

STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, M.D., M.P.H., M.P.A.  
Commissioner



Dannel P. Malloy  
Governor  
Nancy Wyman  
Lt. Governor

05/27/2014

VIA EMAIL: beach\_guidance@epa.gov

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 Guidance and Required Performance Criteria for Grants (EPA-820-D-13-001).

The Connecticut Department of Public Health with the annual assistance of US EPA Beach Grant funding since 2003 has promoted marine beach monitoring and public notification. This has been a collaborative effort with 24 shoreline towns, 19 local health departments and districts, and the Connecticut Department of Energy and Environmental Protection.

The Draft National Guidance and Required Performance Criteria for Grants provides thoughtful guidance to support marine and Great Lakes beach monitoring. This guidance is presented in a framework that also contains specific requirements and performance criteria, some of which will have to be satisfied prior to grant application.

While the Draft guidance and performance criteria are laudable, I have serious reservations they can be implemented in relation to anticipated funding levels and other public health considerations that may serve to reduce the risk of swimmer illness.

Please note the included comments and supporting documentation submitted by the Connecticut Department of Public Health that is based on review of the Draft National Guidance and Required Performance Criteria for Grants.

Sincerely,

A handwritten signature in black ink, appearing to read "Suzanne Blancaflor".

Suzanne Blancaflor, M.S., M.P.H., Chief  
Environmental Health Section



Phone: (860) 509-7293 • Fax: (860) 509-7295 • VP: (860) 899-1611  
410 Capitol Avenue, P.O. Box 340308  
Hartford, Connecticut 06134-0308  
[www.ct.gov/dph](http://www.ct.gov/dph)

*Affirmative Action/Equal Opportunity Employer and Provider*

COMMENTS ON  
DRAFT NATIONAL BEACH GUIDANCE AND REQUIRED  
PERFORMANCE CRITERIA FOR GRANTS  
(EPA-820-D-13-001)

05/22/2014

CONNECTICUT DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL HEALTH SECTION

Jon Dinneen  
Associate Research Analyst

# **CONTENTS**

---

1.0 INTRODUCTION AND BACKGROUND	1
2.0 COMMENTS AND METHODOLOGY	2
2.1 STAFFING REQUIREMENTS SUMMARY	2
2.2 ANTICIPATED CHALLENGES SUMMARY	2
2.3 RECOMMENDATIONS	2
2.4 STAFFING REQUIREMENTS IN DEPTH	3
2.5 ANTICIPATED CHALLENGES IN DEPTH	4
3.0 APPENDICES	6
3.1 A. REQUIREMENTS AND PERFORMANCE CRITERIA	7
3.2 B. PERFORMANCE CRITERIA	18

## **1.0 INTRODUCTION AND BACKGROUND**

On April 18, 2014, US EPA issued its Draft National Beach Guidance and Required Performance Criteria for Grants (document identifier: EPA-820-D-13-001). The final version of this document will supersede earlier guidance and performance criteria published in 2002 by US EPA for the Beach Grant.

While there is continuity between the guidance and performance criteria in force currently and the new proposed Draft guidance and performance criteria, there is enough difference between the two documents to warrant a close review and appraisal in relation to uncertain future funding and how the new guidance and performance criteria may be interpreted and mandated.

By separating guidance from requirements and performance criteria as they are found in the Draft guidance and performance criteria document, the Connecticut Department of Public Health (CT DPH) focused strictly on proposed Beach Grant requirements and performance criteria.

DPH used this approach to more easily review the Draft guidance and performance criteria document and structure its comments.

## 2.0 COMMENTS AND METHODOLOGY

The Draft guidance and performance criteria document references requirements and performance criteria throughout its 98 pages. Some performance criteria are referenced more than once and in more than one Chapter of the document. Requirements are scattered throughout the document.

CT DPH gathered all the requirements *and* performance criteria for reference in Appendix A (starting on page 7). CT DPH has collected all references to the ten (10) performance criteria and placed them in order in Appendix B (see page 18).

These Appendices provide two resources that inform the STAFFING REQUIREMENTS review (see page 3) and the ANTICIPATED CHALLENGES statement (see page 4).

### 2.1 STAFFING REQUIREMENTS SUMMARY



CT DPH concludes that the Draft guidance and performance criteria will require a significant staffing commitment for Connecticut - up from one man-year per grant (or 12 man-months) to 3.8 man-years (or 46 man-months) per grant. CT DPH anticipates an increase in administrative overhead for US EPA Region 1. See page 3 of this review.

### 2.2 ANTICIPATED CHALLENGES SUMMARY



CT DPH anticipates *significant* challenges associated with implementing a Beach Grant that is bound by the requirements and performance criteria proposed in the Draft guidance and performance criteria document. Perhaps most notably, the Draft requirements and performance criteria are not scalable to accommodate future uncertain grant funding levels. For instance, nowhere in the Draft guidance and performance criteria document is there provision for calibrating these requirements and criteria to keep them in line with funding. See page 4 of this review.

### 2.3 RECOMMENDATIONS



The final guidance and performance criteria document should include language permitting a negotiable, scalable and calibrated approach to beach monitoring and grant implementation that is in line with funding levels, epidemiology, research findings *and* collaborative models of governance that require sharing of authority and encourage distributed public health protection across jurisdictional and agency (organizational) boundaries.

In addition, the final guidance and performance criteria document should address and promote public health outreach and education measures targeted at beach goer behaviors (both non-swimmers and swimmers) that may serve to reduce the risk of illness.

## 2.4 STAFFING REQUIREMENTS IN DEPTH

### PERFORMANCE CRITERIA STAFFING REQUIREMENTS WORKSHEET

This worksheet compares Full Time Equivalent (FTE) man-months to satisfy the current annual Beach Grant award (see the FTE - CURRENT column in the chart below) with the total anticipated annual work requirement in man-months to meet the ten (10) performance criteria described in the Draft guidance document (see the FTE - NEW column of the chart) for one grant year. The FTE - NEW column includes current annual workload in man-months plus the additional workload in man-months anticipated with a strict enforcement (interpretation) of the Draft guidance and performance criteria document.

