meet the new grant conditions.

The "Guidance" would require states to immediately use the most restrictive Beach Action Value of 190 E. coli for fresh water or 60 enterococci for marine water. In my mind, I do not see where splitting hairs on fecal indicator bacteria will significantly improve the public's health at our beaches. It seems that it is a waste of precious time and resources to change state and local water quality standards by only 45 E. coli in order to meet the grant condition to utilize the BAV. I would also remind you that if it wasn't for the Beach Act funds over the past several years, that our monitoring efforts would not have been possible and our considerable improvements which have been accomplished collaboratively would have only been a dream.

The proposed "Guidance" is, in my mind, a major step backwards in our efforts to gain the public's confidence and support for making improvements to our beaches through public education, improvements in our sanitary sewers and storm drain discharges, and the enactment of new ordinances regarding the feeding of waterfowl, etc. These collaborative efforts are the result of the hard work by many local, state, federal, and private partners including the Grand Traverse County Health Department, Benzie Leelanau District Health Department, Watershed Center (Grand Traverse Bay), the City of Traverse City, the Michigan Department of Natural Resources, the National Parks Service (Sleeping Bear Dunes), Michigan State University, USGS, and SOS Analytical Laboratory.

It is my hope that local and state beach managers will be able to continue to use Beach Act funds to allow them to continue to pursue our strategic approach in protecting public health at our beaches, which utilize the tools which are cited in the "Guidance" which have been proven to be so successful within the Great Lakes region. It is also my hope that the EPA considers pausing the proposed changes to the 2014 draft "Guidance" for beach grants for a two (2) year period. Any significant future changes should include utilizing meaningful scientific advances such as rolling out the rapid test methods for reporting beach results to the public.

If you have any questions, please feel free to let me know. Thank you.

Sincerely,

Thomas A. Buss, R.S.  
Director of Environmental Health

## ERIE COUNTY DEPARTMENT OF HEALTH (ECDH)-PENNSYLVANIA

### COMMENTS ON THE NATIONAL BEACH GUIDANCE & REQUIRED PERFORMANCE CRITERIA FOR GRANTS

#### SOCIAL MEDIA

ECDH strongly supports the use of social media for beach notification and recognizes the importance of keeping the public informed of current beach conditions. ECDH and the Pennsylvania Department of Conservation and National Resources (DCNR) post beach results on our websites. DCNR also uses Facebook and ECDH will have a Facebook page within a month. We are also researching an App for smart phone users to access beach results.

#### PREDICTIVE MODELING

Predictive modeling is an important tool currently used in our decision-making process for issuing precautionary advisories and protecting public health. Although we are using E. coli analysis (regulatory) for determining advisories and restrictions, we also routinely use predictive modeling. Data from three buoys is included in the predictive model we developed. Our model uses weather and beach data obtained since 2006; annual data is added to improve the model.

Starting in 2013 the USGS Now Cast predictive model was also implemented for our beaches. The two models are compared annually to streamline and improve both models. Our goal would be to develop the models to the point of accuracy that they could eventually replace the E. coli testing to provide more timely results.

A lot of resources have been invested in developing the models. They also play a key role in the decision-making process on days that regulatory beach water samples are not collected. The models will be critical in the future, especially if Beach Grant funds are reduced or eliminated.

qPCR analysis is the rapid analytical method also run on a daily basis and is an additional tool currently being used in the decision-making process.

#### TIERED MONITORING PLAN

Beach use, historical water quality data, proximity to stream discharges, rainfall impact, and possible pollution sources were all taken into account when we established our current tiered monitoring plan. We agree that sanitary surveys should play a key role in determining frequency of sampling.

#### BEACH ACTION VALUE-BAV

It is extremely confusing right now as to whether or not we 'may' or 'must' use the 32/1,000 or the 36/1,000 illness rate-based BAV. We had already submitted the grant application when we found out the grant may be tied to using the lower rate of 32/1,000. Whether this is a requirement or a recommendation is not clear when reading the document and the summary sheets. We use the 235 cfu (E. coli) in Pennsylvania and do not want the criteria lowered to 190 cfu. Presque Isle State Park beaches receive nearly 4 million visitors a year and we are not receiving reports of human illness that could be tied to beach waters. There is no evidence that 235 cfu should be lowered to protect human health at our beaches. The 235 cfu has protected public health. If any beach is experiencing significant impact from pollution, has continuous advisories, or has reported human illnesses, then we could see requiring a stricter standard. However, that is not the case in Pennsylvania, and we request remaining at the 235 cfu.

The BAV should not be a grant requirement.

Our combined use of predictive modeling with precautionary advisories offers much more human health protection and is already very precautionary and conservative.

When we compared the number of advisories and restrictions posted in the last 3 years using 235 cfu against what would have been posted using 190 cfu, there was a significant difference. Advisories/restrictions would have been issued significantly more times using the 190 cfu, without having reported health issues to justify them. We could never make the argument to local government and agency officials and get their support for lower criteria. Local tourism and the economic impact from loss of beach users would be significant on our community and again, there are no local health complaints to justify the actions. Our current criteria is conservative and protects public health.

#### GM –Geometric Mean

We use the same argument as above. We can't justify lowering the GM (100) when we don't see local public health issues at the current geometric mean (126). One of our beaches would have been closed an entire month last year if we were using the lower geometric mean. Again, the impact on the tourism and economy would have been significant.

We are also concerned that we would lose our credibility with our citizens. Closing beaches too often, without basing it on human health justification, may lead people to question our actions and we may lose their respect as the local health agencies.

#### NOTE:

Any change in Pennsylvania's criteria would be a very long process. Erie County manages the EPA Beach Grant for Pennsylvania. Adopting new criteria would be difficult; involve a lot of communication at various levels of government; require a lot of educating of individuals that are not routinely involved with this program; and we would have to sell the concept based on the health impact. This would be extremely difficult when we are not receiving calls of reported illnesses connected to beaches using our current criteria. Change must be evidence-based and show a health benefit.

Pennsylvania definitely would not be able to implement any required changes to state law and regulations in the time available for a grant award.

Submitted by:

Karen M. Tobin  
Director, Environmental Health Services  
Erie County Department of Health  
606 West Second Street  
Erie, PA 16507  
814-451-6754  
ktobin@eriecountygov.org

**Comments from  
Ohio Department of Health**



# OHIO DEPARTMENT OF HEALTH

246 North High Street  
Columbus, Ohio 43215

614/466-3543  
[www.odh.ohio.gov](http://www.odh.ohio.gov)

John R. Kasich / Governor

Denise F. Hawkins, Chief  
Fish, Shellfish, Beach and Outreach Branch  
Office of Water/Office of Science and Technology  
U.S. Environmental Protection Agency  
Washington, D. C. 20460  
202-566-1384  
[hawkins.denise@epa.gov](mailto:hawkins.denise@epa.gov)

May 28, 2014

Dear Ms. Hawkins,

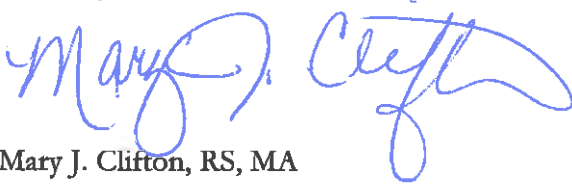
The purpose of this letter is to provide comments from the Ohio Department of Health regarding the National Beach Guidance and Required Performance Criteria for Grants. The Ohio Department of Health has received a BEACH Act grant annually since its inception and has been successful in our monitoring and notification efforts since that time. The changes to the required performance criteria for this grant have brought questions and concerns to our program staff as follows.

1. Ohio's recreational water quality standards are established by the Ohio Environmental Protection Agency and codified in Ohio Administrative Code 3745-1-07. Ohio's existing *E. coli* recreational criterion applicable to bathing waters is 235 cfu/mL. This water quality standard is consistent with the Beach Action Value associated with an illness rate of 36/1000 recreators as put forward in EPA's 2012 revised guidance. As such, we do not see the necessity of applying BEACH Act grant conditions as described in the 2014 draft *National Beach Guidance and Performance Criteria for Grants* document to Ohio. We also note that revision of Ohio's water quality standards involves a multi-step and time-consuming process that under normal circumstances takes from 12-18 months. Even if Ohio were to initiate a rulemaking today, it is unlikely that revisions could be adopted in final form and approved by US EPA by the start of the next recreation season. Therefore we would request that the US EPA extend the timeframe to implement the grant conditions contained within the draft beach guidance and performance criteria document.
2. The revised guidance briefly discusses the use of predictive modeling but does not specifically allow for their use as another determinant for posting advisories. Ohio has been using predictive models for nearly 10 years. The predictive models outperform the culture based sample methods and allow for same day notification of beach water quality to the public. The use of predictive models has expanded to approximately 10% of the beaches in Ohio. Establishing the models at individual beaches takes time and are reevaluated annually for optimal performance of the model. Predictive models, once established and proven reliable, are more protective of public health and reduce the need for culture based water sampling multiple times per week.

As a public health agency it is our desire to protect and promote the health of all in Ohio. The Ohio Department of Health does this by contracting with local health districts, University of Toledo and the Northeast Ohio Regional Sewer District to provide frequent sampling at the beaches along Lake Erie. We encourage our monitoring partners to collaborate with the USGS to establish predictive models for the beaches in their areas. The Ohio Department of Health encourages the review of the RWQS to ensure protection of the public health; however, more time is needed to complete the review at the state level.

Thank you for the opportunity to provide comments on the revised BEACH Act guidance.

Sincerely,



Mary J. Clifton, RS, MA  
Recreation Programs Administrator  
Bureau of Environmental Health  
Ohio Department of Health

**Comments from**  
**SURFRIDER FOUNDATION**



Global Headquarters

P.O. Box 6010

San Clemente, CA

USA 92674-6010

Phone: (949) 492 8170

Fax: (949) 492 8142



May 28, 2014

U.S. Environmental Protection Agency  
1200 Pennsylvania Ave.  
NW Washington DC 20460

**Comments on National Beach Guidance and Performance Criteria for Grants  
Draft released April 18, 2014**

**EPA-820-D-13-001**

The Surfrider Foundation is a grass roots organization whose mission is the protection and enjoyment of oceans, waves and beaches through a powerful activist network. We operate through a network of over 80 Chapters located across the United States and internationally. Our members are often at the beach and in the water on a daily basis, so we have a real vested interest in making sure that our beaches are clean and that water quality information is readily available to warn the public when water conditions could pose a health risk.

We appreciate the opportunity to comment on the draft National Beach Guidance and Performance Criteria for Grants, released by the Environmental Protection Agency (EPA) on April 18, 2014. The biggest change from Surfrider's perspective that this new draft guidance proposes is the mandatory use of a Beach Action Value (BAV) to trigger state public notification procedures at beaches. When the revised water quality criteria recommendations for recreational waters were released in November 2012, we were disappointed that the single sample maximum (now referred to as a statistical threshold value, or STV) for indicator bacteria increased from 104 cfu Enterococcus per 100 ml seawater to 110 or 130 cfu Enterococcus per 100 ml seawater. This change would essentially allow more pollution to be present at the beach before the public is even aware of any potential problems or health risk.

We recognize and appreciate that providing warning of elevated bacteria levels at 60 or 70 cfu Enterococcus would serve to compensate for the increase in STV and would allow members of the public who might be more susceptible to water-borne illnesses to make better informed decisions on whether they should go into the water or not. Although Surfrider supports the option of using BAVs for public notification purposes, we are concerned that the language in the draft guidance that requires states to use a BAV for public notification purposes in order to remain

eligible for their EPA Beach Grant may have unintended adverse consequences. Specifically, our discussions with beach managers in several states have indicated that if they were to use a BAV of 60 cfu for public notification rather than 104 cfu, their number of beach postings and/or closures may increase 30-60%. Although this would result in greater protection of public health, it would occur at the expense of reduced beneficial use and access to beaches and the ocean, which is of equal concern to our members.

Another potential adverse consequence of mandatory use of BAVs for public notification is the cost of subsequent testing necessary to un-post or reopen a beach. If the use of BAVs results in a substantial increase in these “re-tests” and there is assumedly no increase in funding to support increased testing, states may be forced to reduce the number of beaches that are routinely monitored and/or reduce beach monitoring frequency to compensate. Either of these unintended consequences would result in less water quality information available for public health protection.

We also suspect that some states might find these new requirements more onerous than others. For instance, the 2012 revised water quality criteria will require the State of Oregon to adopt bacteria standards that are protective of a primary recreation use at their beaches for the first time, reducing their allowable level of Enterococcus from 158 cfu to 110 or 130. If they are further required to use a BAV of 60 cfu, it would result in a cumulative decrease of 62% in their notification limits.

The states and coastal counties that issue beach closures rather than swimming advisories when bacteria standards are exceeded would also likely experience more of an economic impact from loss of beneficial beach use.

For these reasons, Surfrider does not believe that mandatory use of BAVs as a condition of receiving BEACH Act grants is warranted and appropriate at this time. We suggest that EPA encourage the use of BAVs and perhaps work with interested states to implement pilot programs to evaluate the effectiveness and cost impacts of BAV use. States that currently use EPA criteria to close beaches should at least be given some time to revise their public notification programs and state regulations to utilize BAVs to trigger swimming advisories, keeping the STV as a trigger for beach closures. EPA should consult with these states to see if this is of interest and to determine a reasonable implementation schedule.

The Surfrider Foundation would also like to comment on one additional aspect of this new draft guidance. We are pleased that EPA will now allow states to place more of an emphasis on developing and using predictive water quality models for public notification purposes at beaches. In many locations, modeling holds more promise than qPCR and other developing rapid methods, to provide cost-effective, real-time health protection for beach-goers.

In conclusion, the Surfrider Foundation is generally supportive of the draft National Beach Guidance and Performance Criteria for Grants, but we are also acutely aware



of the need to keep the EPA Beach Grants Program funded, as the annual beach grants are the only tool that EPA has to enforce state compliance with the 2012 recreational water quality criteria and this guidance document.

Surfrider recommends that the EPA finalize this Guidance after removing the requirement for mandatory use of BAVs and recommit to prioritizing funding for the Beach Grants program in EPA's annual budget.

Thank you for the opportunity to share these comments.

Sincerely,

Mara Dias  
Water Quality Manager  
Surfrider Foundation

**Comments from  
State of Maine  
Department of Environmental Protection**



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE  
GOVERNOR

PATRICIA W. AHO  
COMMISSIONER

May 28, 2014

To Whom It May Concern  
BEACH\_GUIDANCE@epa.gov

RE: Comments to the National Beach Guidance and Performance Criteria for Grants

Thank you for the opportunity to comment on the National Beach Guidance and Required Performance Criteria for Grants. The Maine Healthy Beaches (MHB) program objects to the imposition of the proposed new Beach Action Value of 60 colony-forming units (CFU). We do not think this is supported by adequate studies, or sound science. Our experience with Maine’s beaches tells us that this new criteria would result in many additional postings based on natural sources of bacteria unrelated to any human health threat. Experience has also shown that with the 24 hour processing time for water samples, more than ninety percent of these may prove to be false postings. This would undermine the credibility of the program without providing any additional protection for public health.

After reviewing the document located at:  
[http://water.epa.gov/grants\\_funding/beachgrants/guidance\\_index.cfm](http://water.epa.gov/grants_funding/beachgrants/guidance_index.cfm) the Maine Healthy Beaches program has the following specific comments:

1. *Background levels and naturalized fecal indicator bacteria-* The 60 CFU level is very conservative and is typical of “background levels,” either from non-human sources or naturalized fecal indicator bacteria (FIB), for most of Maine’s beaches and coastal watersheds. Overall, Maine’s beaches and associated watersheds are low-density developed. Numerous wildlife and waterfowl are integral to the health of these ecosystems. Beaches with historically good water quality and low-risk of pollution routinely demonstrate levels at or above 60 CFU. Many of these areas have neighboring mudflats and tidal wetlands. On page 9, line 16, EPA recognizes that FIB are not exclusively of fecal origin, they be naturalized in the system, persist and regrow. FIB from non-fecal sources have not been demonstrated to cause human illness. This conservative number may be appropriate for high-risk beaches with known human impacts, but it will likely illustrate that clean beaches are dirty and unsafe when this may not be the case. Maine doesn’t have Concentrated Animal Feeding Operations within our coastal watersheds that could increase the risk of human illness from non-human sources. Maine also does not have the capacity or resources to conduct in-depth research and epidemiological studies to determine an appropriate, site-specific BAV for each of our 60 monitored beaches. This reduction in the Beach Action Value number will essentially double the amount of exceedances and advisories posted annually, and will likely have a negative impact on local economies largely based on tourism as well as the public’s perception of these valued resources.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769  
(207) 764-0477 FAX: (207) 760-3143

2. Limitations of FIB

It is well recognized by the research community and EPA that FIB are limited due to the lag time in obtaining results, lack of source identification, detection of naturalized bacteria, non-fecal or not “fresh” events, etc. On page 10, line 14, EPA acknowledges FIB differ from viruses, and that human illness caused by pathogens documented in epidemiological studies are likely viral in nature.

3. Retention and participation in Maine Healthy Beaches- Participation in the MHB program is voluntary; monitoring and notification of water quality conditions is the responsibility of local jurisdictions and is not mandated by state law. EPA describes the Beach Action Value of 60 as a “conservative, precautionary tool.” Due to the limitations of FIB, there is considerable distrust in the data received. Given the economic importance of beaches and the wave of negative public perception associated with advisories, this new requirement will likely have serious implications for retention and compliance with MHB protocols, etc.

4. Epidemiological Studies and Supportive Data

What epidemiological studies and data from the northeast were used to justify the need for a 60 BAV? We’re interested in these details to help us communicate this proposal to our constituents.

5. qPCR and Predictive Models

The document places tremendous emphasis on using both of these tools to address the limitations of FIB, better manage beaches, notify the public in a timely manner, etc. Maine currently does not have the capacity to implement these tools as they are expensive, highly technical, and we are not aware of any laboratories that are currently set up with the platform to conduct qPCR for surface waters within the state of Maine. Laboratories that may have the capacity to build these capabilities are not located in close proximity to coastal beaches. Will EPA provide support or assist states in obtaining support from to other entities to build our capacity?

Maintaining healthy beaches in the State of Maine is of utmost importance to this program. We believe that the proposed changes will not lead to cleaner beaches but rather to less participation in our voluntary program, or less beach goers and tourist dollars due to increased advisories and closures or both. Thank you for taking the time to consider our comments.

Sincerely,



Colin A. Clark  
Maine Healthy Beaches Program  
Maine Department of Environmental Protection

**Comments from  
American Samoa  
Environmental Protection Agency**



**LOLO M. MOLIGA**  
*Governor*

**LEMANU P. MAUGA**  
*Lt. Governor*

**AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY**

**P.O. Box PPA Pago Pago, American Samoa 96799**

**Phone: 684.633.2304 | Fax: 684.633.5801 | [www.asepa.gov](http://www.asepa.gov)**

**AMEKO PATO**  
*Director*

**FA'AMAO O. ASALELE JR.**  
*Deputy Director*

**Comments**

on

**“2014 National Beach Guidance and Required Performance Criteria for Grants-Draft”**

by

**American Samoa Environmental Protection Agency**

With regard to Section 4.7.2, the American Samoa Environmental Protection Agency (AS-EPA) strongly disagrees with the requirement that BEACH Act grant recipients must use Beach Action Values (BAV) as the Beach Notification Threshold.

EPA states in the draft beach guidance criteria that the BAV is not a component of EPA’s recommended criteria for adoption into state or tribal water quality standards (WQS), but is rather a tool that states and tribes *may* use as a “do not exceed value”. EPA further states that because the BAV is more stringent than the WQS, states and tribes using this threshold continue to satisfy the statutory requirement for a notification action on an exceedance or *likely* exceedance of the WQS.

AS-EPA has recently adopted EPA’s recommended Statistical Threshold Value (STV) in the most recent triennial review (2014) WQS partly based on the following statements in the recommended criteria:

- “a BAV could be used at the state’s discretion as a more conservative, precautionary tool for beach management decisions issues”.
- “For states that do not use a BAV, EPA suggests using the criteria STV value as do not exceed values for beach notification or retaining their current beach notification values in their WQS”.

AS-EPA has chosen to use the STV value as the “do not exceed value” for beach advisories.

AS-EPA considers it contradictory to require BEACH Act grant recipients to use BAV when the recommended criteria states that use of BAV is optional.

AS-EPA considers that an exceedance of the BAV does not substantially indicate or suggest that an exceedance of the WQS will likely occur.

AS-EPA considers that use of the BAV is overly conservative and will lead to overly cautious beach advisories.



AS-EPA considers that use of a BAV criteria for notifications that is different from the WQS without any scientific or public health basis other than an additional and marginal measure of precaution, will cause confusion for the public and will erode public confidence in state/territory environmental agencies.

AS-EPA considers that implementation of the BAV will lead to negative economic impacts. An increase in beach advisories is expected as a result of the BAV implementation. Tourists may develop a negative perception from increased beach advisories, which will impact the tourism component of local economies. This is especially important for the small developing economies of the Pacific Islands. An increase in beach advisories may also lead to a negative perception by artisanal fishers and gatherers, which could lead to a loss of socio-economic benefits of wild harvest and seafood consumption. The potential socio-economic impacts from implementation of the BAV are not justified by the marginal increase in public health protection that the BAV may provide.

AS-EPA considers that the imposition of the BAV requirement on BEACH Act grant eligibility will lead to a reduction of beach monitoring programs nation-wide. Many state/territory agencies will not be able to implement the BAV because of local conditions and/or public perception and acceptance. Agencies that rely on BEACH Act grants to support beach monitoring programs, but cannot implement the BAV requirement, will be required to discontinue an important program for protection of public health. The arbitrary selection of the 75<sup>th</sup> percentile (BAV) as opposed to the statutory based 90<sup>th</sup> percentile (STV) and the Geometric Mean, for a possible marginal increase in recreation protection does not warrant the risk of loss of beach monitoring programs.

