

# Changes Recommended by H-GAC Staff

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*Based on BPA proposal and subsequent comments.  
New language shown in italics.*

## **Introduction**

Add additional information about adaptive management before the final paragraph:

*The BIG proposes an adaptive approach to implementation. The EPA describes adaptive implementation as a tool used to improve implementation strategies. Adaptive implementation may be appropriate when there is uncertainty regarding loading, necessary load reductions, and the effectiveness of implementation activities, as is the case for this I-Plan. Adaptive management allows for the implementation of practicable controls while additional data collection and analysis are conducted. Monitoring addresses the uncertainty in the efficacy of implementation actions and can provide assurance that implementation measures are succeeding in attaining water quality standards, as well as inform the ongoing TMDL implementation strategy. (U.S. Environmental Protection Agency, Best-Wong, B., 2006, "Clarification Regarding "Phased" Total Maximum Daily Loads") The follow-up monitoring, tracking, and plan revision described in this document represent the adaptive strategy of this plan.*

## **Strategy 1.0: WWTF**

No changes. This section already includes activities pertaining to enforcement, unannounced/random inspections, and increased self-reporting. At its meeting on November 10, 2009, the workgroup discussed and rejected a non-detect limit at this time. At its meeting on March 4, 2009, the workgroup discussed and rejected nutrient limits at this time. Both non-detect and nutrient limits could be reconsidered in the future after there is a better understanding of direct bacteria contributions from WWTF and language to this effect is proposed for IA 9.4.4.

## **Strategy 4.0: Storm water and land development**

### **Intro to section**

Add additional paragraph (after third paragraph):

*Structural BMPs, such as modifications to storm water outfalls that may reduce bacteria through aeration, treatment by sunlight, or physical removal of contaminants, have the potential to reduce bacteria loading into waterways. Because there is limited data regarding how well such*

*BMPs might reduce bacteria loading, the BIG has identified the evaluation of the effectiveness of stormwater implementation activities as its first research priority. (See Research Strategy 1.1.) Any research, particularly research relevant to the BIG area, should be reported and shared with BIG stakeholders, through Implementation Activities 4.2, 9.2, and 9.4.2, so that stakeholders can devise appropriate strategies for integrating structural storm water BMPs into their activities.*

#### **IA 4.2:**

Move the following text from 4.2.1 to after the introductory paragraph for IA 4.2, reorder the bullets to highlight structural BMPs, and add descriptive phrase:

*For both the library of best practices and the networking meetings, particular attention should be paid to identifying best practices that involve the following:*

- Structural BMPs and storm water controls that address bacteria reduction;
- Codes, design criteria, and other specifications that address storm water bacteria loading;
- How to incorporate bacteria reduction elements into flood control features;
- How to encourage the use of green infrastructure in street design, sidewalk design, and storm water management programs;
- Opportunities for watershed-based opportunities; and
- How impervious cover affects water quality and bacteria loading, and best practices to address potential negative influences of impervious cover.

#### **IA 9.2.3: Implement targeted monitoring**

Add bullet:

- *The effectiveness of structural BMPs, such as modifications to or specifications for storm water outfalls.*

#### **IA 9.4.4: Update the I-Plan**

Add the following to the first paragraph:

*Specific topics that might be considered during periodic evaluations include:*

- *The nutrient levels in WWTF effluent and in water bodies and how nutrients may impact instream bacteria levels,*
- *Whether the bacteria limits for WWTF effluent are sufficient,*
- *Results of research,*
- *Additional implementation activities that could be added, and*
- *A comparative review of other watershed-based plans in the area to make sure that relative compliance costs are not disproportionate.*

## RP 10.1 Evaluate the effectiveness of storm water IAs

Reorganize portion of paragraphs as follows:

... The effectiveness studies would include both structural measures and behavioral measures. Structural measures might be based on traditional drainage engineering, *such as specifications for storm water outfalls*, and sustainable infrastructure design methodologies, such as Green Infrastructure, Low Impact Development, and smart growth. Behavioral measures might include public outreach, public reporting...