Performance criterion	Requirement	FTE (months)		See in this review
		CURRENT	NEW	page number
Performance criterion 1	<b>Requires</b> a state or tribe to develop a risk-based beach evaluation and classification process and apply it to its coastal recreation waters.	1	9	<b>19</b>
Performance criterion 2	<b>Requires</b> a state or tribe to develop a tiered monitoring plan		8	<b>20</b>
Performance criterion 3	<b>Requires</b> a state or tribe to develop detailed assessment methods and procedures		7	<b>22</b>
Performance criterion 4	<b>Requires</b> states and tribes to develop a mechanism to collect and report monitoring data in timely reports	4	4	<b>23</b>
Performance criterion 5	<b>Requires</b> a state to document any delegation of monitoring responsibilities that might have been made to local governments	1	1	<b>24</b>
Performance criterion 6	<b>Requires</b> that a state or tribe develop a public notification and risk communication plan		4	<b>25</b>
Performance criterion 7	<b>Requires</b> that a state or tribe give notice to the public when coastal recreation waters are not meeting or are not expected to meet applicable water quality standards for pathogens and pathogen indicators.		1	<b>26</b>
Performance criterion 8	<b>Requires</b> that states and tribes compile their notification plans into timely reports. States and tribes <b>must report</b> to EPA the actions they have taken to notify the public	2	4	<b>27</b>
Performance criterion 9	<b>Requires</b> that states describe any notification responsibility they have delegated or intend to delegate to local governments	4	5	<b>28</b>
Performance criterion 10	<b>Requires</b> that states and tribes provide the public with an opportunity to review the program through public notice and provide an opportunity to comment		3	<b>29</b>
	<b>TOTAL FTE (man-months)</b>	<b>12</b>	<b>46</b>	

## 2.5 ANTICIPATED CHALLENGES IN DEPTH

The Draft guidance document introduces a number of new considerations associated with future Beach Grants. Here is a summary of these potential complications envisioned for Connecticut.

### 1. Public notification of sampling exceedances.

The Draft guidance requires "immediate" public notification of water quality monitoring sample exceedances. Current culture based methods for enumerating indicator bacteria require 24 hour culture time. Results reported today as exceeding the WQC will be for samples collected yesterday. This kind of public notification confuses and obscures good public health messaging.

### 2. Prioritize how Beach Grant funding will be spent.

The Draft guidance document states that grant recipients must prioritize how they will spend their funding - partly by deciding which beaches to monitor and which beaches to not monitor. Local health departments and municipalities are likely to object to this approach based on public health concerns.

### 3. Report monitoring data annually "or at a frequency required by the EPA Administrator".

The Draft guidance document leaves the door open for a change in the frequency of reporting beach data to US EPA. More frequent reporting will force changes to the overall beach monitoring workflow. This will involve the local health departments that are responsible for collecting recreational water samples and posting beaches and include the State Laboratory data entry protocol for marine RWQ sample results.

### 4. Responsibility for describing how a grant recipient plans to detect pathogens and pathogen indicators.

The Draft guidance document suggests that grant recipients will be responsible for detecting and assessing levels (concentration) of pathogens causing swimmer illness and the levels (concentration) of pathogen indicators.

Currently states assess the concentration of indicator bacteria, not because it indicates the level (concentration) of pathogens causing swimming illness, but because the concentration of indicator bacteria has been shown by US EPA to associate with risk of swimmer illness.

States are not likely to be in position to assess the concentration of pathogens or even pathogen indicators in natural recreational waters, for obvious reasons that include the technical difficulty of sampling for, culturing and enumerating pathogens associated with swimmer illness.

### 5. Requirements and performance criteria not matched with anticipated funding.

The Draft guidance document's criteria and performance requirements do not allow for scaling or appropriate calibration to match available funding. For instance it may not be possible to meet some or all of the requirements and criteria or performance criteria if funding cannot

match the anticipated 3.8 staffing man-years to meet these requirements and performance criteria.

6. Grant application requires advanced planning, preparation and extensive documentation.

The Draft guidance document states that grants will be awarded on the basis of supplied documentation that will require significant work in advance of submitting a grant application. The Draft guidance and performance criteria fails to account or allow for the staffing resources and funding needed to develop this required documentation.

7. Accepting a Beach Grant will have wide spread impact.

The success of Connecticut's Beach Grant program is based on a collaborative effort between the CT DPH, shoreline health departments and the Connecticut Department of Energy and Environmental Protection (CT DEEP). If the CT DPH accepts a Beach Grant award under the terms and conditions set out in the Draft guidance and performance criteria document, both CT DEEP and shoreline health departments will be bound by these terms and conditions. Given existing jurisdictional and organizational boundaries, and in light of anticipated funding and changes to the terms and conditions as stated in the Draft guidance and performance criteria documents, the CT DPH collaborative approach to marine beach monitoring may be irreparably changed.

8. The Draft guidance document requires clarification.

The Draft guidance document seems to require its own guidance document that would explain what the Draft guidance document to explain what the Draft requirements mean in specific places. For instance, the Draft guidance refers to requirements for "immediate" or "timely" responses (actions) without specifying further an applicable time frame. Furthermore, the Draft guidance document indicates that states will be responsible for the technically difficult challenge of detecting and assessing levels (concentrations) of pathogens or pathogen indicators. Based on current US EPA guidance states are prepared to assess levels (concentrations) of indicator bacteria that associate with the risk of swimmer illness. States will need clear guidance on how to detect levels of pathogens or pathogen indicators.

## **APPENDICES**

Connecticut's comments and review of the US EPA Draft National Beach Guidance and Required Performance Criteria for Grants (EPA-820-D-13-001) derive directly from APPENDIX A (see page 7 of this review) and APPENDIX B (see page 18 of this review).

These two Appendices contain text copied directly from the Draft guidance and performance criteria document itself. The Appendices include page number references to the Draft guidance and performance criteria document.