Lastly, AS-EPA questions the wisdom of imposing the “action values” when statutory based standards have been developed and implemented based on sound science and regulatory due process. All EPA programs for the protection of public and environmental health are standards based, e.g., drinking water, pesticides, hazmat/hazwaste. Is it the intention of EPA to establish a precedent that standards are not sufficient and thus action values must be super-imposed on science based values? Such a precedent will surely erode public confidence in EPA’s scientific process and undermine EPA’s credibility as an objective and due process driven regulatory body.

**Comments from  
The Watershed Center  
Grand Traverse Bay**

May 28, 2014

U.S. Environmental Protection Agency  
Office of Water (1400T)  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460



13272 S. West Bay Shore Drive  
Traverse City, MI 49684  
T 231.935.1514  
F 231.935.3829  
[www.gtbbay.org](http://www.gtbbay.org)

RE: New grant conditions of the BEACH Act

To Whom it May Concern:

On behalf of The Watershed Center Grand Traverse Bay (TWC) and the Grand Traverse Regional Beach Monitoring Stakeholder's Taskforce, we urge the U.S. Environmental Protection Agency (EPA) to work with the Michigan Department of Environmental Quality (MDEQ) when considering the new requirements in the 2014 draft revision to the National Beach Guidance and Required Performance Criteria for Grants (Beach Guidance).

As written, the Beach Guidance document requires states to immediately adopt a temporary water quality standard – a Beach Action Value (BAV) – until the states adopt a new standard consistent with the 2012 Recreational Water Quality Criteria. The BAV sets forth criteria that conflict with Michigan's State Water Quality Standards, as well as Michigan's Public Health Code.

- Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, prohibits the MDEQ from promulgating any additional rules after December 31, 2006; therefore, a revision of the *E. coli* water quality standard under Michigan's Part 4 rules would **first require the legislature to amend Part 31**.
- R 333.12544 of the Public Health Code, 1978 PA 368, as amended, requires the Water Quality Standard used by a local health department to assess whether water is safe for swimming conforms to the official state Water Quality Standards adopted by the MDEQ; therefore, a **modification of the Public Health Code would also be required**.

As such, the MDEQ could not accept any funding from the BEACH Act and distribute to agencies throughout the state to conduct *E. coli* bacteria monitoring at local beaches. We were informed if the MDEQ cannot accept BEACH Act funding from the EPA, local entities could receive direct funding from the EPA with the same grant stipulations. However, local Health Departments are still bound to follow the Water Quality Standards as stated in the Public Health Code, leaving no entities able to monitor beaches until Michigan adopts the 2012 Recreational Water Quality Criteria.

Over the past 13 years, essential funding from the BEACH Act allowed us to identify high priority beaches by monitoring for *E. coli* levels, as well as conduct sanitary surveys to detect sources of bacterial contamination. This led to TWC applying for and receiving more than \$2 million in EPA Great Lakes Restoration Initiative funding to reduce bacterial contamination at three local beaches – Bryant and East Bay Parks in Traverse City and the Village of Suttons Bay.

The majority of that funding (~95%) went back into the community as those projects were designed and constructed.

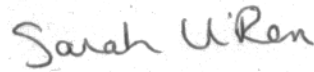
Tourism is essential to our local *Up North* economy, and people are acutely aware that a lack of funding to continuously monitor public beaches and ensure healthy water could jeopardize our local economy and way of life. Continued funding is critical for us to continue monitoring efforts to pinpoint additional priority beaches and ensure that levels at other high-use beaches in our area remain below Water Quality Standards.

We advise the EPA to consider the impact the BAV would have by decreasing beach monitoring in states unable to immediately meet the new conditions, and urge you to work with the MDEQ to find a viable solution that would not result in the loss of funding to agencies throughout Michigan.

Sincerely,



Christine M. Crissman  
Executive Director



Sarah U'Ren  
Program Director

CC: Senator Carl Levin  
Senator Debbie Stabenow  
Representative Benishek

**Comments from  
Florida Department of Health**

**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



**Rick Scott**  
Governor

**John H. Armstrong, MD, FACS**  
State Surgeon General & Secretary

**Vision:** To be the Healthiest State in the Nation

May 28, 2014

To Whom It May Concern,

Thank you for the opportunity to review and comment on the *National Beach Guidance and Required Performance Criteria for Grants* – Draft version. I have completed my review and have provided the enclosed comments. Please recognize that if adopted as written, the guidance proposals for new and modified sanitary surveys, qPCR testing and predictive modeling will reduce the Florida DOH's ability to conduct the monitoring program as it exists, thereby deleting more than nearly two thirds of the 240 monitored beaches. This reduction will not be readily accepted by the swimming public, nor the tourism industry. Should the EPA be interested in providing additional funding for pilot projects of new laboratory methods or modeling, the Florida DOH would be eager to participate.

If you require any further information regarding my response feel free to contact me. My email address is [david.polk@flhealth.gov](mailto:david.polk@flhealth.gov) and I am available by phone at 850-245-4444 Ext. \*2459.

Sincerely,

W. David Polk  
Environmental Specialist I  
State Healthy Beaches Coordinator

WDP/wdp  
Enclosure

**Florida Department of Health**

Division of Disease Control & Health Protection • Bureau of Environmental Health  
4052 Bald Cypress Way, Bin A-08 • Tallahassee, FL 32399-1710  
PHONE: 850/245-4250 • FAX: 850/487-0864

**www.FloridasHealth.com**

TWITTER: HealthyFLA

FACEBOOK: FLDepartmentofHealth

YOUTUBE: fldoh

### **Chapter 3: Risk Based Beach Evaluation and Classification**

3.3 – Request clarification. Is there a limit to beach length? If we sample at the central access to a 10 mile stretch of uninterrupted sandy, accessible coastline, is there a federal definition of what part of that beach would be included in any notification actions issued based on that one sample? Our grant allows for only 240 monitored sites for over 800 miles of coastline.

3.4.1 – Request clarification. What is the meaning of the word “potential”? Based upon recently available news reports, elephants<sup>1</sup> could be a potential source of pollution in some Florida waters. Could you provide a definition of what level of potential should be considered when determining potential sources of fecal pollution? It appears that EPA is moving towards asking states to expend many times the number of dollars on source and risk determination work just to be able to determine where to spend thousands of dollars on monitoring.

3.4.1.1.1 – While beneficial, the initial and routine sanitary surveys would add additional personnel costs that would be impossible to absorb without additional funding, or without reducing monitoring.

3.5.2 – Is there a frame of reference for what EPA considers “high beach usage”? Is it simply a census count daily use average and then relative binning of perhaps 1-100, 101-1000, and 1000+ daily visitors? Recognize that the tourism and public opinion qualifiers tend to overrule these calculations.

3.6 – Clarification requested. If a beach is located on federal property, and therefore subject to the restrictions placed on federal grant money being used on federal property, would it no longer be reported for any BEACH Act purposes, including being used to create the National List of Beaches?

### **Chapter 4: Beach Monitoring**

4.2.2 – While recognizing that data driven determinations help develop appropriate use plans we feel the need to point out that the suggestions in this section (i.e. qPCR-vs-culture, model input/outcomes, switching beaches into non-existent monitoring programs, reclassifying them as non-program beaches, etc.) seems like an attempt to cut back the existing inexpensive tests for monitoring program in favor of experimental methods that have not yet proven their reliability in tropical and sub-tropical marine waters. Florida DOH would favor a scaled pilot project to evaluate these suggestions in our unique environment, yet would need additional EPA funds to do so. We have explored the costs of each of these suggestions for a large scale implementation and found them to be prohibitively excessive for the limited new knowledge gained.

4.3.2.1.3 – EPA should realize that states are not taking a single sample to the lab as soon as it is taken. A sample taken at 8:00 AM will be batched with eight to ten other samples taken on the same sample run and then analyzed later that day (by 2:00 PM to meet 6 hour holding times). By the time these sample tests are read and reported it is the next afternoon on day two. The fact that EPA has continued to use this measure in their guidance illustrates that you have not heard the state program managers about how programs must be actually run in the field. Costs would multiply by a factor of five if this qPCR protocol was implemented, thus sites monitored would need to be reduced by a factor of five.

4.3.2.1.4 – In this section you indicate that you expect multiple samples to be at beaches. Is there a set minimum number of samples that are required at each beach for statistical validity? And is this criteria to be specified per 100 meter or per mile?

4.3.2.3 – Again, line 5, page 52 proposes an unachievable turnaround time for qPCR, since real world sampling and logistics will not allow for same day sampling and test results. The California study detailed on page 61 that set this prediction included a ratio of samplers to samples of greater than one. In the real world that ratio is not going to be >1:1 but closer to 0.1:1. Include the fact that a laboratory doing contract work must submit their samples results to internal QA/QC processes and the actual sample processing time will arrive at closer to 10 hours. We recognize that EPA has used the word “could” in this section to denote that there is a potential of this short turnaround happening but we feel that a guidance written in these generalized terms denotes the ability to make it seem like a common event.

4.3.2.3.2 – Resampling after an exceedance is preferred to waiting for the next routine sampling. However, Florida does not have the funding available to meet this requirement without major changes to the sampling

program. In some areas resampling can happen due to sufficient local staffing and near-by lab proximity, but this is locale specific.

4.4.2.2. Please add on line 38 page 58 that qPCR analytical results can be available is as little as 3 hours **and as long as 10 hours** after receipt in the lab. Please see our comments above at 4.2.2 regarding objections to reliance on unproven tropical waters experimental methods.

4.5 – Clarify “Reported data must be consistent with 4.3.3.3.” Does that mean we must report all the meta-data submitted to STORET? Can we bin the data into Good/Poor categories or do we have to put actual result CFU/100mL numbers on the website?

4.5.1.1 – Is the intent here to require that program managers maintain a file with QA/QC reports from contract labs? As a client we are using state and NELAP certified labs that give us certified data. Unless the laboratory determines there is a problem we do not have a reason to reject the data. Further, as clients we do not have rights to the labs internal QA/QC process on a routine basis, which is what this requirement seems to indicate.

4.5.1.2 – Again, is the intent here that the beach program manager performs the same QA/QC overview that the state and national accrediting agencies already perform? If we use accredited labs are we still required to maintain the verification logs that this section requires?

4.6- 4.6.2 – Predictive models are exceedingly labor and lab cost intensive. For shellfish harvest areas in Florida, these were only accomplished with multiple daily samples and 7 days per week testing over many weeks, and less frequently for months to acquire sufficient data for a statistically valid closure model at each area after rainfall events. This intensive effort is not possible for numerous beach sites with existing grant funds.

4.7.2.1 – Is the beach action value (BAV) a water quality standard? If it is not, then it will become possible to have a water contact health advisory in effect for water that has not exceeded the water quality standard. How does EPA expect states to reconcile the failure of “attainment of use” requirements for waters that have not exceeded the applicable water quality standards?

4.7.2.4 – We understood that the Puerto Rico studies of tropical marine waters similar to Florida’s did not provide a statistically valid CCE count for health-based advisories using the qPCR methods, and so do not believe this table on page 72 reflects accurately for tropical, and potentially sub-tropical waters.

<sup>1-</sup> <http://www.tampabay.com/news/humaninterest/mystery-beach-elephant-was-likely-there-for-a-birthday-party/2180426>



**Comments from**  
**Clean Ocean Action**  
**Hackensack Riverkeeper**  
**Heal the Bay**  
**Natural Resources Defense Council**  
**NJ/NY Baykeeper**  
**Riverkeeper**  
**Waterkeeper Alliance**



May 28, 2014

By email ([beach\\_guidance@epa.gov](mailto:beach_guidance@epa.gov))

Honorable Gina McCarthy  
Administrator  
U.S. Environmental Protection Agency  
Office of Water (4305T)  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

**Re: Docket ID No. EPA-820-D-13-001**

Dear Administrator McCarthy:

Thank you for accepting these comments on the Draft National Beach Guidance and Required Performance Criteria for Grants (Draft Criteria), submitted on behalf of Clean Ocean Action, Hackensack Riverkeeper, Heal the Bay, Natural Resources Defense Council, NY/NJ Baykeeper, Riverkeeper, and Waterkeeper Alliance. Each of our organizations is keenly interested in protecting coastal waters and recreational users of those waters. EPA has a statutory duty to protect public health in recreational waters, a duty that is essential to the 180 million people that visit coastal and Great Lakes beaches every year.

Exposure to pathogens in coastal recreational waters continues to be a significant threat to public health. Dangerously high human pathogen levels, associated with the presence of human or animal waste, are present in coastal waters too often, particularly after heavy rainfall. The underlying culprits are generally raw and improperly treated sewage, raw animal manure, and contaminated stormwater runoff, which are highly deleterious to water quality. Pathogens

in contaminated waters can cause a wide range of diseases including gastroenteritis, dysentery, hepatitis, and respiratory illnesses and are a major threat to all whom they contact.

Public health is best protected through a two-track process: states must give the public timely notice when recreational waters contain unsafe levels of human pathogens, and they must constantly improve water quality so that such occurrences are rare. We recognize that the Draft Criteria seek to make progress on the first track.

After carefully reviewing the Draft Criteria, we suggest the following to better protect public health:

1. EPA must require grantees to notify the public when a conservative pathogen threshold is exceeded;
2. EPA must encourage or require more frequent and better testing that ensures accurate data to inform timely beach closure decisions;
3. Where feasible, EPA must encourage or require modeling or other forecasting techniques that alert the public to water quality threats *before* the public enters the water;
4. EPA must maximize the number of beaches where these rules apply;
5. EPA must require notification protocols that are calculated to reach the maximum number of recreators; and
6. EPA must require grantees to preserve data and make all data, current and historic, easily available to the public.

EPA has made important advancements toward meeting these six principles in the Draft Criteria. In particular, we support EPA's decision to require grantees to adopt the Beach Action Values (BAVs) from EPA's 2012 Recreational Water Quality Criteria (RWQC) as the threshold for beach notification decisions. We also support the Draft Criteria's effort towards requiring grantees to share historical pathogen data. However, EPA can still take easily identifiable steps to better protect public health.

**EPA APPROPRIATELY REQUIRES STATES RECEIVING GRANT MONEY TO USE THE BEACH ACTION VALUE AS A BEACH NOTIFICATION THRESHOLD.**

We strongly support the requirement states and tribes must use a BAV to prompt public notification actions in order to be eligible for federal BEACH Act funding. Draft Criteria at 12-13, Section 4.7.2. We support this requirement because the BAVs are more protective of human health than EPA's current water quality criteria for recreational waters. Among other

factors, those water quality criteria are based upon a gastrointestinal illness rate of either 32 or 36 illnesses per 1,000 swimmers, both of which are unacceptably high. The BAVs provide a more conservative level of protection, and linking notification to the BAVs will help offset the health risks associated with EPA's current water quality criteria.

However, some language in the Draft Criteria is unclear and could be interpreted as establishing this requirement only as an *interim measure* while states and tribes are developing new or revised Recreational Water Quality Standards. For example, on page 12 of the draft, it indicates that it is important to have a nationally consistent trigger for BEACH Act beach notification actions *until* a state or tribe adopts EPA's new or revised water quality criteria, and *then* funding requirements will be based on the approved standards (lines 30-37, page 12).

This language is concerning, as it could suggest that the BAV notification thresholds are a prerequisite for federal funding *only until* states adopt the new/revised EPA criteria. Meanwhile, Section 4.7.2 provides appropriate clarity that a BAV still must be used in order to receive federal funding even after a state standard is developed. But the language on page 12 should be clarified to reflect that it is only the health risk level for the BAV that may vary based on the state-adopted standard, and that use of one of the BAVs is still required for federal funding.

#### **EPA MUST CONTINUE TO MAKE STRIDES TOWARD TIMELY NOTIFICATION OF PATHOGENIC RISKS.**

It does no good to inform the public of existing water quality problems after they've already been to the beach. Even with the welcome requirement that BAV violations trigger beach notifications, EPA must guard against using the BAV as a "you shouldn't have swam yesterday" tool.

EPA should require grantees to include at least one beach risk appropriate predictive model – even if this is as simple as a preemptive closure based on rainfall – for every site. For example, at beaches affected by combined sewer overflows, storm/overflow models would inform monitoring plans; for beaches where other uses are the main risk drivers, different models may be applicable.

Where possible, accurate models should be developed that allow grantees to issue beach notifications and closures prospectively, so that swimmers are notified in time to avoid water contact. If EPA cannot mandate a model for every site, it should require grantees to explain why a model is inappropriate. If a model is inappropriate because of insufficient data, the state should prioritize acquiring additional data. EPA should require models where they do work, not merely encourage them. If they can't be required, they should be incentivized.

We support the suggestion on page 77 that “To the extent possible, states and tribes should be moving toward same-day notification of exceedances and prompt reporting by using tools that provide rapid results (i.e., rapid analytical methods and predictive models) and tools that facilitate rapid communication of those results (e.g., electronic notification and real-time reporting).” But we believe that this should be a requirement rather than an encouragement.

Culture-based testing methods have an inherent time lag that greatly reduces its effectiveness as a tool for protecting the public health. The Draft Criteria state that 70% of exceedances of water quality standards have already ended within 24 hours. Consequently, a culture that returns data a day or two after the sample has been gathered not only is too late to warn a swimmer of real time risks, it also could lead to a beach notification when the water quality is no longer dangerous.

EPA is continuing to rely on culture methods with known and serious timing problems, but is only tentatively endorsing qPCR and modeling protocols because of hypothetical drawbacks. Even if a qPCR test is less accurate than a culture test, if it has *some* accuracy it is more helpful than a culture test that tells swimmers what the water quality was yesterday. Even if qPCR and models are less accurate in certain settings, they are at least timely. If beach managers have a good idea of what the water quality is now, through modeling or experience, then they should notify the public based on that modeling or expertise.

We believe that EPA should require grantees to move toward rapid testing and further require predictive modeling and/or preemptive advisories (as on page 80) that warn the public before potential exposure.

## **EPA MUST INCLUDE ALL BEACHES WITHIN THE PROGRAM**

In our experience, the welcome changes in the Draft Criteria will apply to too few beaches. In developing ranking and monitoring plans, many if not all states list beaches that are commonly used by the public as outside of the program because of funding deficiencies. And many states also list beaches as closed that ought not be closed, or list beaches as seasonably closed that are nevertheless used by the public for recreation outside of the recreational season.

The Draft Criteria should be amended to prohibit grantees, in developing rankings and monitoring plans, from asserting that certain coastal waters are “closed” to bathers, either by area or season, because they allegedly have no or zero use by the public. This is often a faulty and dangerous assumption.

In most instances, there are no physical barriers to a person using a “closed” beach. Except in rare instances (e.g., ongoing construction, the presence of migratory or breeding birds, etc.), beaches are not and cannot be so secured, and therefore it is irrational to assume zero use during periods of “closure”.

All too frequently, beachgoers are not warned about pathogen contamination because the local government does not consider the coastal water open for recreational use. Especially worrisome are non-program beaches, which are neither closed nor monitored. These beaches are not marked as being outside the program and the public is not necessarily informed that the beach is not tested or when pathogen levels at the beach are typically dangerous. At a very minimum, EPA should require states to post signs that a beach is not monitored for water quality safety if it is a non-program beach.

In our experience, bathers commonly use coastal recreational waters regardless of whether a lifeguard is on duty or a beach is administratively/nominally “closed.” Swimmers are often present after hours or outside of the season. These swimmers rarely know that they are recreating on “closed” beaches, and EPA must nevertheless protect their health under the BEACH Act.

All of these uses of “closed” beaches potentially expose bathers to pathogens, and

therefore, cannot be ignored in terms of developing rankings and monitoring plans. The assumption that a “closed” beach has no users, and therefore the grantee has no BEACH Act obligations with respect to such persons, leaves the very members of the public Congress intended to protect vulnerable to illness from waterborne pathogens. For all of the above reasons, EPA must amend the Draft Criteria to prohibit grantees from asserting the faulty and dangerous assumption that a “closed” beach has zero use.

Thank you for this opportunity to provide comments on this critical draft document. If you have questions about our comments please feel free to contact Christopher Len at 201-968-0808.

Sincerely,



Christopher Len  
Staff Attorney  
Hackensack Riverkeeper &  
NY/NJ Baykeeper



Steve Fleischli  
Director & Senior Attorney, Water Program  
Natural Resources Defense Council



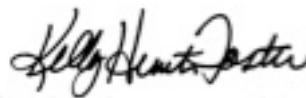
Kirsten James  
Science and Policy Director, Water Quality  
Heal the Bay



Phillip Musegaas, Esq.  
Hudson River Program Director  
Riverkeeper, Inc.



Cindy Zipf  
Executive Director  
Clean Ocean Action (COA)



Kelly Hunter Foster  
Senior Attorney  
Waterkeeper Alliance

**Comments from  
Rhode Island  
Department of Health**





Department of Health

Three Capitol Hill  
Providence, RI 02908-5097

TTY: 711

[www.health.ri.gov](http://www.health.ri.gov)

## **National Beach Guidance and Required Performance Criteria for Grants: Public Comment Period Rhode Island Department of Health Comments**

### *Chapter 3: Risk-based Evaluation and Classification Process (p.23)*

Lines 9-12: Although prioritizing grant funds for higher risk beaches is important, it is also important to continue monitoring at a lower frequency moderate and lower risk beaches for new sources of contamination and track their potential increase or decrease in risk over time. Sample analysis budgets should reflect this and priority funding should be allocated to a well-rounded risk based sampling plan.

### *Chapter 3: Risk-based Evaluation and Classification Process, Section 3.6.1: Initial Submission to EPA, (p.35)*

Lines 12-15: The new criteria would require public comment periods and programs to address those comments in order to receive funding. Would public comment periods and final reports on the comments have to be completed before the grant application is submitted to EPA? Alternatively, can states make note within their application of intent to hold public comment? It would not be realistic to require states to have implemented these requirements this year before the funding is allocated when a significant amount of time and collaboration with regional project officers is necessary to develop a good plan.