## APPENDIX A: REQUIREMENTS AND PERFORMANCE CRITERIA REVIEW

On April 18, 2014, US EPA issued its Draft National Beach Guidance and Required Performance Criteria for Grants (document identifier: EPA-820-D-13-001). A final version of this document will supersede earlier guidance and performance criteria published in 2002 by US EPA for the Beach Grant.

 This Appendix section (A) focuses on the stated grant requirements *including* the ten performance criteria found in the Draft National Beach Guidance and Required Performance Criteria for Grants (document identifier: EPA-820-D-13-001).

### HOW THIS REVIEW WAS ASSEMBLED

This review of requirements and performance criteria consists of text referring directly to requirements *and* to the ten (10) performance criteria copied directly from the Draft guidance and performance criteria document and assembled here in one place. Some other text has been copied to this Appendix section because it is worthy of note. Page numbers in this Appendix section refer to page(s) in the Draft guidance and performance criteria document and are included for handy reference.

Comments or clarifying text not found originally in the Guidance will appear here in [brackets].

There are ten (10) performance criteria. References to them appear throughout the Draft guidance and performance criteria document. When text extracted from the Draft guidance and performance criteria document is associated with one or more of these performance criteria, the criteria will be identified by criteria number like this: **Performance criteria 1**

### Chapter 1: Introduction

- p. 5 This document replaces the June 2002 National Beach Guidance and Required Performance Criteria for Grants, and sets forth performance criteria for (1) ...and (2) promptly notifying the public of any exceedance or likely exceedance of applicable water quality standards for pathogen indicators for coastal recreational waters.
- p. 5 **EPA will use the performance criteria to determine whether a monitoring and notification program is eligible for an implementation grant under CWA section 406(b).**
- p. 5 Chapter 2 summarizes the basic requirements that an applicant **must meet** to receive a Beach Act implementation grant.
- p. 6 Chapter 4 discusses the performance criteria related to monitoring and assessment and provides detailed technical guidance
- p. 6 Chapter 5 describes the performance criteria and technical guidance related to a beach program's public notification and risk communication.
- p. 9 **It is important to note that FIB are not exclusively of fecal origin**, and they can be part of the natural microflora in the environment. FIB have also been shown to persist and even grow in sand, sediments, and soils; on plant surfaces; and within algal mats and biofilms

(Byappanahalli and Ishii 2010; Byappanahalli et al. 2012; Verhougstraete et al. 2010). FIB from these nonfecal sources have not been demonstrated to be related to the potential for human illness. EPA recommends that beach managers understand the potential fecal sources in the watershed affecting their beach to most effectively protect the health of beachgoers. Performing a sanitary survey<sup>4</sup> (section 3.4.1) of the beach watershed is a good step toward this goal, and EPA has made available surveys for both marine and freshwater beaches.

- p. 12 States and tribes receiving grants under CWA section 406(b) **must take** a notification action on an exceedance or likely exceedance of the applicable water quality standard as a condition of receiving a grant. 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.

## Chapter 2: Grants and Required Performance Criteria

- p. 17 Beginning with FY 2014 beach grants that are awarded after this document is final, states and tribes **must meet** the performance criteria in this document in order to receive a grant under section 406(b).
- p. 17 EPA's statutory authority to award grants under section 406(b) of the BEACH Act includes a series of **conditions and requirements** for developing and implementing a beach monitoring and notification program funded by the grant.
- p. 17 EPA has **10 performance criteria** for implementing monitoring, assessment, and notification programs based on the requirements in CWA section 406. To be eligible for a grant to implement a monitoring and notification program, the state's or tribe's program **must be consistent with** the applicable performance criteria. 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.
- p. 18 **Performance criterion 1** requires a state or tribe to develop a risk-based beach evaluation and classification process and apply it to its coastal recreation waters. The plan **must describe** the factors used in the state's or tribe's evaluation and classification process and explain how the state's or tribe's coastal recreation waters are ranked as a result of the process. That process **must result** in a list of specific coastal recreation waters adjacent to beaches or similar points of access used by the public.

- p. 18 **Performance criterion 2** requires a state or tribe to develop a tiered monitoring plan. The plan **must adequately address** the frequency and location of monitoring and the assessment of coastal recreation waters on the basis of the periods of recreational use of the waters, the nature and extent of use during certain periods, the proximity of the waters to known point and nonpoint sources of pollution, and any effect of storm events on the waters. There are three new considerations added to the basis for developing the tiered monitoring plan.
- p. 19 **Performance criterion 3** requires a state or tribe to develop detailed assessment methods and procedures. States and tribes **must adequately address** and submit to EPA methods for detecting levels of pathogens and pathogen indicators that are harmful to human health in coastal recreation areas. States and tribes **must also provide** documentation to support the validity of methods other than those that EPA validated or approved. Finally, states and tribes **must identify and submit** to EPA assessment procedures for identifying short-term increases in pathogens and pathogen indicators that are harmful to human health in coastal recreation areas, including a new requirement to make beach notification decisions using a BAV.
- p. 19 **Performance criterion 4** requires states and tribes to develop a mechanism to collect and report monitoring data in timely reports. States and tribes **must report** their monitoring data to the public in a timely manner, including posting on a website. They **must report** their monitoring data to EPA at least annually or at a frequency required by the EPA Administrator. EPA encourages states to coordinate closely with local governments to ensure that monitoring information is submitted consistently. Reported data **must be consistent with** the list of required data elements -
- (see [http://water.epa.gov/grants\\_funding/beachgrants/datausers\\_index.cfm](http://water.epa.gov/grants_funding/beachgrants/datausers_index.cfm)).
- P. 19 **Performance criterion 5** requires a state to document any delegation of monitoring responsibilities that might have been made to local governments. If monitoring responsibilities are delegated to local governments, the state grant recipient **must describe** the process by which the state may delegate to local governments responsibility for implementing the monitoring program.
- p. 18 **Performance criterion 6** requires that a state or tribe develop a public notification and risk communication plan. The plan **must describe** the state's or tribe's public notification efforts and measures to inform the public of the potential risks associated with water contact activities in the coastal recreation waters that do not meet applicable water quality standards. The state or tribe **must adequately identify** measures to promptly communicate the occurrence, nature, location, pollutants involved, and extent of any exceedance or likelihood of exceedance of applicable water quality standards for pathogens and pathogen indicators. The state or tribe **must identify** how it will promptly communicate that information to EPA. States **are responsible for** identifying how they will promptly communicate the failure to meet applicable standards to a designated official of the local government in the area adjoining the coastal recreation waters with water quality problems.
- p. 20 **Performance criterion 7** requires that a state or tribe give notice to the public when coastal recreation waters are not meeting or are not expected to meet applicable water

quality standards for pathogens and pathogen indicators. A state or tribe **must post signs** at beaches or similar points of access, or provide functionally equivalent communication measures that are sufficient to give notice to the public that the coastal recreation waters are not meeting or are not expected to meet applicable water quality standards for pathogens and pathogen indicators.

p. 20 **Performance criterion 8** requires that states and tribes compile their notification plans into timely reports. States and tribes **must report** to EPA the actions they have taken to notify the public when water quality standards are exceeded.

p. 20 **Performance criterion 9** requires that states describe any notification responsibility they have delegated or intend to delegate to local governments. The state **must describe** the process by which the state may delegate to local governments responsibility for implementing the notification program.

p. 20 **Performance criterion 10** requires that states and tribes provide the public with an opportunity to review the program through public notice and provide an opportunity to comment. This is not a one-time requirement; public input must be sought whenever a state or tribe makes changes to its beach program. If a state or tribe changes its List of Beaches, beach ranking, or other elements of its monitoring and notification program, the public **must have** an opportunity to review the changes before implementation.

The public evaluation can be accomplished through notice and public comment, meetings, forums, or workshops. For example, when classifying and ranking beaches, it is beneficial to gather input from members of the community regarding the recreational waters they would like monitored.

p. 21 The BEACH Act authorizes EPA to make grants to local governments for developing and implementing monitoring and notification programs only if EPA determines that the state or tribe is not implementing a program that meets the requirements of the statute. Erie County, Pennsylvania, is the only local government currently receiving a BEACH Act grant.

### Chapter 3: Risk-based Beach Evaluation and Classification Process

p. 23 Conducting a risk-based beach evaluation and classification process **is required** for BEACH Act grantees. **EPA may only award BEACH Act grants to implement a monitoring and notification program if (1) the grant recipient prioritizes the use of grant funds for particular coastal recreation waters based on the use of the water and the risk to human health presented by pathogens and pathogen indicators, and (2) if the grant recipient makes available to EPA the factors used to prioritize the use of funding (CWA 406(b)(2)(A) (ii) and (iii)).**

p. 23 **Performance criterion 1** (introduced in chapter 2) addresses the beach evaluation and classification process that states and tribes **must conduct**.

States and tribes may develop their own evaluation and classification approach, but they **must address** these requirements.

## General requirement

Specific requirements Risk-based Beach Evaluation and Classification Process (**Performance Criterion 1**). The state or tribe **must develop** a risk-based beach evaluation and classification process and apply it to the state's coastal recreation waters. A state or tribal program **must describe** the factors used in its evaluation and classification process and explain how its coastal recreation waters are ranked as a result. The process **must result** in a List of Beaches.

## Specific requirements

- **Identify** factors used to evaluate and rank beaches.
- **Identify** state or tribal coastal recreation waters.
- **Notify** EPA at least annually, if the List of Beaches changes significantly because of revised beach rankings or changes to monitoring and notification requirements and considerations.
- **Provide** for public review of the risk-based rank and classification.

pp. 24 - 36 [How to classify, evaluate and rank beaches in detail]

## Chapter 4: Beach Monitoring

p. 37 [Beach Monitoring section starts]

p. 38 **Performance Criteria** [for beach monitoring plan: Performance criteria 2, 3, 4, 5]

**Performance criterion 2** includes the following new considerations when developing a tiered monitoring plan:

- States and tribes **must now consider** this historical data when developing a tiered monitoring plan.
- ..states and tribes **must now consider** when developing tiered monitoring plans whether qPCR might be appropriate at specific sites.
- ...states and tribes **must now consider** when developing tiered monitoring plans whether predictive models might be appropriate at specific sites.

p. 39 [**Performance criteria 2**]; **Specific requirements**]

- Adequately prioritize, in the tiered monitoring plan, the frequency, locations, and methods of monitoring and assessment of coastal waters based on:
  - o A review of existing monitoring data.
  - o Periods of recreational use of the waters.
  - o The nature and extent of use of the waters.
  - o The proximity to known point and nonpoint sources of pollution.

- o The effect of storm water runoff on the waters.
  - o The appropriateness of qPCR methods.
  - o The potential use of predictive tools.
- Provide for public review of the tiered monitoring plan.
  - Develop appropriate quality control (QC) policies and procedures and submit adequate quality management plans (QMPs) and quality assurance project plans (QAPPs) to EPA for approval.

p. 39

**[Performance criteria 3]; Specific requirements]**

- Submit to EPA methods for characterizing water quality relative to human health in coastal recreation areas.
- Provide documentation of the performance of methods other than those that EPA recommended or approved or validated.
- Identify and submit to EPA assessment procedures for identifying short-term increases in FIB densities that indicate risk to human health in coastal recreation waters.
- Before adoption and EPA approval of RWQS based on the 2012RWQC, make beach notification decisions using a BAV corresponding to 32 NGI per 1,000 recreators as the beach notification threshold.
- After adoption and EPA approval of RWQS based on the 2012 RWQC, make beach notification decisions using a BAV corresponding to the illness rate of the approved RWQS as the beach notification threshold.

p. 39

**[Performance criteria 4]; Specific Requirements]**

- Make monitoring data available to the public, including posting on a website.
- **Report monitoring data to EPA at least annually or at a frequency that the EPA Administrator determines.** Reported data must be consistent with the reporting requirements specified at:

[http://water.epa.gov/grants\\_funding/beachgrants/datausers\\_index.cfm](http://water.epa.gov/grants_funding/beachgrants/datausers_index.cfm).