### *Chapter 4: Beach Monitoring, Section 4.7.2.1: Use Beach Action Value (BAV) as the Beach Notification Threshold, (p. 69)*

Lines 33-35: *“It is important to note that the BAV is not a component of EPA’s recommended criteria from adoption into state and tribal standards, but rather a tool that states and tribes may use as a “do not exceed value”.*

Lines 9-11 (p. 70): *“Accordingly, EPA is requiring a new grant condition for FY14 grants awarded after this document is final and beyond, that states and tribes use the BAV as a precautionary, conservative measure to protect public health”.*

There is a discrepancy between the recommendations within the document. Are states required to adopt a BAV in order to receive funding or is this a tool we may use?

In addition, attention should be brought to the definition of a “Beach Action.” Many states conduct the notification for recreational facilities differently. A beach action in one state might be to recollect a sample, whereas a beach action in another state is to close the facility to all recreational activities. If the new Criteria leaves this definition open to the states’ interpretation, that needs to be stated.

#### The Effects of a BAV for Rhode Island:

1. According to the Centers for Disease Control and Prevention, there were only two reported cases of illness from 2007 through 2010 in ocean waters. Both cases concerned skin with no noted gastrointestinal symptoms<sup>1,2</sup>. Correlating a beach action of 60 cfu/100ml to an illness rate of 32 illnesses per 1000 bathers is inaccurate given the most recent public health data available for Rhode Island coastal waters. Our current risk-based monitoring plan has prevented any substantial illness outbreaks from occurring at our saltwater beaches.
2. Rhode Island does not issue water quality advisories as is custom with other states and tribes. When a single sample exceeds the national threshold of 104cfu/100 ml, the beach is closed to swimming until a clean sample is reported. As a Program, we believe this approach is the most protective to public health. Advisories give the public the option to swim and that exposes vulnerable populations to potential sources of contamination. Therefore, closing a beach at 104cfu/100ml may be more protective than posting an advisory at 60cfu/100ml
3. Implementation of the BAV in Rhode Island would lead to a significant reduction in state tourism as a majority of Rhode Island’s summer revenue is from out-of-state visitors.
4. The quality of life for our struggling job market would be further impacted. For every day a beach has to close, food stand workers, lifeguards, cleaning crews, parking attendants, and beach managers lose a day of work. These are often minimum wage jobs and a loss of work has the potential to severely affect a person’s quality of life.

**Example: Bristol Town Beach has 39 employees who lost an estimated 2808 days of work from beach closures spanning 2000-2012.**

5. The state of Rhode Island supports local and small businesses. When a beach is closed, revenue to local restaurants, shops, services, and hotels is lost.

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<sup>1</sup> Centers for Disease Control and Prevention. 2009-2010 Recreational Water-associated Outbreak Surveillance Report Supplemental Tables. Available from: <http://www.cdc.gov/healthywater/surveillance/recreational/tables.html>

<sup>2</sup> Centers for Disease Control and Prevention. Descriptions of Select Waterborne Disease Outbreaks Associated with Recreational Water Use. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6012a3.htm>

**In 2013, Rhode Island experienced a 10% exceedance rate using the current value of 104cfu/100ml. If we had applied the proposed criteria of 60 cfu/100ml we would have experienced a 16% exceedance rate. To the public this suggests water quality has declined but as we know that was not the case.**

**In 2013, Rhode Island experienced 111 saltwater beach closure days. Using the draft BAV there may have been as many as 200 or more closure days. While Rhode Island has been very protective of public health, we feel the BAV would create a severe economic impact with no demonstrated improvement in protection.**

For more information, please contact:

Amie Parris, Rhode Island Beach Program Coordinator [amie.parris@health.ri.gov](mailto:amie.parris@health.ri.gov)

**Comments from  
Georgia Department of Natural Resources**

## Comments on EPA's Draft Beach Guidance

 DELETE  REPLY  REPLY ALL  FORWARD ...



Cheney, Elizabeth <Elizabeth.Cheney@dnr.state.ga.us>

mark as unread

Wed 5/28/2014 3:57 PM

To:  Beach\_Guidance;

You forwarded this message on 5/29/2014 1:22 PM.

**Georgia Department of Natural Resources Beach Program - Comments on *National Beach Guidance and Required Performance Criteria for Grants – Draft***

Chapter 3 seems to be missing guidance for determining risk from wildlife fecal sources. It is not clear how a sanitary survey that only finds wildlife fecal sources would be useful for assessing risk to human health.

Section 4.5 The requirement for reporting monitoring data to the public in a timely manner by posting data on a publicly available website is unclear. Is an annual report timely? Does having the data available to the public in STORET meet this requirement?

Section 4.7.1 Use of the STV and GM for beach notifications is unclear. Can a geometric mean calculation be applied to a single sample? This makes no sense.

Section 4.7.2.1 Use of the BAV. If the state is in the process of adopting RWQS based on the illness rate of 36 but has not finalized their standards, the Guidance appears to say that the Beach Program should start using the BAV based on the illness rate of 32, and then switch to using a BAV based on the illness rate of 36. This switch would be very confusing to the public. The Beach program should have the option of using the BAV based on the illness rate that the state is in the process of adopting.

Elizabeth Cheney  
Beach Water Quality  
GA DNR Coastal Resources Division  
One Conservation Way, Brunswick GA 31520  
(912)-262-3057

**Comments from  
North Carolina  
Department of Environment and  
Natural Resources**

## Comments on National Beach Guidance and Required Performance Criteria for Grants

### North Carolina Shellfish Sanitation & Recreational Water Quality

- The Beach Action Value (BAV) was first introduced when the final 2012 Recreational Water Quality Criteria was released. When stakeholders were asked to comment on the draft Recreational Water Quality Criteria there was no mention of the BAV so there was never an opportunity for comment. The information regarding the BAV in the 2012 Recreational Water Quality Criteria was introduced as being an optional tool that states could consider. The Draft Beach Guidance released in April 2014 indicates that the BAV is a requirement for states to be grant eligible. North Carolina adopted rules in 2004 that were a reflection of the 2002 Beach Guidance document. It will take an additional two years for North Carolina to go through the rule making process to update the changes to reflect the 2014 beach guidance. Assuming that BEACH Act funding is available, North Carolina would not be eligible for beach grants until this rule making process was complete. Using the BAV should remain optional.
- The EPA is aware (page 6) that viruses make up the majority of the recreational waterborne illnesses so it is doubtful that using a bacterial indicator with the more stringent BAV criteria will increase protection of public health. It will just lead to more swimming advisories and unnecessary public notification.
- It is not clear in the document if a BAV exceedance requires an actual sign posting on the beach. From page 87, it appears that a press release and website posting would be a functional equivalent to a sign posting.
- Page 69 line 18 concerning the departure of multiple use intensity values of the SSM. It may be necessary for North Carolina to reduce the number of tier II and tier III sampling sites because of the additional work and staff required to post these low usage sites. The BAV criteria will force the program to just concentrate on monitoring the most highly used ocean beaches.

**Comments from  
Delaware Department of Natural Resources  
and Environmental Control**



**Comments: Draft National Beach Guidance  
and Required Performance  
Criteria for Grants  
(EPA-820-D-13-01)**

Chapter 1: Introduction

- Page 3 (lines 1-30), Page 4 (lines 1-43), Page 5 (lines 1-06)
- Issue with “new” program tools:
  - **Delaware’s implementation of current criteria is as protective as 2012 Criteria:**
    - Delaware implemented beach sanitary surveys into the beach monitoring program prior to 1986 Recreational Water Quality Criteria (RWQC) and the Beaches Environmental Assessment and Coastal Health (BEACH) Act. Delaware has used the beach sanitary survey as an effective tool to mitigate and eliminate pollution sources impacting water quality since the early 1980’s.
    - Delaware has maintained state monitoring and notification data and provides the information to the public in real time. We have always moved toward improved technologies to better our notifications to the public.
    - Predictive models have been unsuccessful at our beaches because our waters are too “clean”.
    - Delaware beach monitoring program has emphasized mitigating pollution sources impacting beach water quality as the best tool we have for protecting public health.
    - The Environmental Protection Agency’s (EPA’s) epidemiological studies have all occurred in water impacted by point sources or storm water outfalls from combined sewers. The large epidemiological studies relied on interview surveys of beach goers, not actual linked illness to direct water contact. The fecal indicator bacteria (FIB) relationship to illness was mostly tested in sewage impacted waters and would be a better fit for use in impaired waters. In Delaware funding to improve and increase technology in publicly owned treatment works (POTWs) has prevented untreated sewage from reaching our beaches and waterways. With sewage treatment systems that have back-up power, 24 hour holding and many system redundancies to prevent problems during weather related episodic events and infrastructure failures. All outfalls are monitored by a variety of state and local entities on daily, weekly and monthly intervals to meet the Clean Water Act.
    - The Beach Advisory and Closing Online Notification (BEACON) system to meet the BEACH Act requirement for EPA to establish and maintain a publicly available database of pollution occurrences for coastal recreational waters has always been a

problem. For a few reasons, this is repetitive since DNREC; Office of Information Technology maintains our website and makes sure the information is accurate. BEACON usually has the wrong names of beaches, duplicate sites and beaches and incorrect data. Trying to correct the problem is actually a bigger problem. We usually just deal with the NRDC staff directly for the report, "Testing the Waters". This has been a really big problem; the information needs to be correct.

Page 7 (lines 31-33)

- Question- Can EPA provide data to support that fecal indicator bacteria are distributed evenly (is this an assumption)? Starting with line 30, the document states, FIB are bacterial groups or species that are naturally found in guts of warm-blooded animals, and therefore excreted in high densities in the feces of warm-blooded animals (including humans). They provide an estimation of the amount of feces (or degree of contamination), and indirectly, the presence of fecal pathogen in the water.

Page 10 (lines 39-43) and Page 11 (lines 1-8)

- The Health Concerns section suggest that the 2012 criteria was influenced by the use of quantitative polymerase chain reaction (qPCR) from studies from two beaches impacted by treated sewage. More studies are needed to demonstrate how the level of disinfection affects pathogens and virus removal. In Delaware our sewage treatment facilities have secondary treatment, no beaches are impacted by sewage treatment plant outfalls, and treatment plant facilities greater than .5 MGD have enhanced treatment, using sand filtration and UV disinfection, greatly reducing the risk of viral survival in the effluent.

Page 12 (lines 8-17)

- Delaware beach monitoring program has shown through data that our public health protection is the same using the 1986 or the 2012 criteria. Delaware's current criteria provide for the protection of primary contact recreational use. Evaluating the application of the single sample maximum (SSM), the current criteria offers the same protection as the 2012 criteria (SSM is applied at only two confidence levels).

Page 12 (lines 24-37)

- The beach action value (BAV) is based on statistics and not scientific evidence.
- BAV should not be a grant requirement.
- Delaware conducts beach sanitary survey weekly at all our guarded beaches, using our resources and coordination with the beach towns to eliminate pollution sources.
- Delaware's marine coastal tidal beaches are influenced by winds and re-suspended sediments and this can cause elevated bacteria levels not associated with potential or actual pathogens.
- No data was provided to show how much additional protection BAV provides.

- We live in a vast country; one size does not fit all. Delaware's coastal marine beaches are not impacted by human waste or improperly treated sewage, we would like the EPA to consider placing emphasis on beach sanitary surveys in order to prevent contamination and exposure to the public and develop a criteria that could be used for non-point source impacted marine waters.

Page 13 (lines 1-3)

- The use of qPCR and rapid notification does not provide additional public health protection to primary contact recreation users in Delaware, since Delaware beaches are not impacted by sewage, untreated or otherwise.

Page 13 (lines 11-21)

- The BAV requirement will decrease the use of alternative fecal indicators or methods, including development of site specific thresholds utilizing quantitative microbial risk assessment (QMRA).

## **Chapter 2: Grants and Required Performance Criteria**

Page 18

- Delaware's Recreational Water Program meets the 10 performance criterion in Table 2-1.

## **Chapter 3: Risk Based Beach Evaluation and Classification Process**

Page 24 (lines 7-18)

- Delaware already meets the requirements in Table 3-1.
- Delaware's Recreational Water Program uses the beach sanitary survey tool and has achieved this process at all beaches including those not funded under the BEACH Act and has developed a List of Beaches. Our beach sanitary survey work has an added benefit of knowing the history of the beaches that are enjoyed by the public in Delaware.

## **Chapter 4: Beach Monitoring**

Page 38 (lines 18-23 and 31-37)

- Delaware has been monitoring beaches since 1979.
- Delaware has used predictive modeling in the case of rainfall events.

Page 38 (lines 38-39)

- Expand on requirements.

Page 39 (Table 4-1)

- Delaware meets these criteria at BEACH Act beaches; we also implement criteria across the state at all freshwater and inland bay beaches.

Page 40 Table 4-2

- Delaware does not fit the risk /use categories

Page 44 (lines 14-32)

- This discussion makes sense if there is an intermittent flow of untreated sewage, does not inform the public of potential health risk. A beach sanitary survey could explain the source of the FIB; this could decrease the public health risk and help the public fully understand actual and potential pollution sources.

Page 45 (lines 11-27)

- In Delaware we issue permanent advisory for primary contact recreation after a rain fall event. This provides the public knowledge by permanent signage and is very precautionary and protective of public health. We have completed and implemented predictive models for rain fall events. Delaware beaches were deemed too “clean” for a predictive model to be useful. In our studies we have found that increased bacterial levels are due to disturbed sediments and not fecal sources of pollution.

Page 46 (Table 4-3)

- This discussion is useful but you need to empathize the importance of a beach sanitary survey to understand variability of samples results and what is impacting the marine coastal site. This understanding is key to the tiered approach and determining sampling frequency. Human sources of pollution are the important piece in the puzzle, exceedences missed is not relevance if there are no human sources.

Page 50

- You only reference California – you need to reference other states.

Page 62: Monitoring Report Submission

- Delaware is in compliance but we need to place more weight on the beach sanitary survey.

Page 68 (lines 1-22)

- Using the geometric mean only over the entire beach season.
- Delaware does not agree with using the statistical threshold value (STV) for assessment purposes.

Page 69 (lines 5-16)

- Using the tiered monitoring approach should enable us to better understand our beaches and enable us to monitor more beaches with fewer resources.

Page 69: BAV

- Use BAV as a tool without adopting it into the Water Quality Standards as a “do not exceed value” for beach notification purposes.

- The BAV could be used at the state’s discretion, as a conservative, precautionary tool for beach management decisions.
- This will be very hard to explain to the public.
- When the measurement of fecal indicator bacteria (FIB) does not provide any information on the source of the bacteria how can that be seen as “more stringent”?
- BAV should be an optional tool.
- Requiring the use of a statistical value for a level of indicator bacteria that has no direct relationship to the level of real pathogens present and assuming increased public health protection is promoting poor science.

### **Chapter 5: Public Notification and Risk Communication**

- No comment

## Comments from Delaware's Recreational Water Program

### **National Beach Guidance and Required Performance Criteria for Grants**

#### **Impacts to Delaware from National Resource Defense Committee (NRDC) Using the EPA Mandated Beach Action Values to Assess Primary Contact Recreation Risk**

In 2013, Delaware had a total of four recreational water advisories, one at each of the following beaches: Rehoboth Beach at Rehoboth Avenue, Rehoboth Beach at Virginia Avenue, Atlantic Ocean at Gordon's Pond, and Delaware Bay at Slaughter Beach. These advisories were in response to water samples which exceeded the State and Federal Water quality criteria of 104 colony forming units (cfu/100 ml). The NRDC application of the EPA-mandated Beach Action Values (BAV's) to these same data; this will result in Delaware being reported as having 14 water quality advisories. The discrepancy between advisories issued by DNREC and these theoretical advisories will cause confusion and unnecessary concerns among beach users with no actual increase in risk to primary contact recreational users (swimmers). The changes will also increase the percent of exceedence and may result in beaches being downgraded in the year 2014 "Testing the Waters" report.

- During a conference call, the EPA announced that it was requiring States to use the Beach Action Value (BAV for the 2015 grant year (October 1, 2014 through September 30, 2015) in order to receive Federal funding. One day following the EPA announcement, the NRDC announced it would use the BAV for the 2014 "Testing the Water" report even though no states have adopted the proposed criteria. The BAV was a controversial action value which used the 75<sup>th</sup> percentile data to assess risk rather than the 90<sup>th</sup> percentile which have been used for previous epidemiological studies. Throughout three years of discussion, EPA never mentions the BAV. Upon the release of draft guidance, EPA had stressed that this was an OPTIONAL value given the differing technical opinions regarding the efficacy of the proposed criteria in providing enhanced primary contact recreation protection.
- During the three year development process for the new regulations, the BAV was never discussed with the State's and was developed during the final EPA review process in response to concerns from NRDC and other environmental advocacy groups that the proposed regulations were not protective enough.
- Both the new and old criteria do not accurately represent the risk to neither Delaware swimmers nor do they accurately represent the risk to swimmers in the entire Mid-Atlantic region. This is because epidemiological studies conducted to develop the standards focused on sewage impacted beaches. These beaches are impacted by poorly operating waste water treatment plants and storm water runoff mixed with raw sewage discharged by combined sewer overflow (CSO) structures, mostly in the Great Lake's states, California, and some southern states.

**Delaware has worked hard to prevent these anthropogenic sources of pollution from impacting our beaches.** Much of the bacterial contamination in Delaware originates from wildlife sources (including birds, marine mammals and other coastal wildlife). This is important because the tests conducted for water quality analysis use indicator bacteria which grow in the intestinal tracts of warm-blooded animals. During discussions with EPA, Delaware and other Mid-Atlantic states voiced concern about standards which over estimated risk in our region, but the goal of the EPA was to develop a national standard which would be protective in states with high levels of risk sewage-impacted beaches).

- Delaware has rarely reported illnesses due to recreational water use with the old standard (104 cfu/100 ml). Applying the BAV (60 cfu/100 ml) to DNREC's 2013 data increased advisory frequency by 350% with no demonstrated increase in public health protection. Many states feel that the previous water quality standards did not reflect risk within their state and was only applicable to states with poor water quality due to human impacts. Some states are considering not accepting BEACH Act grant funding from the EPA due to potential negative impacts to tourism and the economy.
- Bacterial levels which exceed 60 cfu/100 ml but remain below the current geometric mean standard of 35 cfu/100 ml do occur periodically and use of the BAV's could result in significantly more advisories. Bacterial values greater than 60 cfu/100 ml but less than the current standard of 104 cfu/100 ml can be seen sporadically along the coast on a weekly basis not identified pollution sources or heavy rains. These exceedences are most likely due to transient wildlife sources, which are part of a healthy ecosystem including dolphins, whales and shore birds) but less than the current standard of 104 cfu/100 ml can be seen sporadically along the coast on a weekly basis.

**Comments from**  
**The State of New Hampshire**  
**Department of Environmental Services**





The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**Thomas S. Burack, Commissioner**



May 28, 2014

Denise F. Hawkins, Chief  
Fish, Shellfish, Beach and Outreach Branch  
Office of Water/Office of Science and Technology  
U.S. Environmental Protection Agency  
Washington, D. C. 20460

**RE: DRAFT National Beach Guidance and Required Performance Criteria for Grants**

To Ms. Hawkins,

The New Hampshire Department of Environmental Services (NHDES) offers the following comments on the U.S. Environmental Protection Agency (EPA)'s proposed **DRAFT National Beach Guidance and Required Performance Criteria for Grants** (EPA-820-D-13-001).

EPA is proposing revised requirements for states to receive future grant funding. In proposing the revised grant requirements, EPA explained that its goals include supporting states by facilitating the sharing and transfer of information between stakeholders, and to reflect updated science by incorporating key aspects of the 2012 Recreational Water Quality Criteria. NHDES has already implemented many of the proposed changes in order to protect public health at swimming beaches. One such change has been the increased use of social media to communicate beach notifications. In fact, NHDES just launched a mobile app for smart phones with beach advisory information. NHDES however does not believe that EPA has presented any significant scientific evidence to demonstrate that implementing the revised Beach Action Values (BAV) will in any way increase protection of public health. In addition, NHDES does not find clear guidance in the document on how to decide between acceptable levels of illness for choosing between the two suggested, yet very similar, BAV criteria. The rule change would have a detrimental impact on the New Hampshire Beach Program.

A great deal of research has been conducted by EPA and other researchers about water bacteria related illnesses of recreational swimmers. Generally, this research demonstrates that as bacteria levels increase, the risk to swimmers also increase. However, no clear research presented to date shows any improved health outcomes at bacteria levels lower than the current standards. According to the EPA's own research (Report on 2009 National Epidemiologic and Environmental Assessment of Recreational Water Epidemiology Studies), "health relationships with indicators of water quality could not be established due to good water quality" at a tropical marine beach. Additionally, at an urban impacted marine beach, "consistent health relationships between fecal indicator organisms and swimming-associated illness were also not established." No evidence has been presented in the **DRAFT National Beach Guidance and Required Performance Criteria for Grants** supporting a lowered notification threshold.

An analyses of all coastal New Hampshire beach samples tested between 2001 and 2013 show that the number of beach advisories would have more than doubled from 1.2% to 3.0% if the suggested 60 CFU BAV rule had been in place. However, there is no evidence that a comparative reduction in waterborne bacterial illnesses would have been reported by the public. According to the most recently released reports from the Centers for Disease Control and Prevention (CDC), between 2006 and 2008, 38 disease outbreaks of illness related to swimming were reported. Of those 38, only 4 were related to ocean water. The vast majority of outbreaks and associated illnesses were linked to swimming in freshwater systems. A reduction in the coastal notification criteria does not appear to be warranted to protect health and comes at a huge potential cost.

NHDES also has concerns regarding the process by which EPA is requiring the new BAVs to be adopted by states. Section 303 of the Clean Water Act provides the basic framework by which states and EPA work together to adopt and update water quality standards including the criteria by which waterbodies are evaluated. NH DES is currently completing its triennial review of its water quality criteria as required by EPA. The review included a consideration of the new BAVs proposed by EPA. Ultimately, we decided not to adopt these criteria for the reasons provided above. Here, however, criteria are essentially being promulgated by EPA through a grant requirement. To invoke such a process sets a troublesome precedent especially given such short notice and the lack of a formal opportunity for comment by the states and the public within the standard CWA arena.

Without any demonstrated increase in public health protection, a required reduction in the BAV used for issuing advisories will have a major impact on the New Hampshire coastal economy which is dependent on our tidal beaches. The excellent water quality at New Hampshire's beaches has been used consistently as an attraction to the beach-going public. Given that there is no discernable health benefit from changing this rule, the unwarranted beach closures it will produce, and the impact it will have on thousands of beach goers and of the many hundreds of thousands of dollars spent in New Hampshire, the pressure from the public and elected officials will be intense for NHDES to withdraw from the beach program. This is a plausible and predictable direct result of the recommended change in the BAV. EPA must seriously consider the lack of direct evidence of reduced public health and should engage their economists in a cost/benefit study before making such a rash decision.

Thank you for the opportunity to comment on this rule and we are open to further discussion about it. I can be reached at (603) 271-0698, or [sonya.carlson@des.nh.gov](mailto:sonya.carlson@des.nh.gov).

Sincerely,

A handwritten signature in black ink that reads "Sonya Carlson". The signature is written in a cursive, flowing style.

Sonya Carlson  
Beach Program Coordinator

**Comments from  
Virginia Department of Health**

## National Beach Guidance and Required Performance Criteria for Grants: Virginia Department of Health Comments

Skiljo III, Matthew (VDH) <Matthew.Skiljo@vdh.virginia.gov>

Wed 5/28/2014 4:16 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Thank you for the opportunity to comment on EPA's draft 2014 National Beach Guidance and Required Performance Criteria for Grants. The Virginia Department of Health (VDH) is very grateful to EPA for the long-standing support that has been offered to develop and implement Virginia's Beach Monitoring Program. Additionally, VDH is pleased to see the thorough guidance that is provided in this document for all the resources, tools, and emerging methods that can be used to further develop beach monitoring programs.

VDH comments for EPA's draft 2014 National Beach Guidance and Required Performance Criteria for Grants are provided below:

1. EPA requirement for states to use BAVs as the threshold value for issuing beach notifications until updating State Water Quality Standards (WQS):

It is not necessary for EPA to require states to use an interim threshold value to issue beach notifications while developing new or revised state WQS. The BEACH Act clearly provides a requirement that states must update water quality standards within 36 months. This requirement is above and beyond what is required by the BEACH Act, and will likely impede on the time and effort required to adopt the 2012 RWQC into state WQS before December 2015.

2. EPA requirement for states to use BAVs after updating State WQS:

It is not necessary to require states to use BAVs as a threshold value to issue beach notifications after adopting new state WQS. Virginia intends to adopt new WQS by December 2015, as required by the BEACH Act, as a threshold value to issue beach notifications. If EPA requires states to use the BAV as a threshold value to issue beach notifications, please strongly consider amending the BEACH Act requirement for states to adopt WQS by December 2015; the adoption of new WQS for state beach monitoring programs will be irrelevant if EPA dictates the use of BAVs, since BAVs are not suggested to be included in state WQS.

**Section 3.6.4, pg 42 of EPA's 2012 RWQC:**

*Beach Notification Programs*

"WQC (Water Quality Criteria) in state WQS are the applicable targets for EPA grant funded state beach notification programs under §406 of the CWA. The BAV is not a component of EPA's recommended criteria, but a tool that states may choose to use, without adopting it into their WQS as a "do not exceed value" for beach notification purposes (i.e., advisories). While the GM (Geometric Mean) and STV (Statistical Threshold Value) would be the applicable WQS, a BAV could be used at the state's discretion as a more conservative, precautionary tool for beach management decisions. Similarly, states could also choose to use the STV as a "do not exceed

value” for the purposes of their beach notification program, without adopting it as a “do not exceed value” in their WQS.”

**Section 5.1, pg. 44 of EPA’s 2012 RWQC:**

“For states that do not use a BAV, EPA suggests using the criteria STV values (provided in Table 4) as “do not exceed” values for beach notification or retaining their current beach notification values in their WQS.”

EPA’s 2012 RWQC clearly that states use either the STV or BAV as a threshold value to issue beach notifications. Please strongly consider developing and issuing EPA Performance Criteria that is consistent with EPA’s 2012 RWQC.

3. EPA’s Rationale for Requiring States to Use BAVs:

The Performance Criteria explains that EPA’s rationale for this requirement is to ensure that states use a threshold value that is applicable to each sampling event, and to ensure consistency among all coastal states. EPA’s 2012 RWQC is designed to provide states with options that meet the various needs of each state’s beach monitoring program and water quality conditions. If EPA believes that it is important for states to have a nationally consistent trigger for BEACH Act beach notification actions, it is unclear why EPA provided states with two illness rate choices for criteria values in EPA’s 2012 RWQC.

4. Virginia Impacts & Health Benefit of BAVs:

Virginia would require additional and significant resources if BAVs were used to trigger beach notifications. Since 2004, Virginia’s beach monitoring program has issued 250 beach advisories. If using the BAV of 60 cfu/100ml, Virginia would have issued at least 450 advisories, and likely more due to resampling. At Virginia Beach area beaches, beach waters are closed when advisories are issued by state/local public health, and the closures are enforced by local law enforcement. Given the potential economic impacts of issuing more advisories and the additional resources needed to issue such advisories, EPA’s 2014 draft Performance Criteria does not provide sufficient rationale of the additional public health protection gained by requiring the use of BAVs for beach notifications. Additionally, EPA’s 2012 RWQC explains that the criteria values of 110 cfu/100ml and 130 cfu/100ml in EPA’s 2012 RWQC are health protective of the general public, including children. If BAVs are required to issue beach notifications, please provide a thorough explanation of the additional public health protection gained.

Thank you for considering our comments. I would be happy to discuss if provided the opportunity.

Sincerely,  
Matt Skiljo

**Matt Skiljo**

Waterborne Hazards Control Program Coordinator

VDH, Office of Epidemiology

109 Governor Street, 417

Richmond, VA 23219

Office: 804-864-8128

**Comments from  
State of Wisconsin  
Department of Natural Resources**



May 27, 2014

To: BEACH\_GUIDANCE@epa.gov

From: Donalea Dinsmore, Beach Program Coordinator, Wisconsin DNR

Subject: Wisconsin Department of Natural Resources (WDNR) Comments on  
Draft National Beach Guidance and Required Performance Criteria

Wisconsin Department of Natural Resources (WDNR) appreciates the opportunity to comment on the Draft National Beach Guidance and Required Performance Criteria for Grants dated April 18, 2014. WDNR supports the strategy of using a tiered monitoring program based on assessment of risks as well as the need to establish a program that builds public trust using modern communication tools that are targeted to the community needs. Wisconsin's beach program enthusiastically supports the inclusion of sanitary survey activities and procedures and incorporation of more real-time techniques (e.g. modeling and qPCR) for monitoring beach water quality as grant-eligible activities.

Our local cooperators have experienced significant budget cuts over the last several years which have emphasized both the need for sustained funding through BEACH Act grants and the importance of targeting the limited resources available to high pay-off program operations. Through a Great Lakes Restoration Initiative grant, Adam Mednick at WDNR has worked on a technology transfer project that reduces the time and effort necessary to develop Nowcast models as well as reducing barriers to implementation on a local level. By collaborating with EPA and USGS (<http://cida.usgs.gov/endeddat/>) to automate functions available through Virtual Beach and Wisconsin's Beach Health website and working with local public health partners, more beach managers are willing to explore this tool as a primary driver in their decision-making process. We have concerns that elements of the guidance and draft criteria interfere with our ability to move forward with those goals in a manner that is both appropriately protective of public health and cost-effective.

1. Requiring states to use a Beach Action Value (BAV) on 190 cfu as a requirement of receiving funding until the state adopts the revised RWQS will be disruptive to our program. It forces direction of resources to chase exceedances of a lower BAV at the expense of implementing real-time monitoring tools irrespective of the risks assessed in developing our tiered program.

Historically, Wisconsin's beach health partners have monitored more frequently than the minimums and secured grant funding to implement sanitary surveys, nowcasting, develop qPCR, and begin beach restorations. Our experience is that implementing each of these activities takes resources and following a beach restoration, additional data is needed to re-establish a valid nowcast. Without the supplemental funding available through the GLRI, the beach program would not have been able to make as much progress as it has. For many locations, beaches-specific sanitary survey data collection is necessary to develop, test, and maintain nowcast models. In the Great Lakes, *E. coli* is the FIB of choice and beach-specific data are necessary to determine whether qPCR is an appropriate monitoring tool and if so, the appropriate action level. At a time when our program partners have more limited funding and in some cases more limited staffing, the grant condition will force the beach program to allocate resources to more resampling activities rather than transitioning to the real-time tools at priority locations.



Given the limited resources available, lower the BAV and increasing the number of advisories may have the unintended consequence of abandoning monitoring at impaired beaches so only the relatively clean beaches get monitored. Smaller communities in Wisconsin are already considering discontinuing monitoring at beaches identified as having a water quality impairment, even those with a relatively large tourist industry. This may lead to even greater economic justice issues associated with pollution. Section 3.6 seems to encourage this action by declaring the beaches to be non-program beaches. Wisconsin's beach health partners have invested significant effort in assessing the sources of contamination and the risks associated with each setting. Lowering the BAV during our transition to using new real-time tools means additional work will be necessary at the local level to build confidence in the decision-making tool and resources that would have been devoted to the transition process will be diverted to re-sampling. We believe that the interests of public health are better served by preserving states' flexibility to implement recreational water quality standards, allowing the programs to optimize available tools to balance vigilance at the beaches and public health protection.

2. Requiring states to use the lower BAV until state rules are revised creates the impression that there is an urgent need to protect public health regardless of the source or setting and adds needless confusion to the public notification system. This grant condition subverts the federal rule which gave the states discretion on establishing the recreational water quality criteria to be applied within the state.

Although Chapter 1 of the Beach guidance outlines the case for using FIB as a surrogate for pathogens, it does not present evidence to support the need to use a lower risk BAV in advance of state rulemaking. This chapter identifies the difficulty in attributing illness incidents with swimming and lines 16 – 20 on page 9 recognizes that not all FIB have a demonstrated potential for illness. Mandating the lower BAV in advance of a state rule change complicates public messaging about potentially temporary increases in number of advisories, the risk associated with changing the threshold and how it applies to our diverse beach settings. This mandate seems to conflate determinations of water quality impairments with decisions about whether it is safe to swim on any particular day which seems counter to the RWQC rule that separated the decisions and created the concept of a BAV.

3. Used in isolation, the recommended monitoring frequencies and lower BAV in section 4.3.2.1.1 appear inadequate to provide the level of public health protection this BAV reflects.

Table 4-3 and the text in 4.3.1.1.2 indicate 70% or more missed exceedances with a once per week frequency. This mirrors the experience of beach managers in the Great Lakes who have seen more water quality advisories associated with more frequent monitoring. While the text acknowledges limited resources available, beginning the monitoring an entire month in advance of the beach season expends resources when little or no one is swimming. In the upper Midwest this recommendation is impractical and needlessly expensive in locations where ice is still present, limiting available resources for monitoring late in the season when we have experienced higher incidence of elevated bacteria and algae. As with prioritizing locations to implement qPCR, the guidance should encourage strategic investments in more intensive monitoring to better characterize various beach settings to validate that minimal monitoring is appropriate.

In addition to the concerns enumerated above, please consider the following comments and suggestions on specific sections of the guidance:

EPA's guidance in 4.2.2 seems to contain a bias toward monitoring over predictive modeling, suggesting that exceedances need to be confirmed with sampling rather than using an unbiased sampling plan to maintain the predictive capacity of the model. The guidance does not recognize the potential to use nowcast models to increase "monitoring" of beach water quality on 5 – 7 days per week. WDNR encourages providing more detailed support document for implementing predictive models using Virtual Beach 3.0 (similar to the details for qPCR). This supplement could take advantage of material in the following Great Lakes Restoration Initiative (GLRI) grant reports:

Mednick, A. C. and D. Watermolen (2009). Beach pathogen forecasting tools: Pilot testing, outreach, and technical assistance. Madison, WI: Wisconsin Department of Natural Resources (Demonstrated that local

health departments could successfully operate predictive models and the importance of providing a linkage between the users and developers of Virtual Beach.)

Mednick, A. C. (2012). Building operational “nowcast” models for predicting water quality at five Lake Michigan beaches. Madison, WI: : Wisconsin Department of Natural Resources. (Demonstrated through case studies that local health departments vary in their capacity to develop predictive models, and that centralized technical support and data systems are necessary to ensure widespread adoption.)

Wisconsin’s project to reduce barriers to implementing nowcasts at local levels took advantage of the more intensive monitoring schedule and associated beach-specific physical data collected during sanitary surveys to optimize the predictive capability of the nowcasting available through Virtual Beach even at beaches with relatively few water quality exceedances. Beginning with a rich data set that is representative of the range of conditions experienced at a beach enabled beach managers for several Wisconsin beaches to implement two tiered nowcast systems, using beach-specific physical data on days when the beach is monitored and using automated data imported from USGS’s Environmental Data Discovery and Transformation (EnDDAT) system into Virtual Beach **3.0**. This combination of tools enables beach managers to predict water quality exceedances within as little as 10 minutes on days when sampling is not done at the beach. At those beaches where the transition has been made from traditional (i.e. culture-based) monitoring to predictive models, the core objective of the water-quality sampling shifts from providing direct support for advisory or closure decisions to the validation and long-term maintenance of the models as effective decision-support tools. Sampling design must in turn be geared towards meeting this objective by ensuring adequate sample frequency with an unbiased design. Additional sampling beyond the routine may be indicated to build trust with decision-makers (confirming the necessity of advisories on expected high use days), to confirm that a beach can be re-opened following a closure, or to assure continued model validity following implementation of a BMP. This suggests that investing in maintaining the automated data systems has a great potential for protecting public health while controlling costs.

Tier 1 beaches with a high priority for public health protection may have the ability to use the multiple lines of evidence approach described in 28 – 38 where other locations with more modest means and abilities may have a more limited ability to implement this approach. Section 4.3.2.1.2, page 48, lines 37 and 38 should incorporate the concept of monitoring representative conditions. Page 49, line 1 suggests a two year timeframe for building a robust model but doesn’t indicate the monitoring frequency or number of data points included in this period. In our work with USGS, they have recommended roughly 60 data points over that period.

Section 4.3.1.1.4 makes general statements about ‘most inland streams experiencing higher FIB densities in spring and summer than during the winter’ and the reasons for the phenomenon. We are concerned that these broad generalities may not hold true across the range of coastal states and climate change and land use may be changing these patterns. For example, municipal discharges under NPDES permits may not require chlorinate during winter months when there is little or no recreational body contact. Small and medium size agricultural operations are spreading manure in the winter and monitoring by our field staff is showing very high FIB densities associated with winter rains and thaws. In addition, extreme weather conditions beyond rainfall may trigger extended periods of elevated FIB.

Section 4.3.3.1, page 53, line 5 suggests the potential for citizen volunteers to provide more intensive monitoring at high-priority beaches. Wisconsin has extensive experience with volunteer monitoring data in decision-making. Recruiting, training, and the logistics of coordinating a volunteer workforce have their own challenges and costs. Decision-makers may not be comfortable with delegating sampling directly associated with public health protection. We urge EPA and beach managers to be realistic about the investment required and the limitations of this approach. In 2012 and 2013, the Alliance for the Great Lakes obtained a Wisconsin Coastal Management grant to pilot a volunteer monitoring project to support nowcasting in southeast Wisconsin. Extensive collaboration and planning went into developing the project plan and quality objectives. The report for that grant may provide insights into the performance and outcomes of that volunteer activity.

Thank you for considering these comments and suggestions. If you have questions or would like additional information, please contact me at [donalea.dinsmore@wisconsin.gov](mailto:donalea.dinsmore@wisconsin.gov) or 608-266-1926.

**Comments from**  
**Oregon Health Authority**  
**Public Health Division**

Public Comments: National Beach Guidance and Required Performance Criteria for Grants  
Cude Curtis G <curtis.g.cude@state.or.us>

Wed 5/28/2014 5:01 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: BORISENKO Aaron <aaron.n.borisenko@state.or.us>; Cude Curtis G  
<curtis.g.cude@state.or.us>; Farrer David G <david.g.farrer@state.or.us>;

jae.p.douglas@state.or.us <jae.p.douglas@state.or.us>; Knittel, Janette

<Knittel.Janette@epa.gov>; larry.caton@state.or.us <larry.caton@state.or.us>; Pedersen, Rob  
<Pedersen.Rob@epa.gov>;

📎 2 attachments

Difference in exceedences RWQC 158 and 60.xlsx; OBMP.Feedback NEW EPA Criteria.doc;

To Whom It May Concern:

EPA is soliciting comments on a plan to reduce the Beach Action Value (BAV) to 60 cfu/100 mL. Oregon's current BAV is 158 cfu/100 mL. Oregon Health Authority's Oregon Beach Monitoring Program (OBMP) compiled quantitative and qualitative data (attached) to determine how the program would be affected if EPA adopts the new criteria.

- **There would be a two-fold increase in OBMP advisories.** In 2013, OBMP monitored 16 beaches (Memorial Day - Labor Day). There was a total of 406 samples collected and 29 exceeded Oregon's current beach action value (BAV) of 158 cfu/100mL, resulting in 12 beach advisories. When the draft criteria standard of 60 BAV is applied to 2013 sampling results, 56 samples exceed the standard and would result in an estimated 25 beach advisories. When OBMP applies 60 BAV to all monitoring season data (2002-2013), there are an additional 555 exceedances (average of 46 per year). OBMP has resources to employ just one FTE staff to sample the entire Oregon coastline. OBMP would need **twice** the resources (equipment, staff, etc.) to maintain current beach monitoring efforts under the draft criteria standards. These additional resources would be necessary to conduct re-sampling following the exceedance sample. If additional resources are not available from EPA, a reduction in the number of beaches monitored would be necessary defeating the objective of the draft criteria to prevent less beach water quality related illnesses.
- **Advisories do not necessarily reduce exposures.** Ocean surf temperatures in Oregon are cold, meaning hardier individuals are recreating in the surf. Children are more likely to be found recreating in the warmer, safer streams crossing the beach. These streams are most often the source of bacterial contamination; the beach program under EPA guidance does not issue advisories based on bacteria levels in these streams. An increase in the number of beach advisories will not necessarily keep people out of the water, especially in those freshwater streams that tend to be warmer and are safer for kids to play in. The new standard may not be effective in reducing illnesses at the beach, or at any rate it will be difficult to justify based on illness reduction because no program or organization in Oregon has collected enough illness data to be of statistical significance.

- **Advisories alone do not reduce illnesses.**We should place greater emphasis on finding and fixing sources of contamination. The new criteria would strain OBMP's already limited sampling budget. OBMP could be forced to decrease the number of beaches and sites sampled and/or reduce the number of freshwater samples. OBMP would likely cease off-season and investigational sampling to identify potential sources of contamination, which, if remediated, would reduce the bacteria getting to the beach and therefore the number of illnesses.
- **Risk communication to the public will be difficult.** The President's past and current budget proposals do not include funding beach monitoring programs. It will be difficult to explain why we are adopting a more conservative criteria, resulting in twice as many advisories and fueling public concern over contamination issues, just to be defunded the following year. How would the public respond? Would they know there is no funding to monitor Oregon's beaches? Or would the public think since there are no advisories, the water does not contain high levels of bacteria? Also, would hearing more frequent advisories indicate to the public that the beach is more contaminated than it had been in the past under the old criteria? Might the public become fatigued from hearing too many advisories and not pay any attention to them?
- **Beaches should be classified by tiers.**The beaches of Oregon differ immensely from Florida beaches; grouping all coastal beaches into one category provides a disservice to the public. Unlike beaches in Florida, Oregon's ocean is cold and visitors do not fully submerge themselves in the water year round (there is a small percentage of Oregon's population that surf year-round and have access to third party data collection to monitor waters; OBMP cannot issue advisories from these data because samplers and laboratories are not accredited by DEQ). Requiring Oregon to uphold the same beach water quality standards as Florida is not an adequate reflection of the nature of our waters, beaches and visitors. Removing previously developed EPA beach tiers mandates states to use more resources on fewer beaches to uphold the criteria, leaving many beaches and people vulnerable because widespread sampling across the coastline is no longer an option with existing resources.

If the intent of the new criteria is to reduce the number of illnesses at the beach, then updating the beach program (including resource allocation) to include an emphasis on finding and controlling sources of bacterial contamination would be more effective at reducing illnesses than increasing the number of advisories people may or may not heed as they head to the beach to enjoy the surf.

Thank you for the opportunity to share how the new criteria would effect OBMP. Please let me know if you have any questions or request additional information.