**[Performance criteria 5]; Specific Requirement]**

- If a state delegates monitoring responsibilities to local governments, the state grant recipient **must describe** the process that the state follows.

p. 40

This section describes the *required elements* of a tiered monitoring plan and discusses quality assurance *requirements* and recommendations.

A BEACH Act grant-funded program **must prioritize** the use of grant funds for monitoring on the basis of the use of the waters and the risk to human health.

The specific elements of monitoring plans will vary according to these factors, local practices and policies, and the extent and nature of available resources. Regardless of the approach taken, states and tribes **must demonstrate** how the plan meets the performance criterion for an adequate tiered monitoring plan.

p. 42 States and tribes **must determine** which beaches to monitor and which beaches not to monitor using an analysis of their recreational waters based on the degree of recreational use of the adjacent water body and risk to human health posed by known or unknown sources and historical variable water quality.

p. 42 - 43 To best protect public health, the states and tribes **must evaluate** the tradeoffs of monitoring more beaches less frequently or fewer beaches more frequently based on degree of use of the beach, risk to human health, and other considerations.

**[Performance criteria 2]; worthy of note]**

States and tribes **must submit** documentation of the quality system for review and approval by the EPA Grants Officer and the EPA QA officer, or an approved designee, before environmental measurements (primary or secondary) are taken. States and tribes should contact the EPA Regional QA officer for more detailed guidance tailored to their grant.

p. 43 To comply with 40 CFR 31.45, grant recipients **must develop** and implement QA practices consisting of policies, procedures, specifications, standards, and documentation necessary to produce data of sufficient quality to meet project objectives and to minimize loss of data due to out-of-control conditions or malfunctions.

The consultation with EPA regional officials **should determine** what documentation is sufficient to describe the quality system used for their beach monitoring and notification programs and should consider a variety of quality management topics, including but not limited to the following:

- Ensuring that QA procedures are consistent with EPA's Policy Directive Number FEM-2012-02, Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements. A copy of the policy is available online at:

<http://www.epa.gov/fem/pdfs/competency-policy-aaia-new.pdf>.

- Developing a QAPP or equivalent documentation for their beach monitoring and notification programs. A QAPP is a commonly used form of documentation for primary data collection. It is a technical planning document that defines the objectives of a projector continuing operation and the methods, organization, and quality management activities necessary to meet the project or operation goals. It serves as the blueprint for implementing the data collection activity to ensure that the program's technical and quality goals are met. It also provides the necessary link between the required data quality constraints and the sampling and analysis activities to be conducted. A QAPP typically details the technical activities and QA and QC procedures that should be implemented to ensure that the data meet the specified standards. The QAPP should be

implemented to ensure that data collected and analytical data generated are complete, accurate, and suitable for the intended purpose

- Consideration of standard operating procedures (SOPs), which can be included as attachments to the tiered monitoring plan or QAPP, can be used to present in detail the method for a given technical operation, analysis, or action in sequential steps. An SOP includes specific sites, sampling locations, equipment, materials, and methods; QA and QC procedures; and other factors necessary to perform sampling, analysis, and notification.
- Addressing other tasks identified by EPA regional officials.

pp. 44 - 56 [Factors to consider when developing a monitoring plan]

pp. 56 - 62 Methods and Assessment Procedures (**Performance Criterion 3**) [describes EPA approved analytic methods and how to deploy them for RWQ monitoring]

p. 62 States, tribes, and local governments **must report** their monitoring data to the public in a timely manner, **including** posting the data on a publicly available website. This new requirement will help to ensure that water quality data are widely available in a timely manner.

p. 62 EPA **recommends** that managers use procedures to verify whether the microbiological sample collection and analyses have correctly estimated the densities of indicator bacteria, to ascertain whether requirements for a specified use of the results have been fulfilled, and to determine how the data should be interpreted for decision making.

pp. 62 - 63 [describes how to approach data validation and verification]

pp. 64 - 67 EPA encourages states and tribes to use predictive tools as a means of delivering timely estimates of water quality at beaches and to make beach notification decisions.

pp. 67 - 72 **2012 Recreational Water Quality Criteria**

p. 70 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. Prior to a state or tribe adopting and EPA approving new or revised WQS, the state or tribe must use the BAV in EPA's 2012 RWQC that corresponds to 32 NGI per 1000 recreators for one of the two recommended indicator/method combinations (enterococci or E. coli by culture) or qPCR (on a site-specific basis and with the appropriate analyses (See section 4.4.2.3)) as the threshold value for determining whether to take a beach notification action.

After a state or tribe has adopted and EPA approves new or revised RWQS, the **state or tribe must use** one of the following BAVs in its beach monitoring and notification program:

- “If the EPA-approved state or tribal WQS is one of EPA’s 2012 RWQC recommendations for enterococcus or E. coli as measured by culture, the state or tribe **must use** the BAV in EPA’s 2012 RWQC that corresponds either to 32 NGI per 1000recreators or 36 NGI per 1000 recreators for one of the two recommended indicator/method combinations (enterococci or E. coli by culture) or qPCR (on a site-specific basis and with the appropriate analyses (See section 4.4.2.3.)) as the threshold value for determining whether to take a beach notification action.
- “If the EPA-approved state or tribal WQS is not one of EPA’s 2012 RWQC recommendations for enterococci or E. coli as measured by culture, the state or tribe must use a BAV that is a daily threshold value, calculated to be at least as stringent as the BAV in EPA’s 2012 RWQC (i.e., represents at most the 75th percentile value from the state’s or tribe’s chosen water quality distribution or other relevant metric) as the threshold value for determining whether to take a beach notification action. Table 4.5 lists BAVs for culturable enterococci for fresh and marine waters, culturable E. coli (for fresh water only), and the Enterococcus spp. qPCR Method 1611 for fresh and marine waters. It also shows which thresholds BEACH Act states and tribes could use, depending on whether they had approved RWQS in place.

p. 72 **Delegation of Monitoring Responsibilities (Performance Criterion 5)**

If a state delegates monitoring responsibilities to local governments, **performance criterion 5** requires the state grant recipient to describe the process by which the state may delegate these responsibilities to local governments and document any specific delegated responsibilities. States must notify EPA annually if there are any changes in delegated responsibilities.