Sincerely,

Curtis Cude

Interim Environmental Public Health Section Manager

Center for Prevention & Health Promotion

Item	Beach ID	Beach Name	Year	# Samples	# Exceed 60	% Exceed 60	# Exceed 158	% Exceed 158	# Difference	% Difference
1	OR178544	Agate Beach	2002	3	0	0	0	0	0	0
2	OR244981	Bastendorff Beach	2002	4	0	0	0	0	0	0
3	OR899292	Beverly Beach	2002	4	0	0	0	0	0	0
4	OR884773	Bob Straub State Park	2002	1	0	0	0	0	0	0
5	OR277842	Cannon Beach	2002	4	1	25	1	25	0	0
6	OR624395	D River Beach	2002	3	1	33	0	0	1	33
7	OR673620	Fogarty Creek Beach	2002	3	0	0	0	0	0	0
8	OR270205	Harris Beach State Park	2002	3	1	33	1	33	0	0
9	OR769241	Kiwanda Beach	2002	2	0	0	0	0	0	0
10	OR953303	Mill Beach	2002	3	1	33	0	0	1	33
11	OR271317	Nelscott Beach	2002	3	1	33	1	33	0	0
12	OR578688	Nye Beach	2002	3	0	0	0	0	0	0
13	OR478882	Oceanside Beach	2002	4	0	0	0	0	0	0
14	OR314514	Ona Beach	2002	4	1	25	1	25	0	0
15	OR742120	Otter Rock Beach	2002	3	1	33	1	33	0	0
16	OR556489	Roads End Beach	2002	3	1	33	1	33	0	0
17	OR425623	Rockaway Beach	2002	3	1	33	1	33	0	0
18	OR329442	Seaside Beach	2002	3	0	0	0	0	0	0
19	OR770138	Short Sand Beach	2002	3	0	0	0	0	0	0
20	OR400253	Siletz Bay	2002	3	1	33	0	0	1	33
21	OR627686	South Beach	2002	3	0	0	0	0	0	0
22	OR550486	Sporthaven Beach	2002	3	0	0	0	0	0	0
23	OR110179	Sunset Bay	2002	3	0	0	0	0	0	0
24	OR461207	Yachats Wayside Beach	2002	1	0	0	0	0	0	0
25	OR598473	Yaquina Bay	2002	3	0	0	0	0	0	0
<b>Totals</b>				<b>75</b>	<b>10</b>		<b>7</b>		<b>3</b>	

26	OR178544	Agate Beach	2003	37	0	0	0	0	0	0
27	OR468472	Bandon Face Rock	2003	12	0	0	0	0	0	0
28	OR775236	Barview County Park	2003	9	0	0	0	0	0	0
29	OR244981	Bastendorff Beach	2003	54	5	9	3	6	2	4
30	OR225794	Battle Rock Wayside	2003	8	0	0	0	0	0	0
31	OR641971	Beachside Waldport	2003	12	0	0	0	0	0	0
32	OR899292	Beverly Beach	2003	44	6	14	5	11	1	2
33	OR884773	Bob Straub State Park	2003	13	0	0	0	0	0	0
34	OR368023	Bullards Beach	2003	8	0	0	0	0	0	0
35	OR277842	Cannon Beach	2003	67	5	7	1	1	4	6
36	OR345069	Cape Lookout State Park	2003	10	0	0	0	0	0	0
37	OR624395	D River Beach	2003	51	6	12	6	12	0	0
38	OR543359	Florence South Jetty	2003	7	0	0	0	0	0	0
39	OR673620	Fogarty Creek Beach	2003	40	1	3	0	0	1	3
40	OR750407	Fort Stevens State Park	2003	10	0	0	0	0	0	0
41	OR600095	Gleneden Beach	2003	31	0	0	0	0	0	0
42	OR548324	Gold Beach	2003	11	0	0	0	0	0	0
43	OR588191	Gov Patterson State Park	2003	8	2	25	0	0	2	25
44	OR270205	Harris Beach State Park	2003	37	2	5	0	0	2	5
45	OR298050	Heceta Beach Florence	2003	8	0	0	0	0	0	0
46	OR676750	Hubbard Creek Beach	2003	8	2	25	1	13	1	13
47	OR601061	Hug Point Beach	2003	8	0	0	0	0	0	0
48	OR506189	Hunter Cr Wayside	2003	8	0	0	0	0	0	0
49	OR531432	Indian Beach	2003	7	0	0	0	0	0	0
50	OR769241	Kiwanda Beach	2003	24	0	0	0	0	0	0
51	OR186822	Manhattan Beach	2003	10	0	0	0	0	0	0
52	OR748927	Manzanita	2003	8	0	0	0	0	0	0
53	OR642423	Meyers Beach	2003	10	1	10	1	10	0	0
54	OR953303	Mill Beach	2003	40	8	20	6	15	2	5
55	OR475512	Moolack Beach	2003	11	1	9	0	0	1	9
56	OR276898	Nehalem Bay	2003	8	0	0	0	0	0	0
57	OR271317	Nelscott Beach	2003	37	2	5	0	0	2	5
58	OR378443	Neskowin Beach	2003	13	1	8	0	0	1	8
59	OR578688	Nye Beach	2003	36	1	3	0	0	1	3
60	OR478882	Oceanside Beach	2003	34	0	0	0	0	0	0
61	OR314514	Ona Beach	2003	54	7	13	5	9	2	4
62	OR196983	Ophir Creek	2003	7	0	0	0	0	0	0
63	OR742120	Otter Rock Beach	2003	35	1	3	0	0	1	3
64	OR556489	Roads End Beach	2003	37	0	0	0	0	0	0
65	OR425623	Rockaway Beach	2003	36	0	0	0	0	0	0
66	OR329442	Seaside Beach	2003	68	4	6	1	1	3	4
67	OR770138	Short Sand Beach	2003	64	0	0	0	0	0	0

68	OR400253	Siletz Bay	2003	37	2	5	0	0	2	5	
69	OR627686	South Beach	2003	35	1	3	0	0	1	3	
70	OR550486	Sporthaven Beach	2003	37	0	0	0	0	0	0	
71	OR110179	Sunset Bay	2003	43	7	16	6	14	1	2	
72	OR488730	Tolovana State Park Beach	2003	9	0	0	0	0	0	0	
73	OR603376	Twin Rocks Beach	2003	14	1	7	1	7	0	0	
74	OR937019	Umpqua Beach	2003	13	0	0	0	0	0	0	
75	OR311057	Whiskey Run Beach	2003	7	1	14	0	0	1	14	
76	OR461207	Yachats Wayside Beach	2003	12	0	0	0	0	0	0	
77	OR598473	Yaquina Bay	2003	40	1	3	1	3	0	0	
<b>Totals</b>				<b>1287</b>	<b>68</b>	<b>37</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>

78	OR178544	Agate Beach	2004	57	4	7	2	4	2	4	
79	OR468472	Bandon Face Rock	2004	8	0	0	0	0	0	0	
80	OR775236	Barview County Park	2004	46	2	4	0	0	2	4	
81	OR244981	Bastendorff Beach	2004	131	9	7	0	0	9	7	
82	OR225794	Battle Rock Wayside	2004	7	0	0	0	0	0	0	
83	OR641971	Beachside Waldport	2004	7	1	14	0	0	1	14	
84	OR899292	Beverly Beach	2004	83	10	12	8	10	2	2	
85	OR884773	Bob Straub State Park	2004	7	0	0	0	0	0	0	
86	OR368023	Bullards Beach	2004	6	0	0	0	0	0	0	
87	OR277842	Cannon Beach	2004	201	9	4	4	2	5	2	
88	OR345069	Cape Lookout State Park	2004	9	0	0	0	0	0	0	
89	OR624395	D River Beach	2004	66	2	3	0	0	2	3	
90	OR268676	Florence North Jetty	2004	36	0	0	0	0	0	0	
91	OR543359	Florence South Jetty	2004	7	0	0	0	0	0	0	
92	OR673620	Fogarty Creek Beach	2004	18	0	0	0	0	0	0	
93	OR750407	Fort Stevens State Park	2004	11	0	0	0	0	0	0	
94	OR600095	Gleneden Beach	2004	18	0	0	0	0	0	0	
95	OR548324	Gold Beach	2004	8	0	0	0	0	0	0	
96	OR588191	Gov Patterson State Park	2004	8	0	0	0	0	0	0	
97	OR270205	Harris Beach State Park	2004	69	13	19	6	9	7	10	
98	OR298050	Heceta Beach Florence	2004	7	0	0	0	0	0	0	
99	OR676750	Hubbard Creek Beach	2004	7	0	0	0	0	0	0	
100	OR601061	Hug Point Beach	2004	7	0	0	0	0	0	0	
101	OR506189	Hunter Cr Wayside	2004	7	0	0	0	0	0	0	
102	OR531432	Indian Beach	2004	7	0	0	0	0	0	0	
103	OR769241	Kiwanda Beach	2004	50	0	0	0	0	0	0	
104	OR186822	Manhattan Beach	2004	21	1	5	1	5	0	0	
105	OR748927	Manzanita	2004	7	0	0	0	0	0	0	
106	OR642423	Meyers Beach	2004	7	0	0	0	0	0	0	
107	OR953303	Mill Beach	2004	58	8	14	8	14	0	0	
108	OR475512	Moolack Beach	2004	7	0	0	0	0	0	0	
109	OR276898	Nehalem Bay	2004	7	0	0	0	0	0	0	
110	OR271317	Nelscott Beach	2004	102	0	0	0	0	0	0	
111	OR378443	Neskowin Beach	2004	7	0	0	0	0	0	0	
112	OR578688	Nye Beach	2004	69	0	0	0	0	0	0	
113	OR478882	Oceanside Beach	2004	63	0	0	0	0	0	0	
114	OR314514	Ona Beach	2004	69	6	9	0	0	6	9	
115	OR196983	Ophir Creek	2004	7	0	0	0	0	0	0	
116	OR742120	Otter Rock Beach	2004	70	0	0	0	0	0	0	
117	OR556489	Roads End Beach	2004	65	1	2	0	0	1	2	
118	OR425623	Rockaway Beach	2004	63	5	8	0	0	5	8	
119	OR329442	Seaside Beach	2004	165	0	0	0	0	0	0	
120	OR770138	Short Sand Beach	2004	162	6	4	4	2	2	1	
121	OR400253	Siletz Bay	2004	66	0	0	0	0	0	0	
122	OR627686	South Beach	2004	57	0	0	0	0	0	0	
123	OR550486	Sporthaven Beach	2004	23	0	0	0	0	0	0	
124	OR110179	Sunset Bay	2004	129	32	25	20	16	12	9	
125	OR488730	Tolovana State Park Beach	2004	7	0	0	0	0	0	0	
126	OR603376	Twin Rocks Beach	2004	21	3	14	1	5	2	10	
127	OR937019	Umpqua Beach	2004	44	2	5	0	0	2	5	
128	OR311057	Whiskey Run Beach	2004	7	0	0	0	0	0	0	
129	OR461207	Yachats Wayside Beach	2004	8	0	0	0	0	0	0	
130	OR598473	Yaquina Bay	2004	21	0	0	0	0	0	0	
<b>Totals</b>				<b>2220</b>	<b>114</b>	<b>54</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>

131	OR178544	Agate Beach	2005	39	3	8	2	5	1	3
132	OR775236	Barview County Park	2005	42	1	2	0	0	1	2
133	OR244981	Bastendorff Beach	2005	91	5	5	0	0	5	5

134	OR899292	Beverly Beach	2005	30	2	7	0	0	2	7	
135	OR277842	Cannon Beach	2005	140	9	6	5	4	4	3	
136	OR624395	D River Beach	2005	33	8	24	2	6	6	18	
137	OR268676	Florence North Jetty	2005	39	1	3	0	0	1	3	
138	OR270205	Harris Beach State Park	2005	35	2	6	0	0	2	6	
139	OR676750	Hubbard Creek Beach	2005	19	6	32	3	16	3	16	
140	OR601061	Hug Point Beach	2005	65	1	2	0	0	1	2	
141	OR769241	Kiwanda Beach	2005	69	2	3	0	0	2	3	
142	OR953303	Mill Beach	2005	29	7	24	1	3	6	21	
143	OR271317	Nelscott Beach	2005	70	4	6	2	3	2	3	
144	OR378443	Neskowin Beach	2005	27	3	11	2	7	1	4	
145	OR578688	Nye Beach	2005	61	5	8	1	2	4	7	
146	OR478882	Oceanside Beach	2005	30	1	3	0	0	1	3	
147	OR742120	Otter Rock Beach	2005	33	0	0	0	0	0	0	
148	OR425623	Rockaway Beach	2005	35	5	14	3	9	2	6	
149	OR329442	Seaside Beach	2005	109	4	4	0	0	4	4	
150	OR770138	Short Sand Beach	2005	143	14	10	2	1	12	8	
151	OR400253	Siletz Bay	2005	31	4	13	1	3	3	10	
152	OR627686	South Beach	2005	39	0	0	0	0	0	0	
153	OR110179	Sunset Bay	2005	99	30	30	11	11	19	19	
154	OR603376	Twin Rocks Beach	2005	12	2	17	1	8	1	8	
155	OR937019	Umpqua Beach	2005	41	0	0	0	0	0	0	
<b>Totals</b>				<b>1361</b>	<b>119</b>		<b>36</b>		<b>83</b>		

156	OR178544	Agate Beach	2006	46	6	13	3	7	3	7	
157	OR775236	Barview County Park	2006	46	6	13	0	0	6	13	
158	OR244981	Bastendorff Beach	2006	99	4	4	3	3	1	1	
159	OR899292	Beverly Beach	2006	42	0	0	0	0	0	0	
160	OR277842	Cannon Beach	2006	112	12	11	3	3	9	8	
161	OR624395	D River Beach	2006	31	5	16	1	3	4	13	
162	OR268676	Florence North Jetty	2006	45	4	9	2	4	2	4	
163	OR270205	Harris Beach State Park	2006	67	4	6	1	1	3	4	
164	OR676750	Hubbard Creek Beach	2006	17	1	6	1	6	0	0	
165	OR601061	Hug Point Beach	2006	59	0	0	0	0	0	0	
166	OR769241	Kiwanda Beach	2006	75	4	5	1	1	3	4	
167	OR953303	Mill Beach	2006	43	5	12	2	5	3	7	
168	OR271317	Nelscott Beach	2006	75	3	4	0	0	3	4	
169	OR378443	Neskowin Beach	2006	30	0	0	0	0	0	0	
170	OR578688	Nye Beach	2006	56	4	7	3	5	1	2	
171	OR478882	Oceanside Beach	2006	30	1	3	0	0	1	3	
172	OR742120	Otter Rock Beach	2006	50	1	2	0	0	1	2	
173	OR425623	Rockaway Beach	2006	33	3	9	2	6	1	3	
174	OR329442	Seaside Beach	2006	105	3	3	0	0	3	3	
175	OR770138	Short Sand Beach	2006	140	6	4	2	1	4	3	
176	OR400253	Siletz Bay	2006	32	1	3	1	3	0	0	
177	OR627686	South Beach	2006	45	2	4	0	0	2	4	
178	OR110179	Sunset Bay	2006	104	29	28	8	8	21	20	
179	OR603376	Twin Rocks Beach	2006	15	6	40	3	20	3	20	
180	OR937019	Umpqua Beach	2006	67	2	3	1	1	1	1	
<b>Totals</b>				<b>1464</b>	<b>112</b>		<b>37</b>		<b>75</b>		

181	OR178544	Agate Beach	2007	46	7	15	4	9	3	7
182	OR775236	Barview County Park	2007	27	0	0	0	0	0	0
183	OR244981	Bastendorff Beach	2007	93	4	4	1	1	3	3
184	OR225794	Battle Rock Wayside	2007	4	0	0	0	0	0	0
185	OR899292	Beverly Beach	2007	34	3	9	1	3	2	6
186	OR277842	Cannon Beach	2007	112	3	3	1	1	2	2
187	OR624395	D River Beach	2007	53	13	25	8	15	5	9
188	OR268676	Florence North Jetty	2007	41	2	5	0	0	2	5
189	OR270205	Harris Beach State Park	2007	84	9	11	5	6	4	5
190	OR676750	Hubbard Creek Beach	2007	31	3	10	1	3	2	6
191	OR601061	Hug Point Beach	2007	55	1	2	1	2	0	0
192	OR531432	Indian Beach	2007	7	0	0	0	0	0	0
193	OR769241	Kiwanda Beach	2007	75	2	3	2	3	0	0
194	OR953303	Mill Beach	2007	83	24	29	14	17	10	12
195	OR271317	Nelscott Beach	2007	57	1	2	0	0	1	2
196	OR378443	Neskowin Beach	2007	36	2	6	2	6	0	0
197	OR578688	Nye Beach	2007	93	22	24	17	18	5	5
198	OR478882	Oceanside Beach	2007	34	2	6	2	6	0	0
199	OR742120	Otter Rock Beach	2007	47	1	2	0	0	1	2



200	OR425623	Rockaway Beach	2007	43	3	7	0	0	3	7
201	OR329442	Seaside Beach	2007	100	1	1	0	0	1	1
202	OR770138	Short Sand Beach	2007	133	2	2	1	1	1	1
203	OR400253	Siletz Bay	2007	46	9	20	3	7	6	13
204	OR627686	South Beach	2007	30	0	0	0	0	0	0
205	OR110179	Sunset Bay	2007	95	16	17	7	7	9	9
206	OR488730	Tolovana State Park Beach	2007	1	0	0	0	0	0	0
207	OR603376	Twin Rocks Beach	2007	10	0	0	0	0	0	0
208	OR937019	Umpqua Beach	2007	41	4	10	1	2	3	7
209	OR461207	Yachats Wayside Beach	2007	5	0	0	0	0	0	0
<b>Totals</b>				<b>1516</b>	<b>134</b>	<b>71</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>

210	OR178544	Agate Beach	2008	88	8	9	3	3	5	6
211	OR468472	Bandon Face Rock	2008	38	2	5	2	5	0	0
212	OR244981	Bastendorff Beach	2008	83	5	6	2	2	3	4
213	OR225794	Battle Rock Wayside	2008	31	3	10	1	3	2	6
214	OR899292	Beverly Beach	2008	30	0	0	0	0	0	0
215	OR277842	Cannon Beach	2008	136	15	11	7	5	8	6
216	OR624395	D River Beach	2008	65	6	9	2	3	4	6
217	OR268676	Florence North Jetty	2008	33	0	0	0	0	0	0
218	OR543359	Florence South Jetty	2008	9	0	0	0	0	0	0
219	OR548324	Gold Beach	2008	20	1	5	1	5	0	0
220	OR270205	Harris Beach State Park	2008	97	32	33	19	20	13	13
221	OR676750	Hubbard Creek Beach	2008	95	5	5	2	2	3	3
222	OR601061	Hug Point Beach	2008	58	0	0	0	0	0	0
223	OR506189	Hunter Cr Wayside	2008	19	1	5	0	0	1	5
224	OR531432	Indian Beach	2008	68	1	1	0	0	1	1
225	OR769241	Kiwanda Beach	2008	63	0	0	0	0	0	0
226	OR953303	Mill Beach	2008	78	14	18	3	4	11	14
227	OR378443	Neskowin Beach	2008	27	0	0	0	0	0	0
228	OR578688	Nye Beach	2008	115	22	19	10	9	12	10
229	OR478882	Oceanside Beach	2008	27	0	0	0	0	0	0
230	OR742120	Otter Rock Beach	2008	42	1	2	1	2	0	0
231	OR425623	Rockaway Beach	2008	56	6	11	3	5	3	5
232	OR329442	Seaside Beach	2008	105	0	0	0	0	0	0
233	OR770138	Short Sand Beach	2008	140	1	1	0	0	1	1
234	OR400253	Siletz Bay	2008	29	0	0	0	0	0	0
235	OR110179	Sunset Bay	2008	83	9	11	4	5	5	6
236	OR603376	Twin Rocks Beach	2008	9	1	11	0	0	1	11
237	OR937019	Umpqua Beach	2008	24	0	0	0	0	0	0
238	OR311057	Whiskey Run Beach	2008	1	1	100	0	0	1	100
239	OR461207	Yachats Wayside Beach	2008	7	0	0	0	0	0	0
<b>Totals</b>				<b>1676</b>	<b>134</b>	<b>60</b>	<b>60</b>	<b>74</b>	<b>74</b>	<b>74</b>

240	OR178544	Agate Beach	2009	76	2	3	0	0	2	3
241	OR468472	Bandon Face Rock	2009	14	0	0	0	0	0	0
242	OR244981	Bastendorff Beach	2009	68	5	7	1	1	4	6
243	OR225794	Battle Rock Wayside	2009	17	1	6	0	0	1	6
244	OR277842	Cannon Beach	2009	81	4	5	1	1	3	4
245	OR624395	D River Beach	2009	63	9	14	2	3	7	11
246	OR268676	Florence North Jetty	2009	36	0	0	0	0	0	0
247	OR543359	Florence South Jetty	2009	1	0	0	0	0	0	0
248	OR548324	Gold Beach	2009	7	0	0	0	0	0	0
249	OR270205	Harris Beach State Park	2009	29	2	7	2	7	0	0
250	OR298050	Heceta Beach Florence	2009	1	0	0	0	0	0	0
251	OR676750	Hubbard Creek Beach	2009	52	3	6	0	0	3	6
252	OR601061	Hug Point Beach	2009	39	1	3	0	0	1	3
253	OR506189	Hunter Cr Wayside	2009	7	0	0	0	0	0	0
254	OR531432	Indian Beach	2009	50	2	4	0	0	2	4
255	OR769241	Kiwanda Beach	2009	54	1	2	0	0	1	2
256	OR953303	Mill Beach	2009	31	5	16	3	10	2	6
257	OR271317	Nelscott Beach	2009	3	0	0	0	0	0	0
258	OR378443	Neskowin Beach	2009	21	0	0	0	0	0	0
259	OR578688	Nye Beach	2009	76	10	13	7	9	3	4
260	OR478882	Oceanside Beach	2009	21	0	0	0	0	0	0
261	OR742120	Otter Rock Beach	2009	38	1	3	0	0	1	3
262	OR425623	Rockaway Beach	2009	21	1	5	0	0	1	5
263	OR329442	Seaside Beach	2009	79	2	3	0	0	2	3
264	OR770138	Short Sand Beach	2009	100	0	0	0	0	0	0
265	OR400253	Siletz Bay	2009	5	0	0	0	0	0	0

266	OR627686	South Beach	2009	3	0	0	0	0	0	0
267	OR110179	Sunset Bay	2009	75	23	31	11	15	12	16
268	OR603376	Twin Rocks Beach	2009	7	0	0	0	0	0	0
<b>Totals</b>				<b>1075</b>	<b>72</b>	<b>27</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>16</b>

269	OR178544	Agate Beach	2010	51	2	4	0	0	2	4
270	OR468472	Bandon Face Rock	2010	14	0	0	0	0	0	0
271	OR244981	Bastendorff Beach	2010	74	3	4	3	4	0	0
272	OR225794	Battle Rock Wayside	2010	18	1	6	1	6	0	0
273	OR884773	Bob Straub State Park	2010	1	0	0	0	0	0	0
274	OR277842	Cannon Beach	2010	55	3	5	2	4	1	2
275	OR635747	Crissey State Park	2010	28	0	0	0	0	0	0
276	OR624395	D River Beach	2010	67	12	18	5	7	7	10
277	OR268676	Florence North Jetty	2010	33	0	0	0	0	0	0
278	OR548324	Gold Beach	2010	10	0	0	0	0	0	0
279	OR270205	Harris Beach State Park	2010	28	6	21	1	4	5	18
280	OR298050	Heceta Beach Florence	2010	21	0	0	0	0	0	0
281	OR676750	Hubbard Creek Beach	2010	55	5	9	0	0	5	9
282	OR601061	Hug Point Beach	2010	40	2	5	1	3	1	3
283	OR531432	Indian Beach	2010	52	2	4	0	0	2	4
284	OR769241	Kiwanda Beach	2010	54	1	2	0	0	1	2
285	OR378443	Neskowin Beach	2010	21	0	0	0	0	0	0
286	OR578688	Nye Beach	2010	72	3	4	0	0	3	4
287	OR478882	Oceanside Beach	2010	21	0	0	0	0	0	0
288	OR742120	Otter Rock Beach	2010	36	0	0	0	0	0	0
289	OR425623	Rockaway Beach	2010	21	2	10	0	0	2	10
290	OR329442	Seaside Beach	2010	80	4	5	1	1	3	4
291	OR770138	Short Sand Beach	2010	104	1	1	0	0	1	1
292	OR550486	Sporthaven Beach	2010	21	1	5	0	0	1	5
293	OR110179	Sunset Bay	2010	76	21	28	6	8	15	20
294	OR488730	Tolovana State Park Beach	2010	45	3	7	1	2	2	4
295	OR603376	Twin Rocks Beach	2010	7	1	14	0	0	1	14
296	OR937019	Umpqua Beach	2010	21	0	0	0	0	0	0
<b>Totals</b>				<b>1126</b>	<b>73</b>	<b>21</b>	<b>21</b>	<b>52</b>	<b>52</b>	<b>16</b>

297	OR178544	Agate Beach	2011	29	0	0	0	0	0	0
298	OR468472	Bandon Face Rock	2011	10	0	0	0	0	0	0
299	OR244981	Bastendorff Beach	2011	44	0	0	0	0	0	0
300	OR225794	Battle Rock Wayside	2011	11	0	0	0	0	0	0
301	OR277842	Cannon Beach	2011	41	6	15	1	2	5	12
302	OR635747	Crissey State Park	2011	19	0	0	0	0	0	0
303	OR624395	D River Beach	2011	43	4	9	0	0	4	9
304	OR268676	Florence North Jetty	2011	18	0	0	0	0	0	0
305	OR548324	Gold Beach	2011	12	0	0	0	0	0	0
306	OR270205	Harris Beach State Park	2011	22	5	23	1	5	4	18
307	OR298050	Heceta Beach Florence	2011	23	4	17	4	17	0	0
308	OR676750	Hubbard Creek Beach	2011	33	0	0	0	0	0	0
309	OR601061	Hug Point Beach	2011	33	0	0	0	0	0	0
310	OR531432	Indian Beach	2011	38	1	3	1	3	0	0
311	OR769241	Kiwanda Beach	2011	38	1	3	1	3	0	0
312	OR378443	Neskowin Beach	2011	18	0	0	0	0	0	0
313	OR578688	Nye Beach	2011	53	4	8	2	4	2	4
314	OR478882	Oceanside Beach	2011	9	0	0	0	0	0	0
315	OR742120	Otter Rock Beach	2011	24	0	0	0	0	0	0
316	OR425623	Rockaway Beach	2011	18	1	6	0	0	1	6
317	OR329442	Seaside Beach	2011	59	4	7	2	3	2	3
318	OR770138	Short Sand Beach	2011	74	3	4	1	1	2	3
319	OR550486	Sporthaven Beach	2011	15	0	0	0	0	0	0
320	OR110179	Sunset Bay	2011	43	9	21	2	5	7	16
321	OR488730	Tolovana State Park Beach	2011	39	2	5	0	0	2	5
322	OR603376	Twin Rocks Beach	2011	6	0	0	0	0	0	0
323	OR937019	Umpqua Beach	2011	18	0	0	0	0	0	0
<b>Totals</b>				<b>790</b>	<b>44</b>	<b>15</b>	<b>15</b>	<b>29</b>	<b>29</b>	<b>16</b>

324	OR178544	Agate Beach	2012	9	0	0	0	0	0	0
325	OR515788	Alsea Bay	2012	15	0	0	0	0	0	0
326	OR244981	Bastendorff Beach	2012	24	0	0	0	0	0	0
327	OR277842	Cannon Beach	2012	30	1	3	1	3	0	0
328	OR624395	D River Beach	2012	18	1	6	0	0	1	6
329	OR270205	Harris Beach State Park	2012	24	3	13	0	0	3	13

330	OR298050	Heceta Beach Florence	2012	18	1	6	0	0	1	6
331	OR676750	Hubbard Creek Beach	2012	18	0	0	0	0	0	0
332	OR953303	Mill Beach	2012	20	2	10	1	5	1	5
333	OR578688	Nye Beach	2012	24	3	13	0	0	3	13
334	OR425623	Rockaway Beach	2012	14	1	7	1	7	0	0
335	OR329442	Seaside Beach	2012	42	0	0	0	0	0	0
336	OR770138	Short Sand Beach	2012	56	0	0	0	0	0	0
337	OR110179	Sunset Bay	2012	24	1	4	0	0	1	4
338	OR488730	Tolovana State Park Beach	2012	42	1	2	0	0	1	2
339	OR603376	Twin Rocks Beach	2012	6	0	0	0	0	0	0
340	OR461207	Yachats Wayside Beach	2012	5	0	0	0	0	0	0
<b>Totals</b>				<b>389</b>	<b>14</b>		<b>3</b>		<b>11</b>	

341	OR178544	Agate Beach	2013	7	0	0	0	0	0	0
342	OR515788	Alsea Bay	2013	19	1	5	1	5	0	0
343	OR244981	Bastendorff Beach	2013	24	2	8	0	0	2	8
344	OR277842	Cannon Beach	2013	26	3	12	2	8	1	4
345	OR624395	D River Beach	2013	21	0	0	0	0	0	0
346	OR270205	Harris Beach State Park	2013	41	14	34	7	17	7	17
347	OR298050	Heceta Beach Florence	2013	19	1	5	0	0	1	5
348	OR676750	Hubbard Creek Beach	2013	19	3	16	1	5	2	11
349	OR953303	Mill Beach	2013	19	2	11	1	5	1	5
350	OR578688	Nye Beach	2013	27	3	11	0	0	3	11
351	OR425623	Rockaway Beach	2013	20	5	25	2	10	3	15
352	OR329442	Seaside Beach	2013	39	2	5	2	5	0	0
353	OR770138	Short Sand Beach	2013	56	10	18	7	13	3	5
354	OR110179	Sunset Bay	2013	23	8	35	3	13	5	22
355	OR488730	Tolovana State Park Beach	2013	39	1	3	1	3	0	0
356	OR603376	Twin Rocks Beach	2013	7	1	14	0	0	1	14
<b>Totals</b>				<b>406</b>	<b>56</b>		<b>27</b>		<b>29</b>	

<b>Total additional exceedences</b>		<b>555</b>
<b>Average additional exceedences per year</b>		<b>46</b>

### Difference in Exceedances (158 and 60 BAV)

Year	# Samples	# Exceed 60	# Exceed 158	# Difference
2013*	406	56	27	29
2012	389	14	3	11
2011	790	44	15	29
2010	1126	73	21	52
2009	1075	72	27	45
2008	1676	134	60	74
2007	1516	134	71	63
2006	1464	112	37	75
2005	1361	119	36	83
2004	2220	114	54	60
2003	1287	68	37	31
2002	75	10	7	3

\*12 advisories (2013); ~25 advisories with BAV of 60

- Total additional exceedances: 555
- Average additional exceedances per year: 46

**Comments from  
Massachusetts Department of Public Health**

Massachusetts Department of Public Health comments

Celona, Mike (DPH) <mike.celona@state.ma.us>

Wed 5/28/2014 5:01 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: Nascarella, Marc (DPH) <marc.nascarella@state.ma.us>; Curran, Vanessa (DPH) <vanessa.curran@state.ma.us>;

This email is to provide comments on the United States Environmental Protection Agency (US EPA) "Draft National Beach Guidance and Required Performance Criteria for Grants (EPA-820-D-13-001)". Specifically, in April 2014, EPA announced that states receiving funding from EPA to support implementation of the Beaches Environmental Assessment and Coastal Health (BEACH) Act would have a new requirement in order to receive future funding. This new requirement stipulates that future grantees must perform public notification, such as issuing an advisory, for any water quality test result from a bathing beach that exceeds the appropriate Beach Action Value (BAV). For marine beaches, the BAV is either 60 or 70 cfu/100 mL depending on illness rates derived by EPA.

The Massachusetts Department of Public Health, Bureau of Environmental Health (MDPH/BEH), has been receiving EPA funding under the BEACH Act since 2001. MDPH/BEH and local health officials in Massachusetts are also responsible for enforcement of state beaches regulations. Massachusetts water quality standards for marine bathing beaches (for which we receive EPA BEACH Act funding) is the most conservative standard (104 cfu/100 mL enterococci) of the potential water quality standards that EPA has stipulated to date.

The proposal by EPA to require grantees to conduct public notification, such as advisories, when a water quality sample exceeds a BAV level contradicts EPA's description of the BAV, which is clearly not a water quality standard (EPA Recreational Water Quality Criteria 2012) but only a guidance. This creates the confusing scenario where a performance requirement of a federal BEACHES grant (the adoption of the BAV guideline complete with the requisite public notification when the value has been exceeded) contradicts state regulations requiring compliance with an EPA-established bacteriological water quality standard. Notifications based on two different values will serve to create a great deal of confusion for health officials and the general public alike.

We also note that based on the results of the 2013 beach season in Massachusetts, we expect over 300 additional notifications at marine beaches that exceed the BAV guidance value, but meet the state regulatory criterion (i.e., at beaches with samples > 60 cfu/100 ml; but < 104 cfu/100 ml). Requiring confusing public notification in so many instances where sampling met regulatory standards would result in significant resource impacts.

MDPH/BEH therefore urges EPA not to move forward with this proposed performance requirement for future BEACH Act funding. Instead, we suggest that grantees be allowed the

flexibility of using BAV as EPA originally intended, i.e., as an optional informational tool. Thank you for your consideration of these comments.

**Comments from  
Commonwealth of Puerto Rico**



## PR Comments

Melendez Aguilar, Angel <AngelMelendez@jca.gobierno.pr>

Wed 5/28/2014 5:14 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: Grebe, Helen <Grebe.Helen@epa.gov>;

1 attachment

removed.txt;

In 2002, the Environmental Quality Board (EQB) began the planning phase of the Beach Monitoring and Public Notification Program, which was established in the Quality of Water Area. In the planning phase, EQB evaluated 43 beaches classified as areas swimmers by the PR Planning Board. EQB established an order of priority (ranking), considering the following: were public beaches, number of visitors per year, number of tourist per year, potential sources of contamination and percent of violations for bacteriological parameters (if had sampling station). Finally, 23 beaches were selected in accordance with the ranking and the federal funds awarded the Federal Environmental Protection Agency (EPA). In March 2003, the monitoring of their beaches and began public notice of water quality on the beaches.

EQB continue the implementation of the Beach Monitoring and Public Notification Program until 2012. During fiscal year 2013, this Program was discontinued due to the fact that EPA did not awarded funds. In October, 2013 the funds were allocated for the Beaches Program, so we initiated again with the work plan established in previous years, this time for 36 beaches.

The National Beach Guidance and Required Performance Criteria for Grants (Draft April 2014) in page 17, section 2.2 Performance Criteria states the following: *"FY 2014 beach grants awarded before this document is final must be consistent with the performance criteria in the 2002 National Beach Guidance and Required Performance Criteria for Grants. Beach grants for FY 2014 and beyond that are awarded after this document is final must be consistent with the performance criteria in this document"*. On page 35, Section 3.6.1 Initial Submission to EPA states the following: *"The BEACH Act authorizes EPA to award implementation grants only if the public is provided an opportunity to review the grant-funded monitoring and notification program through a process that provides for public notice and the opportunity to comment on the program, which would include ranking of beaches. (See performance criterion 10, section 2.2.10.) A state or tribe should review and address any comments before submitting its List of Beaches to EPA."*

EQB already submitted in May 22, 2014 its grant application for FY 2014 funds. Our proposal contemplates sampling the same 36 beaches approved by EPA on October, 2013. It should be pointed out that, the beaches participating in our Beach Program were selected based on Department of Natural and Environmental Resources bathing zones inventory, which consists of coastal areas of Puerto Rico suitable for bathing and passive recreation that are classified as public beaches by the Puerto Rico Planning Board. In addition, selection of the beaches was based on frequency of use by local bathers and tourists, number of users, public sanitation facilities, and location of pollution sources (point and non-point), as well as its accessibility and appropriateness for bathing activities. The evaluation and selection of the beaches included in the Program was presented to EPA through a draft

of a Quality Assurance Project Plan. EPA accepted the list of beaches selected and included in the EQB Beach Program.

Nevertheless, we have a concern regarding fulfillment of all requirements of the National Beach Guidance and Required Performance Criteria for Grants (Draft April 2014) before EPA approves FY 2014 grant. We understand that it is a bit restrictive at this time to meet the requirement for public participation before October, 2014. Assuming that we start the process for public participation on June 1, 2014 it would take at least 4 to 5 months to finish it; a draft has to be developed, then it has to be reviewed internally before a public notice is issued, at least 30 days has to be granted for public submitting comments and then EQB has to review and address the comments and update the List of Beaches before submitting it to EPA. We understand that we can fulfill this requirement before EPA awards FY 2015 funds.

If you have any comments or questions, do not hesitate to contact us.

Thanks,



*Ángel R. Meléndez Aguilar, BSChE, MBA*

División de Planes y Proyectos Especiales

Plans and Special Project Division



Área de Evaluación y Planificación Estratégica

Evaluation and Strategic Planning Area

Tel. /Phone: (787) 767-8181 ext. 3543

Fax: (787) 767-2592

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**Comments from  
Oregon Department  
of Environmental Quality**

Public Comments: National Beach Guidance and Required Performance Criteria for Grants  
BORISENKO Aaron <BORISENKO.Aaron@deq.state.or.us>

Wed 5/28/2014 5:19 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: CUDE CURTIS G <CURTIS.G.CUDE@state.or.us>; FARRER DAVID G

<DAVID.G.FARRER@state.or.us>; jae.p.douglas@state.or.us <jae.p.douglas@state.or.us>;

Knittel, Janette <Knittel.Janette@epa.gov>; larry.caton@state.or.us <larry.caton@state.or.us>;

Pedersen, Rob <Pedersen.Rob@epa.gov>; HILLWIG Rebecca <Rebecca.Hillwig@state.or.us>;

To Whom It May Concern;

The goals of the beach guidance criteria are admirable. Greater protection for waders and swimmers at our nations beaches continues the important mission of the Clean Water Act goals in making our nations waters safer for contact recreation. Yet resources for natural resource protection are dwindling. Both federal and state natural resource agencies are being asked to do more with less. To be the most effective with the resources available, we need to prioritize our environmental efforts on issues that pose the greatest risks to human health and sensitive aquatic life. Oregon has some of the nations cleanest beaches as demonstrated by the data we have collected over the last decade. Hot spots have been identified in a few areas and progress has been made in correcting some of those problems using the data provided through the beach program. However, the data also demonstrates that wading and swimming along Oregon's beaches is one of the lowest risk recreational contact activities a visitor could do in Oregon (other than hypothermia and strong currents) . So here are some of the potential consequences of the new criteria in Oregon:

1. We estimate there will be approximately 40 % more advisories.
2. The new criteria will create the perception, real or not, that our beaches are degrading (the opposite is probably true).
3. The temporal or spatial extent of our beach monitoring activities will be reduced. Because the new criteria will lead to more advisories, we will need to either reduce the number of beaches we visit to accommodate resampling or reduce the number of times we visit beaches over the season.
4. There will be less monitoring resources for investigative sampling.
5. Additional public attention will be focused on the "issues of our beaches" detracting from more substantial environmental concerns like groundwater quality, polluted freshwater streams, emerging toxics concerns, stormwater and other non-point source issues etc.
6. Inconsistency with water quality standards for fresh water creates confusing messaging to Oregonians.
7. More advisories may adversely impact local tourism which is important to the coastal communities.

I realize that many of these consequences are outside of the scope and objectives of the Nation Beach Guidance document. However, as we promulgate new guidance and rules I think it is important to understand the "big picture" as we try to be as effective as possible in implementing effective "place based" environmental priorities based on data demonstrating the extent and risk to human health and aquatic life. Thank you for your consideration of these comments.

*Aaron Borisenko*

*Water Quality Monitoring Manager*

*Oregon Department of Environmental Quality*

*Laboratory Environmental Assessment Division*

*3150 NW 229th Suite 150*

*Hillsboro, Oregon 97124*

*Office: (503) 693-5723*

*Fax: (503)693-4999*

*[borisenko.aaron@deq.state.or.us]borisenko.aaron@deq.state.or.us*

*"No problem can be solved from the same level of consciousness that created it." –Albert Einstein*

**Comments from  
Huron-Clinton Metroparks**

## National Beach Guidance and Performance Criteria for Grants

Paul Muelle <Paul.Muelle@metroparks.com>

Wed 5/28/2014 6:00 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Thank you for the opportunity to comment on the revised, draft *National Beach Guidance and Performance Criteria for Grants (Guidance)*.

The Huron-Clinton Metroparks supports the use of new tools such as rapid methods (i.e., Quantitative Polymerase Chain Reaction), predictive tools, and electronic media, to improve public health protection at beaches as outlined in the Guidance documents. The Metroparks have been fortunate to receive funds from the Great Lakes Restoration Initiative (GLRI) to improve stormwater systems and to develop and implement some of the new tools outlined in the Document, which have and will help us better manage our beaches. In order for our park system to complete the implementation of these projects, significant financial support from the GLRI was required, for which we are grateful.

However, with limited funding from both Federal, State and Local sources, we are concerned with the expectations to incorporate additional requirements into an already struggling beach monitoring and maintenance program. We are concerned that Michigan must adopt a new Beach Action Value of 190 *E. coli* per 100 milliliters (ml) until they can promulgate new water quality standards (WQS) based on the 2012 Recreational Water Quality Criteria (RWQC). It is our understanding that the EPA recently reviewed Michigan's existing WQS and determined that they are consistent with the 2012 RWQC, which recommends a geometric mean and a statistical threshold value, yet Michigan would not be able to obtain BEACH Act funds without changing their WQS. We support efforts to improve beach water quality and protect public health, however, disagree with requiring states to adopt a Beach Action Value and new WQS as a condition of grant funding which is intended to improve human health protection, but could do the opposite if Michigan cannot implement the new standards in the time available for a grant award.

The GLRI has provided the Metroparks significant funding in our quest to protect public health at our beaches by supporting the implementation of successful methods and tools and we support the expansion and refinement of the use of sanitary surveys, rapid methods, and forecast models to identify, correct, and eliminate sources of pollution. However, we urge the EPA to re-consider any changes in the Performance Criteria that would place undue financial burden on an organization through program implementation or negatively impact an organization due to newly imposed WQS.

Sincerely,

**Paul Muelle** | *Natural Resources and Environmental Compliance Manager*

Huron-Clinton Metroparks

13000 High Ridge Drive, Brighton, MI 48114-9058 | 810-494-6052

[www.metroparks.com]www.metroparks.com

**Comments from  
Illinois Environmental Protection Agency**





# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/558-2012

May 28, 2014

Denise Hawkins, Chief  
Fish, Shellfish, Beach and Outreach Branch  
Office of Water/Office of Science and Technology  
U.S. Environmental Protection Agency  
Washington, D.C. 20460  
Sent via e-mail

RE: Comment on the draft National Beach Guidance and Required Performance Criteria for Grants

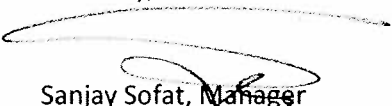
Dear Ms. Hawkins:

Illinois Environmental Protection Agency (Illinois EPA) provides the following comment on the subject draft document. Illinois EPA is the agency responsible (through the Illinois Pollution Control Board) for adopting the National Recreational Criteria (2012) as water quality standards for bacteria for our state. This is a long and involved process and will take two to three years to carry out. We will be converting state-wide bacteria water quality standards from fecal coliform to E. coli. Illinois' existing beach criteria are 235 cfu/ 100 mL E. coli.

We do not see the logic, as expressed in the subject Guidance, of requiring the state's beaches to be regulated at a new value, 190 cfu/100 mL while Illinois EPA undergoes the adoption process for the National Recreational Criteria (page 70 of the draft Guidance). The state and local authorities in Illinois that are responsible for regulating beaches will find it extremely difficult to deal with this new value for the few years in the interim. We intend to adopt the National Recreational Criteria as state standards and we believe that Illinois is in good standing with USEPA as we facilitate this process. Penalizing beach managers makes no sense when it is recognized that the process of adopting national criteria as state standards takes time, hence the Clean Water Act allowance of three years (the triennial review) to accomplish this task. Therefore, we request that the USEPA extend the timeframe to implement the grant conditions contained within the draft beach guidance and performance criteria document and thereby keep the beach criteria as they are (235 cfu/ 100 mL) during the interim period.