## Chapter 5: Public Notification and Risk Communication

p. 77 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).

p. 77 This guidance reflects those goals in the addition of **three new specific requirements** under the performance criteria. These requirements apply to states and tribes that receive grants under CWA section 406 after this document is final:

- **Performance criterion 2**, Tiered Monitoring Plan, **now requires** that states and tribes consider the potential use of predictive tools when developing a tiered monitoring plan.
- **Performance criterion 2**, Tiered Monitoring Plan, **now requires** that states and tribes consider the appropriateness of qPCR methods when developing a tiered monitoring plan.
- **Performance criterion 4**, Monitoring Report Submission, **now requires** that states and tribes make monitoring data available in a timely manner to the public on a website.

**Performance criteria 6 through 9** describe the **four requirements** for a public notification and risk communication program.

- Public Notification and Risk Communication Plan (**Performance criterion 6**).
- Actions to Notify the Public (**Performance criterion 7**).
- Notification Report Submission (**Performance criterion 8**).
- Delegation of Notification Responsibilities (**Performance criterion 9**).

[Here are the details....]

### **Public Notification and Risk Communication (specific requirements)**

- **Identify** measures to notify EPA and local governments (if applicable) when indicator bacteria levels exceed a beach notification threshold.
- **Identify** measures to notify the public when a beach notification threshold has been exceeded by posting a sign or functional equivalent.
- **Identify** measures that inform the public of the potential risks associated with water contact activities in the coastal recreation waters that do not meet applicable water quality standards.
- **Provide** for public review of the public notification and risk communication plan.

### **Actions to Notify the Public (specific requirements)**

- Promptly issue a public notification for exceedance of the beach notification threshold when there is no reason to doubt the accuracy of the sample.
- If there is a reason to doubt the accuracy of the first sample, the state agency may resample before issuing a notification.

### **Notification Report Submission**

- States and tribes must report to EPA at least annually, or at a frequency the EPA Administrator determines, on the occurrence, nature, location, pollutants involved, and extent of any exceedances of any water quality standards for pathogens and pathogen indicators.

### **Delegation of Notification Responsibilities**

- States must identify any local governments to which they have delegated responsibility for implementing a notification program and describe the process by which the state may delegate such authority.

p. 86 If a sample indicates that there is an exceedance or a likely exceedance of a water quality standard or other notification threshold value, the state or tribe **must immediately issue** a public notification according to the policy and procedures established in the public notification and risk communication plan *unless there is a reason to doubt the accuracy of the first sample. If there is doubt (based on predefined QA measures), the responsible agency should resample.*

If the decision is to notify the public, EPA *recommends* the following actions:

- Prompt notification of the owner, manager, or operator and/or the lifeguards. When sample results indicate an exceedance of a beach notification threshold, the appropriate agency **must promptly notify** the beach manager/operator and appropriate staff members (e.g., lifeguards). This approach ensures that the responsible authorities know that action should be taken to ensure the safety of the beach employees.
- Prompt public notification. The appropriate agency **must promptly notify** the public of an exceedance of a beach notification threshold—by either a sign or functional equivalent (see section 5.4). Notification typically should occur at the point of beach access. States and tribes **must promptly issue** a notification when there is an exceedance of a beach notification threshold based on modeling results or a preemptive threshold.

p. 87 Programs funded with BEACH Act grants must notify the public (i.e., post signs or use functionally equivalent communication measures) of an exceedance of a beach notification threshold.

p. 93 **Performance criterion 8** requires grant recipients to compile their notification activities and report them in a timely manner. States and tribes must report their notification data to EPA at least annually.

**Performance criterion 9** requires state grant recipients to describe any delegation of notification responsibilities to local governments. States must notify EPA, at least annually, of changes in any delegation of responsibilities.

## APPENDIX B: PERFORMANCE CRITERIA REVIEW

On April 18, 2014, US EPA issued its Draft National Beach Guidance and Required Performance Criteria for Grants (document identifier: EPA-820-D-13-001). A final version of this document will supersede earlier guidance and performance criteria published in 2002 by US EPA for the Beach Grant.

 This Appendix section (B) focuses exclusively on the ten (10) performance criteria and assembles all references to them found in the Draft National Beach Guidance and Required Performance Criteria for Grants (document identifier: EPA-820-D-13-001)

### HOW THIS REVIEW WAS ASSEMBLED

This review of the performance criteria consists of text referring to these performance criteria copied directly from the Draft guidance and performance criteria document and assembled here in one place. Page numbers in this Appendix section refer to page(s) in the Draft guidance and performance criteria document and are included for handy reference.

Comments or clarifying text not found originally in the Guidance will appear here in [brackets].

There are ten (10) performance criteria. References to these appear throughout the Draft guidance and performance criteria document being reviewed here. When text extracted from the Draft guidance and performance criteria document is associated with one or more of these performance criteria, the criteria will be identified here by criteria number this way: **Performance criteria 1**

 The Draft guidance and performance criteria document is NOT organized by performance criteria and as a result, grant performance criteria are referenced throughout the document. Also, some individual performance criteria are referenced more than once in this document.

### PERFORMANCE CRITERION INTRODUCTION

p. 17 EPA has **10 performance criteria** for implementing monitoring, assessment, and notification programs based on the requirements in CWA section 406. To be eligible for a grant to implement a monitoring and notification program, the state's or tribe's program **must be consistent with** the applicable performance criteria. 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.