Thank you for the opportunity to provide comments on the revised BEACH Act guidance.

Sincerely,



Sanjay Sofat, Manager  
Division of Water Pollution Control  
Bureau of Water

**Comments from  
Chicago Park District**



**chicago park district**

Administration Office  
541 North Fairbanks  
Chicago, Illinois 60611  
(312) 742-PLAY (7529)  
(312) 747-2001 TTY  
www.chicagoparkdistrict.com

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*Mayor*

May 28, 2014

**Comments concerning the Draft National Beach Guidance and Required Performance Criteria for Grants**

Dear Sir or Madam:

Thank you for the opportunity to comment on the Draft National Beach Guidance and Performance Criteria for Grants (Guidance).

The Chicago Park District (CPD) owns and manages 27 public beaches on Lake Michigan within the City of Chicago. CPD is responsible for beach monitoring and public notification programs at Chicago's public beaches. CPD is currently in compliance with the 1986 recreational water quality criteria as promulgated by USEPA in 2004 for all coastal waters where states had not yet adopted the 1986 criteria. Advisories are issued when *E. coli* levels are detected or predicted to be above 235 cfu / 100 ml. CPD has received Beach Act funding, administered by the Illinois Department of Public Health, to support a portion of our monitoring and notification programs for several years.

CPD personnel have reviewed the Guidance. We commend EPA for encouraging the use of tools such as sanitary surveys, predictive modeling, rapid testing and electronic media for public notification of health risk. Thanks in part to funding through the Great Lakes Restoration Initiative, use of these tools has already expanded throughout the Great Lakes and has improved the protection of public health at many beaches.

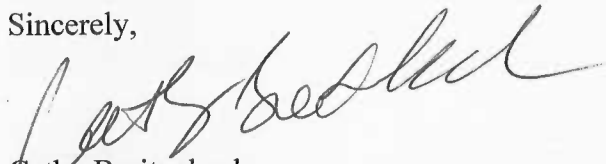
We are also troubled by inconsistencies between the Guidance and the 2012 Recreational Water Quality Criteria. The Guidance requires states to use the most restrictive Beach Action Value (BAV) of 190 cfu / 100 ml where states have not yet adopted the 2012 Criteria in order to qualify for grant funding. The 2012 Criteria provide states with a choice between a BAV of 235 cfu / 100 ml and 190 cfu / 100 ml. We strongly encourage EPA to strive for consistency between the Guidance and the 2012 Criteria. The legislative process for states to adopt new water quality regulations takes many months. As currently drafted, the Guidance may have the effect of changing the BAV used at beaches to 190 for one or two years, only to have it change back to 235 once the 2012 Criteria are adopted.

Beach water quality is a complex issue to explain to the general public, and CPD has completed extensive work to educate the public about beach water quality, public health risks, and how the public can help to protect water quality. We fear that a temporary reduction in the water quality criteria would only serve to confuse people and erode confidence in beach water quality programs.

CPD has also spent the past four years building predictive models for water quality that allow us to issue advisories based on real-time predictions instead of day-old lab results. This work was supported by EPA funding through the Great Lakes Restoration Initiative and extensive technical support from the US Geological Survey. The models are also based on the existing water quality criteria of 235. Modifying the models to reflect a change in the water quality criteria to 190 would take time and resources. We strongly believe that public health would be better served by focusing resources on sanitary surveys and mitigation projects to address the sources of bacteria instead of modifying operations to accommodate a temporary change in the water quality criteria.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cathy Breitenbach', written in a cursive style.

Cathy Breitenbach  
Director of Cultural and Natural Resources  
Chicago Park District

**Comments from  
Hawaii Department of Health**

## Comments for the draft National Beach Guidance and Required Performance Criteria for Grants

### General Comments

It seems beach related research done the last several years are being ignored. The work done by the Great Lakes people, info and research done by them and others does not show in this document. A lot more is being asked but will more funds be coming also? Enterococci does not work as a FIB in Hawaii. In coordination with *Clostridium perfringens* it does. Any rain event in Hawaii increases Enterococci levels in our coastal waters as well as any high surf event.

Research in Hawaii has shown that enterococci replicates in the soil, sand, biofilm, and decaying matter and that is why we use *Clostridium* as a secondary tracer. Without it, we would be putting out false alarms. This document does not address secondary FIB tracers or other options at all. Will we be allowed to use *Clostridium* in the future?

qPCR data can be generated in the same day if: 1) sampler starts at 4 am and delivers the samples to lab by 7 am, 2) lab staff preps the lab, stripping DNA from all equipment, before samples arrive, 3) filter and rolls filter and puts in bead tube another 1-2 hours depending on amount of samples, 4) put into machine, and 5) 6 hours later results. So by 3 pm we have the data and by 4pm public notification is out. By that time, most people are beginning to leave the beach. So, is the expense of the qPCR equipment, establishing a library, and a dedicated lab area worth all this? Then there is the question of whether what is found is viable.

There seems to be some re-inventing of the wheel in this document, is it really needed?

### Section 3.4.1.1.1

Although a sanitary survey can be a major undertaking requiring a great deal of time and resources for most programs, it is a good step to take. This would be a good tool to use to characterize the existing conditions of the watershed and any possible contributory factors that may affect water quality. The information could also be used to review what is working well in a watershed to produce or maintain good water quality. This would be a wealth of information that could be used program wide within the Clean Water Act community.

### Section 3.6

List of beaches, program and non-program. Is the list on non-program beaches a new requirement? Are these beaches required to have lengths and boundaries determined, as well as the other required information for program beaches? I would like more clarification on what a Tier 3 beach is and what a non-program beach is.

### Section 3.6.1 and .2

The List of Beaches must be a living document as status of beaches changes as more information is gathered or as conditions change. It seems EPA is leaving the word "significant" in to allow states the leeway to decide whether public comment is required. At this level of decision-making, public comment may be problematic. Why? There are numerous groups and individuals that feel the area that they frequent or study should have high priority. They have vested interest in the areas and often have a narrow view of the overall monitoring goals. Soliciting information about areas is a better way to make decisions regarding tiering beaches. The term the "squeaky Wheel" gets the oil should not apply to development of a sampling plan. The state program should have already acquired the necessary information prior to tiering the beaches to make sound informed decisions, all of which is already required to be public information. Soliciting public comment will add another layer of review that will bog down the implementation of the monitoring and waste valuable time and resources.

## Section 4.1

### qPCR

For many states, qPCR is still an unreachable goal. The up-front costs of the equipment and associated costs for building the genetic library is still prohibitive. Additionally, although qPCR is termed as “same-day” results, the reality is that when sample collection times are considered along with travel time to the laboratory, same-day results that will be useful for beachgoers are still not possible. If samples are run in a special qPCR only room, lab person is highly skilled, and samples arrive early in the morning(6 am), then possibly results could be available by noon. But most labs do not have a dedicated room and therefore there is required prep time for lab, sampler would need to start sampling run at 4 am or 5 am depending on the number of stations, which pushes the time back another two to three hours. Until a truly effective rapid test is developed that is implementable for the above described situations, qPCR is still not really a viable tool.

### Section 4.3.1.1.1 Event-scale Variability

Hawaii is already using a predictive tool in the event of a significant rain event. When the National Weather Service issue a Flash Flood Warning, and storm water discharge is verified, Brown Water Advisory is issue for the area of concern. It can a bay, a section of coastline, an entire island coastline, or the entire State of Hawaii. This was developed by review of a large historical database for WQ data and descriptive conditions that accompany the data.

### 4.3.2.3

This will be problematic for HI. Sporadic exceedances of enterococci occur randomly statewide. These tend to be one-time events which are typically followed by lower numbers. How do we address this? Is resampling the next day an option? What if the resample day falls on a Friday or a day preceding a



holiday? Our budget does not allow overtime for lab staff. That is why we test for enterococci and *Clostridium perfringens*. If only enterococci is high and *Clostridium* is low, there is no human fecal contamination issue. Any rain event and/or high surf in Hawaii will result in elevated enterococci numbers due to enterococci replicating in biofilm and in the sand.

#### Section 4.3.2.3.3 After a Heavy Rainfall Event

If there is a heavy rainfall event and/or the National Weather Service Issues a Flash Flood Warning, and stormwater discharge verified, a Brown Water Advisory is issued for the affected waters (coastline).

#### Section 4.6.2 Rainfall-based Beach Notification Threshold

Hawaii is already using a predictive tool in the event of a significant rain event. When the National Weather Service issue a Flash Flood Warning, and storm water discharge is verified, Brown Water Advisory is issue for the area of concern. It can a bay, a section of coastline, an entire island coastline, or the entire State of Hawaii. This was developed by review of a large historical database for WQ data and descriptive conditions that accompany the data.

#### Section 4.7.2.1 Beach Action Value

It is unclear from the document whether usage of the BAV is a recommended or mandatory, procedure, since it contradicts itself. If it is mandatory, this will be problematic for HI. Since the value must be lower than the STV, there is a possibility that numerous notifications will be sent out. The notifications will also be for a sampling that occurred a day ago. Will such notice be relevant and useful to beachgoers? Since enterococci has been shown by research to persist in tropical soils, beach sand, biofilm, decaying vegetation, and therefore not be a sign of possible fecal contamination in waters, how can

exceedance of such an indicator be relied upon to issue a notification that waters are contaminated with fecal matter? In Hawaii, if we had used the BAV 70 during the last 30 days, we would have had 10 BAV alert to put out that was due to background numbers.

## Conclusions

I applaud EPA's efforts to standardize and strengthen state's and tribe's BEACH programs. However the amount of oversight and rules is overly burdensome. It will divert time and manpower away from actual implementation of the program, thereby diminishing the effectiveness of BEACH. Although much of the needed time will be up-front, maintaining the reviews will still require diverting employee (samplers) away from sample collection. Sanitary surveys alone, which I feel is a useful tool, will take a large amount of effort to complete statewide. With other projects and studies, it will be very difficult to adhere to these new requirements.

**Comments from  
Washington State  
Department of Ecology & Health**

**May 28, 2014**

**To: EPA Office of Water**

**From: Debby Sargeant, Washington State Beach Program Manager**

**Subject: Comments on April 18, 2014 draft National Beach Guidance and Required Performance Criteria for Grants (EPA-820-D-13-001)**

**Chapter 2 Section 2.2.2:** Three new considerations are added to the basis for developing the tiered monitoring plan. Does this mean each BEACH program must develop another tiered monitoring program?

**Chapter 3 Section 3.6:** More detailed guidance is given as to how to classifying beaches into program versus non-program beaches. Washington State has already gone through this process; does the new guidance mean we have to do it again?

**Chapter 4 Section 4.7.2.1:** Washington BEACH program is concerned about the requirement that all BEACH Act grants use a beach notification threshold or beach action value (BAV) of 60 cfu if they have not adopted the 2012 EPA bacteria criteria. This requirement will mean a higher cost to our BEACH program, this will mean we will have to cut beaches from the program or monitor beaches less frequently.

The BAV of 60 cfu is much more stringent than our current BAV of 104 cfu. This will mean we will have to resample beaches more often, this is quite costly. For Washington State we estimated what the additional costs would be if the BAV were 60 or 70 (this is based on data from 2013 beach resample events):

For the BAV  $\geq 70$  cfu we would have to resample 96 times versus the 64 resample events that occurred in 2013.

- Additional laboratory costs would be costing \$3,360.
- Additional labor costs to resample 32 more times would be \$5,120.
- Total additional cost approximately: \$8,480.

For the BAV  $\geq 60$  cfu we would have to resample 112 times versus the 64 resample events that occurred in 2013.

- Additional laboratory costs would be costing \$5,040.
- Additional labor costs to resample 48 more times would be \$7,680.
- Total additional cost approximately: \$12,720.

**Based on just the laboratory costs I estimate we'd have to cut 2-3 beaches at the  $\geq 70$  cfu BAV and 3-4 beaches at the  $\geq 60$  cfu BAV.**

In addition, Washington State has not adopted the 2012 bacteria criteria. Local health jurisdictions think it would be politically unfavorable to use a lower numeric criteria than our current state standard. Our partners may choose to opt out of the beach program all together. A more politically favorable option would be to wait until Washington State has promulgated EPA's 2012 criteria, thus local jurisdictions would see it as a state imposed requirement.

**Comments from  
Guam Environmental Protection Agency**



# GUAM ENVIRONMENTAL PROTECTION AGENCY

AHENSIAŃ PRUTEKSIUN LINA'LA GUAHAN

GUAM ENVIRONMENTAL PROTECTION AGENCY

1973

EDDIE BAZA CALVO  
GOVERNOR OF GUAM

RAY TENORIO  
LT. GOVERNOR OF GUAM

ERIC M. PALACIOS  
ADMINISTRATOR

YVETTE CRUZ  
DEPUTY ADMINISTRATOR

P.O. BOX 22439 BARRIGADA, GU 96921

EPA.GUAM.GOV

May 28<sup>th</sup>, 2014

Hafa Adai,

The Environmental Monitoring and Analytical Services (EMAS) Division of Guam EPA, which is responsible for administrating and implementing the USEPA BEACH Act, submits the following comments for the DRAFT National Beach Guidance and Required Performance Criteria for Grants.

### **Performance Criterion 3 - Requirement to use Beach Action Value**

Better guidance is needed on the use of the BAV vs GM/STV Criteria. For example, will states be required to conduct two notifications? One based on the BAV (alerts) and another based on the RWQC (standards exceedances). If not, then is the purpose of the RWQC simply for monthly assessments?

Clarification is needed on the definition and differences in the use of "advisory" vs "closure" vs "posting" vs "notification alerts". Guam uses "advisory" for water quality standard exceedances. Will an exceedance of the BAV be labeled an "alert"?

Clarification is needed on whether the GM and STV are calculated on a rolling or static duration. Evaluating Guam data, we will have significant differences in the number of "advisories/alerts" depending on which method is used.

### **Performance Criterion 4 - Requirement to post data on website**

Guam meets this by posting our list of beaches under advisory every week (our sampling frequency at 44 beaches is weekly). Clarification is need on whether this requirement includes posting the raw data to the website as well or does our submission to STORET and BEACON suffice?

Dangkolo Na Si Yu'os Ma'ase

Jesse T. Cruz  
EMAS Division Administrator

**Comments from  
State of Louisiana  
Department of Health and Hospitals**



# State of Louisiana

Department of Health and Hospitals  
Beach Monitoring Program

May 28, 2014

EPA  
Transmitted via email to BEACH\_GUIDANCE@epa.gov

Re: Louisiana Beach Program's comments on the draft *National Beach Guidance and Required Performance Criteria for Grants*, EPA-820-D-13-001, dated April 18, 2014.

Dear Sir or Madam,

Thank you for the opportunity comment on the draft *National Beach Guidance and Required Performance Criteria for Grants* (Draft Guidance). We have thoroughly reviewed the Draft Guidance and identified four areas of concern. Our concerns relate to the proposed Beach Action Value (BAV), use of rapid methods and predictive tools, and the timeline for states to implement the proposed changes. Each of these issues is addressed below.

## BAV

Louisiana currently uses both a 30-day running geometric mean (GM) criterion of 35 CFU/100 mL and a single sample maximum (SSM) criterion of 104 CFU/100 mL. Using a simulation study, we have estimated that with once weekly sampling, approximately 60% of exceedances would be missed using single sample criterion alone. Those results are generally consistent with Louisiana's (LA) examination of advisory source (i.e., GM only, SSM only, both), in which 54% (722 of 1339) advisories were based on exceedance of SSM criterion (i.e., SSM only and both SSM and GM criterion) between 2009 and 2013. Examination of applying the BAV criteria of 60 CFU/100mL to LA's 2013 season versus LA's current criteria results in 20% fewer exceedances, even though the single sample threshold is reduced from 104 to 60. The draft guidance does a good job of explaining the need for both GM and STV for WQ assessment purposes (Section 1.5.1), but completely ignores that rationale in the beach advisory section. If the Draft Guidance remains unchanged, LA will consider adopting the BAV as proposed and drop the GM criterion from its advisory decision process. Although we believe that adoption of the BAV will be less protective of public health, we do not believe that it is appropriate for LA to use a more stringent decision rule than that of neighboring states, creating the false impression that LA's beaches are more contaminated than those of neighboring states as a result. If LA adopts the BAV, we will also consider reducing the sampling period by one month to correspond with the swimming season as a running 30-day GM would not be required.



### Use of Rapid Methods

The Draft Guidance requires states to consider the use of rapid methods. LA does not plan to adopt rapid methods at this time for the following reasons:

- LA's beaches are relatively low use and do not warrant more than once per week sampling, negating any benefit of applying rapid methods.
- LA's beaches are remote from the lab, with samples collected in the morning being delivered to the lab in the afternoon, further negating any benefit of using rapid methods.
- All Beach samples are processed by the Louisiana Department of Health and Hospital's (LDHH) certified lab, which does not have, and does not plan to acquire, the equipment and personnel to perform qPCR.

### Predictive Tools

LA completed a thorough examination of the potential to use predictive models to issue preemptive advisories in 2009<sup>1</sup> and determined that models with acceptable sensitivity and specificity could not be developed with the environmental data collected by LA's Beach Program. More recent analysis<sup>2</sup> has documented the considerable annual variation in the association between the observed environmental variables and enterococci density, further reducing the likelihood of developing acceptable predictive tools. Accordingly, LA does not plan to use predictive tools until better environmental data become available.

### Implementation

LA will not be able to implement the Draft Guidance, once finalized, until federal FY16. Adoption of the Draft Guidance would require LA to revise its Beach Program Plan, QAPP, program database, and website. Revision of the Beach Program Plan will require LDHH approval to ensure compliance with the state's Sanitary Code, issuance of a public notice that the plan is available for review, a public comment period, and preparation of the a final document that address any comments received. These additional requirements were not anticipated under the current grant, and the available funds have been fully committed to implementing current program requirements. LA will be able to implement the Draft Guidance using FY14 grant proceeds to develop the new program requirements in FY15 and implement the revised plan in FY16. LA is prepared to amend its FY14 grant proposal to include a work plan describing the development of the revised Beach Program Plan, QAPP, program database, and website during FY15.

Thank you for considering LA's comments on the Draft Guidance.

Sincerely,



Caitlin L. Pinsonat  
Beach Monitoring Program Coordinator

---

<sup>1</sup> Wagner, R.O., M. Schaub, and J. Freedman. 2009. *Predictive Modeling of Remote Beaches – Louisiana's Experience*. National Beach Conference, April 20-22 2009, Huntington Beach, CA

<sup>2</sup> LDHH. 2012. *Louisiana BEACH Grant Report; 2011 Swimming Season*.

**Comments from**  
**California Environmental Protection Agency**  
**State Water Resources Control Board**

Comments on US EPA Beach Guidance and Required Performance Criteria for Grants

Gjerde, Michael@Waterboards <Michael.Gjerde@waterboards.ca.gov>

Wed 5/28/2014 7:44 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Cc: Fleming, Terrence <Fleming.Terrence@epa.gov>; Crader, Phillip@Waterboards

<Phillip.Crader@waterboards.ca.gov>; Hann, Paul@Waterboards

<Paul.Hann@waterboards.ca.gov>; Whitney, Vicky@Waterboards

<Vicky.Whitney@waterboards.ca.gov>;

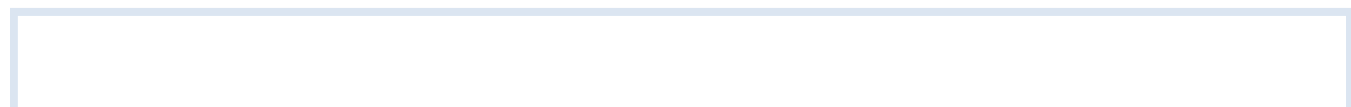
Thank you for the opportunity to comment on the US EPA National Beach Guidance and Required Performance Criteria for Grants dated April 18, 2014 (US EPA Beach Guidance). These guidelines will be very helpful in ensuring that the California Beach Monitoring program successfully meets the goals of protecting California Beach visitors from pathogen borne illnesses.

California has the most robust beach monitoring program in the nation. The State provides \$1.8 million annually for sampling, analysis and notification in coordination with the approximate \$500,000 annual US EPA provides through the Beach grant program. In addition, counties spend an additional one million dollars each year to do monitoring beyond what is required by state and federal law. Each year California conducts weekly monitoring at 509 sites at 255 beaches. Through the Clean Beaches Initiative (CBI), California has funded sanitary surveys and associated system repairs of over \$100 million to date.

California is also on the cutting edge of science related to pathogen monitoring and detection. California has invested more than \$100 million in significant research and specific beach projects to address identified beach problems. Several examples of this cutting edge research, conducted by the Southern California Coastal Water Research Project and funded largely with state CBI funds are referenced in the Grant guidelines.

Finally, California has invested heavily in addressing those beaches that do show regular exceedences of recreational standards. Through the Clean Beaches Initiative, California funds sanitary surveys and associated system repairs. California has adopted, where necessary, total maximum daily loads (TMDL) that identify the sources of bacteria and include enforceable implementation measures designed to protect public health and beach water quality.

With this cumulative experience as a background, we have reviewed the changes in this year's guidelines. Many of the changes we support, and have in many cases already implemented. California is testing the use of rapid indicators at three different county jurisdictions. However, we have concerns about the proposal to require the use of Beach Action Values for beach posting. We believe that the requirement to use the Beach Action Values may be problematic for the following reasons that are discussed more fully below. 1) Imposition of the beach action values is effectively a standards action being implemented through a grant program without the benefit of a public process. 2) The requirement to use the beach action values creates legal inconsistencies with state laws. 3) Use of the beach action values will increase the number of beach postings by between 50% and 60% with little likely improvement in public health outcomes. 4) The use of beach action values may cause public confusion and uncertainty over Beach Safety. 5) Imposition of the beach action values may have an adverse economic impact to the state. 6) Imposition of the beach action values may result in a reduction in overall beach monitoring.