## PERFORMANCE CRITERION 1

- p. 18 **Performance criterion 1** requires a state or tribe to develop a risk-based beach evaluation and classification process and apply it to its coastal recreation waters. The plan **must describe** the factors used in the state's or tribe's evaluation and classification process and explain how the state's or tribe's coastal recreation waters are ranked as a result of the process. That process **must result** in a list of specific coastal recreation waters adjacent to beaches or similar points of access used by the public.
- p. 23 **Performance criterion 1** (introduced in chapter 2) addresses the beach evaluation and classification process that states and tribes **must conduct**.

States and tribes may develop their own evaluation and classification approach, but they **must address** these requirements.

### General requirement

Specific requirements Risk-based Beach Evaluation and Classification Process (**Performance Criterion 1**). The state or tribe **must develop** a risk-based beach evaluation and classification process and apply it to the state's coastal recreation waters. A state or tribal program **must describe** the factors used in its evaluation and classification process and explain how its coastal recreation waters are ranked as a result. The process **must result** in a List of Beaches.

### Specific requirements

- **Identify** factors used to evaluate and rank beaches.
- **Identify** state or tribal coastal recreation waters.
- **Notify** EPA at least annually, if the List of Beaches changes significantly because of revised beach rankings or changes to monitoring and notification requirements and considerations.
- **Provide** for public review of the risk-based rank and classification.

## PERFORMANCE CRITERION 2

p. 18 **Performance criterion 2** requires a state or tribe to develop a tiered monitoring plan. The plan **must adequately address** the frequency and location of monitoring and the assessment of coastal recreation waters on the basis of the periods of recreational use of the waters, the nature and extent of use during certain periods, the proximity of the waters to known point and nonpoint sources of pollution, and any effect of storm events on the waters. There are three new considerations added to the basis for developing the tiered monitoring plan.

p. 38 **Performance Criteria** [for beach monitoring plan: Performance criteria 2, 3, 4, 5]

**Performance criterion 2** includes the following new considerations when developing a tiered monitoring plan:

- States and tribes **must now consider** this historical data when developing a tiered monitoring plan.
- ..states and tribes **must now consider** when developing tiered monitoring plans whether qPCR might be appropriate at specific sites.
- ...states and tribes **must now consider** when developing tiered monitoring plans whether predictive models might be appropriate at specific sites.

p. 39 **Performance criteria 2; Specific requirements**

- Adequately prioritize, in the tiered monitoring plan, the frequency, locations, and methods of monitoring and assessment of coastal waters based on:
  - o A review of existing monitoring data.
  - o Periods of recreational use of the waters.
  - o The nature and extent of use of the waters.
  - o The proximity to known point and nonpoint sources of pollution.
  - o The effect of storm water runoff on the waters.
  - o The appropriateness of qPCR methods.
  - o The potential use of predictive tools.
- Provide for public review of the tiered monitoring plan.
- Develop appropriate quality control (QC) policies and procedures and submit adequate quality management plans (QMPs) and quality assurance project plans (QAPPs) to EPA for approval.

p. 42 - 43 To best protect public health, the states and tribes **must evaluate** the tradeoffs of monitoring more beaches less frequently or fewer beaches more frequently based on degree of use of the beach, risk to human health, and other considerations.

(Performance Criterion 2 continued on next page)

**[Performance criteria 2]; worthy of note]**

States and tribes **must submit** documentation of the quality system for review and approval by the EPA Grants Officer and the EPA QA officer, or an approved designee, before environmental measurements (primary or secondary) are taken. States and tribes should contact the EPA Regional QA officer for more detailed guidance tailored to their grant.

p. 77

This guidance reflects those goals in the addition of **three new specific requirements** under the performance criteria. [Two new specific requirements are for Performance criterion 2 and one new specific requirement is for Performance criterion 4]. These requirements apply to states and tribes that receive grants under CWA section 406 after this document is final:

- **[Performance criterion 2]**, Tiered Monitoring Plan, **now requires** that states and tribes consider the potential use of predictive tools when developing a tiered monitoring plan.
- **[Performance criterion 2]**, Tiered Monitoring Plan, **now requires** that states and tribes consider the appropriateness of qPCR methods when developing a tiered monitoring

[See Performance criterion 4, for the third new requirement)

### PERFORMANCE CRITERION 3

- p. 19 **Performance criterion 3** requires a state or tribe to develop detailed assessment methods and procedures. States and tribes **must adequately address** and submit to EPA methods for detecting levels of pathogens and pathogen indicators that are harmful to human health in coastal recreation areas. States and tribes **must also provide** documentation to support the validity of methods other than those that EPA validated or approved. Finally, states and tribes **must identify and submit** to EPA assessment procedures for identifying short-term increases in pathogens and pathogen indicators that are harmful to human health in coastal recreation areas, including a new requirement to make beach notification decisions using a BAV.
- p. 39 **Performance criteria 3; Specific requirements**
- Submit to EPA methods for characterizing water quality relative to human health in coastal recreation areas.
  - Provide documentation of the performance of methods other than those that EPA recommended or approved or validated.
  - Identify and submit to EPA assessment procedures for identifying short-term increases in FIB densities that indicate risk to human health in coastal recreation waters.
  - Before adoption and EPA approval of RWQS based on the 2012RWQC, make beach notification decisions using a BAV corresponding to 32 NGI per 1,000 recreators as the beach notification threshold.
  - After adoption and EPA approval of RWQS based on the 2012 RWQC, make beach notification decisions using a BAV corresponding to the illness rate of the approved RWQS as the beach notification threshold.
- pp. 56 - 62 Methods and Assessment Procedures (**Performance criterion 3**) [describes EPA approved analytic methods and how to deploy them for RWQ monitoring]
- p. 62 States, tribes, and local governments **must report** their monitoring data to the public in a timely manner, **including** posting the data on a publicly available website. This new requirement will help to ensure that water quality data are widely available in a timely manner.