Imposition of the Beach Action value (beach action values) is effectively a standards action being implemented through a grant program without the benefit of a public process

The new EPA 2012 recreational criteria is clear that “beach action values is not a component of EPA’s recommended criteria, but a tool that states may choose to use, without adopting it into their WQS as a “do not exceed” value for beach notification purposes.” California already has a beach notification standard that meets or exceeds the protection levels proposed in the EPA criteria document, and is not currently proposing to adopt the Beach Action Values. The State Water Board is concerned that the requirement to use beach action values has the same effect and could be considered a standards action being implemented through a grant program without the opportunity for public comment or the process requirements of Clean Water Act Section 301.

The requirement to use the beach action values creates legal inconsistencies with state laws

California already has a set of protective bacteria standards (known as AB411 beach standards) that have been approved through a public process. The AB411 standards are already as or more stringent than the new EPA 2012 Recreational Criteria. AB411 requires weekly beach monitoring and posting for any exceedences of seven related FIB standards for total and fecal coliforms and enterococcus. These standards include the three Geomean and single sample maximum values as well as a fecal/ total coliform ratio.

The California posting requirements based on these standards trigger additional actions including resampling, notification to the agencies responsible for the operation of the beach and referral to the district attorney. Compelling the use of the beach action value sets up regulatory inconsistency between state and federal programs where counties will be required to post beaches using beach action values, but water quality evaluation for 303(d) listing will be tied to standards implemented as part of the USEPA 2012 water quality criteria which does not require the use of beach action values.

Use of the beach action values will increase the number of beach postings by between 50% and 60% with little likely improvement in public health outcomes.

Requiring that beaches be posted at a level of 60 cfu would greatly increase the number of postings at California beaches compared to the Enterococcus standard single sample maximum (SSM) of 104 cfu currently in place or the proposed Statistical Threshold Value (STV) of 110 cfu that corresponds to the 32 NEEAR gastrointestinal illness (NGI) per 1,000 recreators. When using the beach action values of 60 during the period from 2009 through 2013, the number of postings would have increased by 48.4% compared to the 104 SSM and 50.1% with 110 STV. Especially disconcerting would be that during the very dry year of 2013 when beach water quality was measurably better than historically, actual postings using the beach action values would have increased by 61.9% over the 104 SSM or 63.4% over the 110 STV thresholds if applied in 2013.

The State Water Board does not foresee the increase in postings as an improvement in public health outcomes, particularly since most postings are still based on current cultural methods requiring at least 24 hours for analysis. A more appropriate response would be to promote the use of beach predictive modelling and rapid indicator testing to improve the timeliness of beach public health notifications.

The use of beach action values may cause public confusion and uncertainty over Beach Safety

Current state law requires the posting of signs at California beaches when bacteria levels exceed health standards set by the California Department of Public Health. Creating grant requirement to post beaches using the beach action values threshold separates this process from the standards proposed by the 2012 US EPA criteria already deemed protective of public health. It would likely also create a situation where beaches are regularly posted, but do not qualify as impaired beaches under the 303(d) listing policy. Thus the use of beach action values to post beaches would create confusion for the public as the postings would create mixed messages about the safety of recreational waters.

Imposition of the beach action values may result in a reduction in overall beach monitoring.

Some counties in California have over 50 years of beach water quality sampling experience. Counties often use their own resources, beyond those provided by the state and federal grant programs to sample at more locations and a higher frequency than required by California state law. If the counties are required to post sampled sites much more frequently based on the beach action values, many counties may choose to reduce their overall sample program to only those levels explicitly required by state and federal law. This could result in reduced county sampling and a consequent decrease in public health protection which is contrary to the stated intention to increase precautionary warning to the swimming public.

conclusion

The State Water Board supports the US EPA efforts to improve public health protection and notification at our nation's beaches. We have reviewed the changes to the US EPA Beach Guidance and support many of the changes. However, we do not believe that imposition of the beach action values as thresholds for beach notification through the National Beach Guidance Criteria for Grants is the most appropriate approach. We continue support for state and US EPA development of predictive modelling and rapid test methods that will provide more useful information to the public on a same day basis. We believe these are more cost effective approaches for improving public notification. As with the beach action values and for most of the remaining proposed changes in the National Beach Guidance Criteria for Grants, the State Water Board supports their additions as guidance but not as required performance criteria.

California looks forward to working with US EPA toward improving public notification about beach bathing hazards. We look to find approaches implementing appropriate beach predictive modelling or implementing rapid methods for fecal indicator bacteria which may be a more effective ways to protect public health. California will continue to support and participate with US EPA in any review process.

# Late Comments

The following comments were received after the May 28, 2014 comment deadline.

**Comments from  
City of Long Beach  
Department of Health and Human Services**

Comments on EPA Rec - 1 Guidelines

Nelson Kerr <Nelson.Kerr@longbeach.gov>

Fri 5/30/2014 7:56 PM

To: Beach\_Guidance <Beach\_Guidance@epa.gov>;

Categories: Red category

**Comments from City of Long Beach, DHHS, Environmental Health, Long Beach CA.**

- Additional review as to the applicability of the science to California beaches is warranted, i.e. different sources of pollution - less sewage treatment effluent reaching our beaches vs east coast
- The new regulations will create confusion with required posting of "Beach Action Values", which are "non regulatory". BAV's need additional review and input prior to implementing posting requirements.
- Economic impacts to local programs and beneficial uses issues need additional analysis.
- Lab impacts will need to be evaluated.
- Having multiple risk levels and multiple criteria will create confusion among the monitoring agencies and the general public.
- Recommend meeting with local monitoring program reps, state waterboards and EPA prior to implementation or approval

This approach from EPA should consider how it will impact California monitoring programs, which are very extensive when compared to other states. The new criteria will have a major impact on beach health and economy and at this point, we are not sure of tangible health benefits. More analysis and discussion is warranted prior to the adoption of the EPA Guidance Document.

Nelson Kerr, MPA, REHS  
Bureau Manager, Environmental Health  
City of Long Beach, Dept. of Health and Human Services  
2525 Grand Ave. Long Beach, CA 90815  
Ph: (562) 570-4170 Fax: (562) 570-4038

Please note my new email address is  
nelson.kerr@longbeach.gov

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**Comments from**  
**South Carolina Department of**  
**Environmental Health and Control**



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

## South Carolina Department of Environmental Health and Control

Comments on “National Beach Guidance and Required Performance Criteria for Grants

### **Page 38 Section 4.1 Performance Criteria line 31 – 37 The Potential use of predictive tools.**

Response:

The South Carolina standard for enterococci listed in state regulation 61-68 WATER CLASSIFICATIONS & STANDARDS states that: “Additionally, for beach monitoring and notification activities for CWA Section 406 only, samples shall not exceed a single sample maximum of 104/100 ml.”

For states with recreational water quality standards, the use of predictive models may not be specifically supported in regulation.

### **Page 69 - 70 Section 4.7.2 Threshold Values for Beach Notification Actions (Performance Criterion 3) pg 69 line 1 – 40 and pg 70 line 1-16**

Response:

The state standard for enterococci listed in state regulation 61-68 WATER CLASSIFICATIONS & STANDARDS states that: “Additionally, for beach monitoring and notification activities for CWA Section 406 only, samples shall not exceed a single sample maximum of 104/100 ml.”

The State considers this proposed requirement to be beyond what is required by State and Federal regulation. As set forth in the Recreational Water Quality Criteria (2012), the EPA considers the illness rate of 32 illnesses in 1000 to be a reasonable risk and the STV is considered the reasonable quantification value to represent that risk.

**Comments from  
New York City  
Department of Health and Mental Hygiene**



NEW YORK CITY DEPARTMENT OF

HEALTH AND MENTAL HYGIENE

Mary T. Bassett, MD, MPH

Commissioner

Christopher Boyd  
Assistant Commissioner  
Bureau of Environmental  
Sciences and Engineering

42-09 28<sup>th</sup> Street  
14<sup>th</sup> Floor, CN #56  
Queens, NY 11101  
347-396-6001 (tel)  
347-396-6089 (fax)

[BEACH\\_GUIDANCE@epa.gov](mailto:BEACH_GUIDANCE@epa.gov)

Re: National Beach Guidance and Required Performance Criteria for Grants

To Whom it May Concern:

The New York City Department of Health and Mental Hygiene (the “Department”), submits the following comments providing recommendations concerning the National Beach Guidance and Required Performance Criteria for Grants document:

### **Clarification Regarding Beach Notification Actions**

As detailed in Section 4.7.2.1 (page 69, line 21) and mentioned in other location throughout the document, EPA requires that the 2012 RWQC Beach Action Values to be used as the Beach Notification Threshold. DOHMH suggests that the guidance document and performance criteria consistently specify that, “any [*valid*] single sample above the BAV would trigger a beach notification until collection of another sample below the BAV.” Section 4.3.2.3 details how and when single samples are considered valid or representative.

### **Clarification of Single Sample Requirements**

DOHMH suggests that the EPA clarify how the BAV single sample threshold be applied to beaches that stretch many miles, and are sampled multiple times (>10) on a single day. For example, in the case of any (1) single sample exceedance of the BAV for a long, continuous beach, should the notification be applied to the entire beach, or only that particular section of beach where the exceedance occurred? Is the interpretation of single sample representativeness and notification scope entirely under state/local jurisdiction?

Furthermore, does state/local jurisdiction have flexibility in determining the validity and representativeness of a single sample? For example can the representative single sample for a long, continuous beach be a mean average of all of the single samples taken at that beach on a given day?

### **Clarification of BAV Notification Actions**

DOHMH suggests clarifying section 5.3.2 When to Remove a Notification to confirm, or specify otherwise, that a Notification Action may only be lifted when water quality sample results meet the BAV threshold *and* the 2012 RWCQ for Statistical Threshold Value (STV) and Geometric Mean (GM). If any of the three thresholds remains unmet, the beach notification action must not be lifted.

## Public Evaluation of Program:

EPA does not sufficiently define what qualifies as a “program change” that would trigger evaluation in section 2.2.10. Additionally, DOHMH suggests either reevaluating the role or adjusting available grant funds to account for the burden of public evaluation of beach monitoring and notification program. The current and proposed grant funding amount is not sufficient to include full public evaluation of all beach program changes within the scope of the program.

### 5.4.1 Beach Signs:

To improve the communication of risk to the public when water quality does not meet acceptable standards, DOHMH conducted focus groups and intercept surveys of beach patrons in 2013. In response to input on several beach signs, DOHMH developed a new public notification sign for beach water quality warnings that communicates clearly and directly the action to be taken and the basis for the direction. The EPA may wish to consider including this and other signs considered more effective for consideration by other jurisdictions.



### 5.4.4.2 Text Messages:

DOHMH developed a new texting service for the 2014 bathing season that other jurisdictions may wish to consider incorporating into their public communication strategies. Beach patrons by texting “beach” to 877-877 are enrolled in texting service that allows for both on demand updates on the status of a beach by texting the name of the beach to the service and the ability for DOHMH to “push” a text message to a subscriber. Provided below is the simple, direct message received regarding status of a beach. As the EPA guidance suggests, this texting service was accompanied by a media and advertising strategy to promote the texting service. Attached is copy of the advertisement used. The EPA should consider including examples of successful messaging and promotion efforts to assist the dissemination of best practices.

**OPEN:**

\*BEACH NAME\* is OPEN. To learn more about water quality sampling and the DOH Beach Program go to: [maps.nyc.gov/beach](https://maps.nyc.gov/beach)

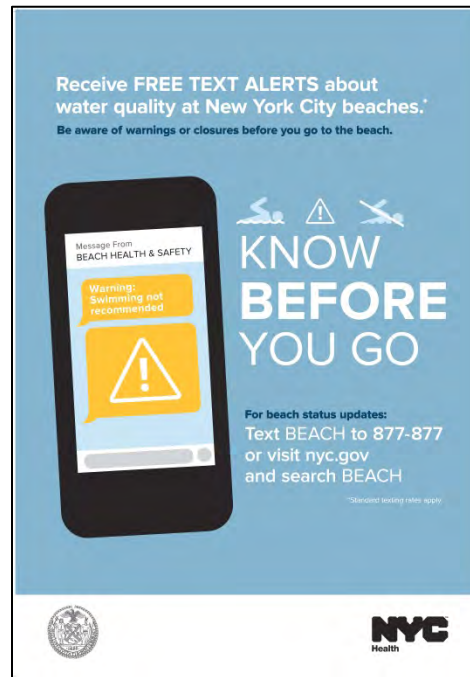
**ADVISORY:**

WARNING. Swimming and wading at \*BEACH NAME\* is NOT recommended at this time. Water is contaminated w/ sewage or storm runoff. For more info text WHY

“WHY” → Sewage and runoff may cause illnesses. Children, pregnant women, the elderly & the chronically ill are at higher risk. For more info, visit: [maps.nyc.gov/beach](https://maps.nyc.gov/beach)

**CLOSED:**

\*BEACH NAME\* is CLOSED. By Order of the Health Department, swimming and wading are not considered safe at this time. For more info, visit: [maps.nyc.gov/beach](https://maps.nyc.gov/beach)



Thank you for the opportunity to comment on this important guidance document.

Sincerely,

Christopher Boyd  
Assistant Commissioner

Attachments

# WARNING



Swimming and wading are **not recommended.**

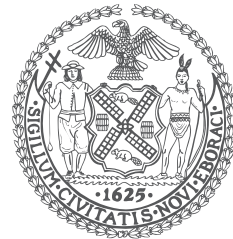
**Water is contaminated** with sewage or storm runoff, which may cause vomiting, diarrhea, respiratory illness or infections. Children, pregnant women, the elderly and the chronically ill are at higher risk.

**For beach status updates:**

Text **BEACH** to **877-877** or call **311**



# BEACH CLOSED



By order of the Health Department,

Swimming and wading are  
**not permitted.**

**For beach status updates:**

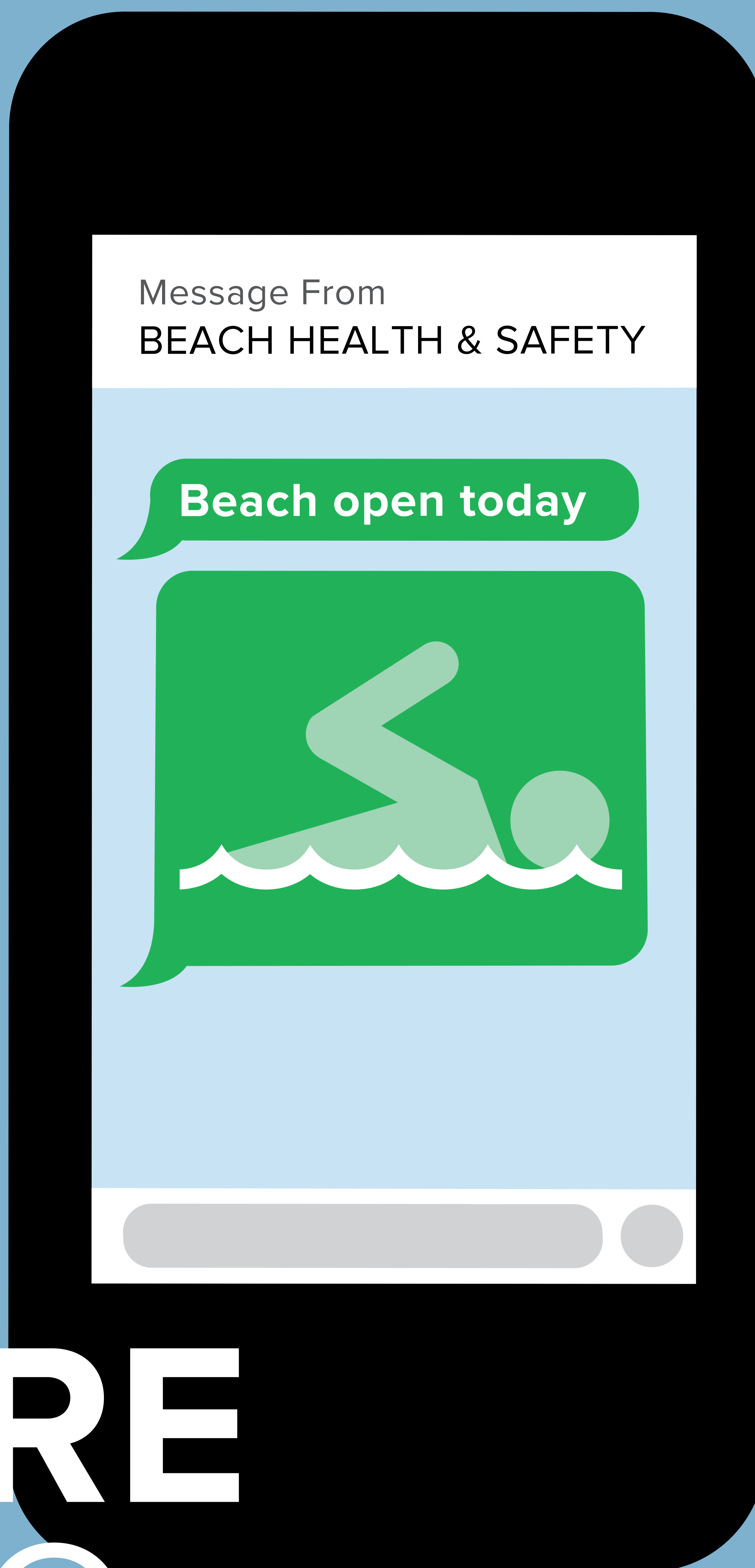
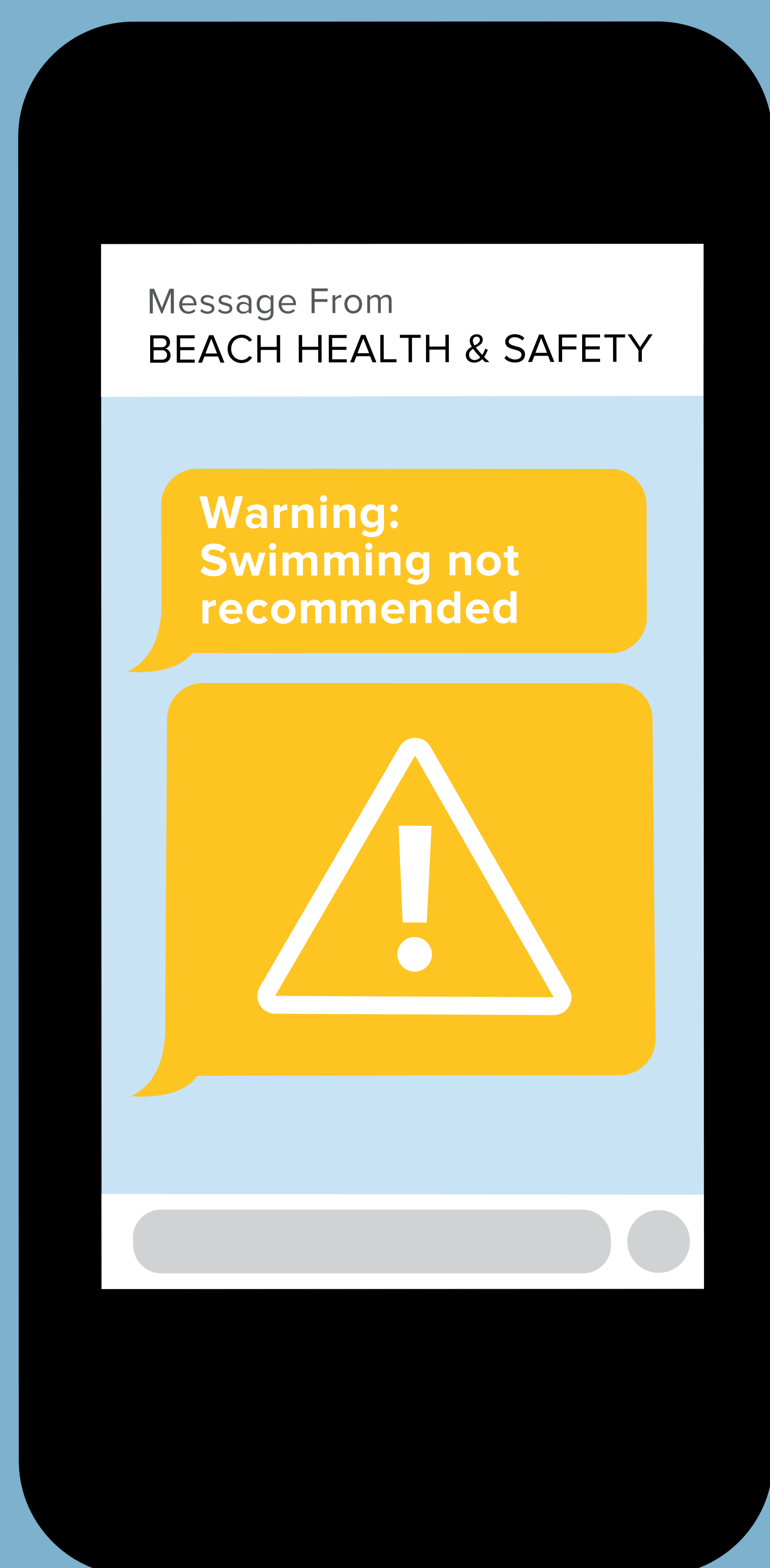
Text **BEACH** to **877-877** or call **311**





Receive **FREE TEXT ALERTS** about water quality at New York City beaches.\*

Be aware of warnings or closures before you go to the beach.



KNOW  
BEFORE  
YOU GO

**For beach status updates:**

Text BEACH to 877-877

or visit [nyc.gov](http://nyc.gov) and search BEACH

\*Standard texting rates apply