## PERFORMANCE CRITERION 4

p. 19 **Performance criterion 4** requires states and tribes to develop a mechanism to collect and report monitoring data in timely reports. States and tribes **must report** their monitoring data to the public in a timely manner, including posting on a website. They **must report** their monitoring data to EPA at least annually or at a frequency required by the EPA Administrator. EPA encourages states to coordinate closely with local governments to ensure that monitoring information is submitted consistently. Reported data **must be consistent with** the list of required data elements -

(see [http://water.epa.gov/grants\\_funding/beachgrants/datausers\\_index.cfm](http://water.epa.gov/grants_funding/beachgrants/datausers_index.cfm)).

p. 39 **Performance criteria 4; Specific Requirements]**

- Make monitoring data available to the public, including posting on a website.
- **Report monitoring data to EPA at least annually or at a frequency that the EPA Administrator determines.** Reported data must be consistent with the reporting requirements specified at:

[http://water.epa.gov/grants\\_funding/beachgrants/datausers\\_index.cfm](http://water.epa.gov/grants_funding/beachgrants/datausers_index.cfm).

p. 77 • **Performance criterion 4**, Monitoring Report Submission, **now requires** that states and tribes make monitoring data available in a timely manner to the public on a website.

## PERFORMANCE CRITERION 5

P. 19 **Performance criterion 5** requires a state to document any delegation of monitoring responsibilities that might have been made to local governments. If monitoring responsibilities are delegated to local governments, the state grant recipient **must describe** the process by which the state may delegate to local governments responsibility for implementing the monitoring program.

p. 72 **Delegation of Monitoring Responsibilities (Performance criterion 5)**

If a state delegates monitoring responsibilities to local governments, **performance criterion 5** requires the state grant recipient to describe the process by which the state may delegate these responsibilities to local governments and document any specific delegated responsibilities. States must notify EPA annually if there are any changes in delegated responsibilities.

## PERFORMANCE CRITERION 6

p. 18 **Performance criterion 6** requires that a state or tribe develop a public notification and risk communication plan. The plan **must describe** the state's or tribe's public notification efforts and measures to inform the public of the potential risks associated with water contact activities in the coastal recreation waters that do not meet applicable water quality standards. The state or tribe **must adequately identify** measures to promptly communicate the occurrence, nature, location, pollutants involved, and extent of any exceedance or likelihood of exceedance of applicable water quality standards for pathogens and pathogen indicators. The state or tribe **must identify** how it will promptly communicate that information to EPA. States **are responsible for** identifying how they will promptly communicate the failure to meet applicable standards to a designated official of the local government in the area adjoining the coastal recreation waters with water quality problems.

p. 77 • Public Notification and Risk Communication Plan (**Performance criterion 6**).

### **Public Notification and Risk Communication (specific requirements)**

- **Identify** measures to notify EPA and local governments (if applicable) when indicator bacteria levels exceed a beach notification threshold.
- **Identify** measures to notify the public when a beach notification threshold has been exceeded by posting a sign or functional equivalent.
- **Identify** measures that inform the public of the potential risks associated with water contact activities in the coastal recreation waters that do not meet applicable water quality standards.
- **Provide** for public review of the public notification and risk communication plan.

p. 86 If a sample indicates that there is an exceedance or a likely exceedance of a water quality standard or other notification threshold value, the state or tribe **must immediately issue** a public notification according to the policy and procedures established in the public notification and risk communication plan *unless there is a reason to doubt the accuracy of the first sample. If there is doubt (based on predefined QA measures), the responsible agency should resample.*

p. 87 Programs funded with BEACH Act grants must notify the public (i.e., post signs or use functionally equivalent communication measures) of an exceedance of a beach notification threshold.

## PERFORMANCE CRITERION 7

p. 20 **Performance criterion 7** requires that a state or tribe give notice to the public when coastal recreation waters are not meeting or are not expected to meet applicable water quality standards for pathogens and pathogen indicators. A state or tribe **must post signs** at beaches or similar points of access, or provide functionally equivalent communication measures that are sufficient to give notice to the public that the coastal recreation waters are not meeting or are not expected to meet applicable water quality standards for pathogens and pathogen indicators.

p. 77 • Actions to Notify the Public (**Performance criterion 7**).

### **Actions to Notify the Public (specific requirements)**

- Promptly issue a public notification for exceedance of the beach notification threshold when there is no reason to doubt the accuracy of the sample.
- If there is a reason to doubt the accuracy of the first sample, the state agency may resample before issuing a notification.

## PERFORMANCE CRITERION 8

p. 20 **Performance criterion 8** requires that states and tribes compile their notification plans into timely reports. States and tribes **must report** to EPA the actions they have taken to notify the public when water quality standards are exceeded.

p. 77 • Notification Report Submission (**Performance criterion 8**).

### Notification Report Submission

- States and tribes must report to EPA at least annually, or at a frequency the EPA Administrator determines, on the occurrence, nature, location, pollutants involved, and extent of any exceedances of any water quality standards for pathogens and pathogen indicators.

p. 93 **Performance criterion 8** requires grant recipients to compile their notification activities and report them in a timely manner. States and tribes must report their notification data to EPA at least annually.

## PERFORMANCE CRITERION 9

p. 20 **Performance criterion 9** requires that states describe any notification responsibility they have delegated or intend to delegate to local governments. The state **must describe** the process by which the state may delegate to local governments responsibility for implementing the notification program.

p. 77 • Delegation of Notification Responsibilities (**Performance criterion 9**).

### **Delegation of Notification Responsibilities**

- States must identify any local governments to which they have delegated responsibility for implementing a notification program and describe the process by which the state may delegate such authority.

p. 93 **Performance criterion 9** requires state grant recipients to describe any delegation of notification responsibilities to local governments. States must notify EPA, at least annually, of changes in any delegation of responsibilities.

## PERFORMANCE CRITERION 10

p. 20

**Performance criterion 10** requires that states and tribes provide the public with an opportunity to review the program through public notice and provide an opportunity to comment. This is not a one-time requirement; public input must be sought whenever a state or tribe makes changes to its beach program. If a state or tribe changes its List of Beaches, beach ranking, or other elements of its monitoring and notification program, the public **must have** an opportunity to review the changes before implementation.