

BACTERIA IMPLEMENTATION GROUP

WORKGROUPS

General guidance for all Workgroups

- The final product from most of the Workgroups will be a summary of recommended implementation activities and will be the basis of a written section in the Implementation Plan.
- Coordination with other pertinent Workgroups is imperative. Contact with other Workgroups should be the first source of information if input is required.
- Workgroups should not undertake work outside the specified direction of the BIG.
- Workgroups should not speak on behalf of the BIG or represent any recommendations as accepted by the BIG unless directed to do so by the BIG.

Load Source Workgroups

A key element of the implementation plan will be identification of load reduction activities and responsible parties. Load reduction efforts will depend largely on the sources being addressed. A list of charges common to the proposed workgroups is provided, followed by a list of proposed load workgroups.

Load Source Workgroup Charges

The load source workgroups shall:

- Characterize the activities that contribute bacteria loads from the source category and assess the relative importance of the source activity relative to other identified source activities.
- Identify or clearly define the bacteria load expected from the source.
- Identify and evaluate current load reduction activities in place in the region to address this potential source.
- Identify, compare and screen candidate implementation activities, including information on implementation cost, effectiveness and related policy or legal issues.
- Solicit input from the Coordination & Policy Workgroup to identify and document potential challenges related to implementation activities.
- Propose high, medium, and low priority implementation activities that have a reasonable expectation of reducing bacteria loads.
- Propose parties who will undertake the proposed implementation activities.
- Submit preliminary recommendations to the BIG.
- Receive and review comments from the public and the BIG.
- Perform additional evaluations and comparisons as directed/necessary.
- Define a proposed schedule of implementation.
- Identify research gaps and proposed research to be conducted during the implementation period; coordinate with research group.
- Identify monitoring needs; coordinate with monitoring group.
- Estimate costs of implementation activities.
- As needed, assist the Watershed Outreach Workgroup as it prioritizes activities in each watershed.

BACTERIA IMPLEMENTATION GROUP

WORKGROUPS

Proposed List of Workgroups

To focus effort on the identification of loads, implementation activities, and responsible parties the BIG proposes to form the workgroups which are organized by potential sources, as described below:

- **Agricultural Sources:** Includes commercial activities and sites involved in row crop production, horticulture, and silviculture for commercial purposes that can be sources of bacteria.
- **Animal Sources:** Includes wildlife, livestock, birds, and other ecological and non-human sources of bacteria, except pets, that can be sources of bacteria. This includes all (non-pet) animals, whether managed or owned for commercial purposes or not, and also temporary sources such as livestock shows and other large exhibitions. This includes undeveloped park areas, dog parks, and wildlife management areas.
- **Construction Sources:** Includes all construction activities, including, but not limited to, those that expose the soil such as demolition, construction, clearing, grading, and excavating.
- **Land Development Sources:** Includes pre- and post-construction planning and operation of commercial, residential, industrial land developments, and the infrastructure and roadways supporting them, which can be sources of bacteria. This also includes industrial sources, golf courses, business parks, landscaping activities (for residential, commercial, and other customers, and other sources).
- **Illicit Discharges and Dumping Sources:** Includes inappropriate discharges to waterways and regional storm sewer systems as well as inappropriate dumping of solid wastes on public and private land that can be sources of bacteria.
- **Onsite Sanitary Sewage Facility (OSSF) Sources:** Includes the siting, design, construction, and operation of onsite septic systems that can be sources of bacteria.
- **Residential Sources:** Includes citizen activities occurring in residential land use areas that can be sources of bacteria. This includes yard care, pet care, household solid waste handling, and other citizen behaviors.
- **Sanitary Sewer System Sources:** Includes the design, operation, and maintenance of sanitary sewer systems that can be sources of bacteria. May include aging systems; illicit connections; and problems caused by fats, oils, and grease.
- **Stormwater System Sources:** Includes the design, operation, and maintenance of municipal separate storm sewer system features, including buried pipes, culverts, mitigation and detention basins, stream beds, and other natural drainage components that can be sources of bacteria.
- **Wastewater Treatment System:** Includes the design, operation, and maintenance of wastewater treatment plants that can be sources of bacteria. This should include consideration of regionalization.

BACTERIA IMPLEMENTATION GROUP

WORKGROUPS

Management and Policy Workgroups

TMDL implementation is an iterative process and the implementation of many load reduction activities by many parties in the region will require significant management of priorities, resources, implementation organizations, funding, and schedules. To ensure that resources are being expended in an effective manner, each activity should be evaluated for its expected load reduction. There will also be many legal, regulatory, and policy issues to address. The BIG proposes to form the following management and policy workgroups:

- **Research**
- **Implementation Monitoring & Plan Revision**
- **Coordination & Policy**
- **Watershed Outreach**

The charge of these workgroups is outlined below.

- **Research:** Includes the following:
 - Summarize and prioritize research needs identified by the load source workgroups or BIG.
 - Use Bacterial Source Testing (BST) to identify the sources of the bacteria.
 - Identify and prioritize any additional research needs regarding:
 - Fate and transport of bacteria, including growth, die-off, suspension, resuspension, and sediment-water column interactions.
 - Background bacteria impacts.
 - Partitioning of microorganisms and particle/microorganism associations.
 - Human health risks from exposures.
 - Primary vs. secondary contact recreation.
 - Use attainability analysis.
 - Water quality criteria.
 - Epidemiology.
 - Microbial risk assessment.
 - Other water science.
 - Identify research costs.
 - Define proposed research schedule.
- **Implementation Monitoring & Plan Revision:** Includes the following:
 - Determine agencies that are involved in monitoring, identify gaps in the data and monitoring, and coordinate amongst them.
 - In coordination with source workgroups develop and review the monitoring plan for each implementation activity.
 - Provide assistance to workgroups on how to incorporate Bacteria Source Testing.
 - Develop techniques to directly or indirectly measure and assess load reduction activities for effectiveness.
 - Develop recommendations for monitoring activities that will assist stakeholders in determining whether implementation actions are working.
 - Support the BIG and Workgroups with information and input as needed and requested.

BACTERIA IMPLEMENTATION GROUP

WORKGROUPS

Coordination & Policy: Includes the following:

- Provide guidance to the BIG regarding overall integration and coordination, including the guidance regarding development of criteria for comparing and prioritizing implementation activities.
- As recommendations are made by the Workgroups identify challenges to successful implementation and suggest solutions.
- Support the BIG and Workgroups with information and input as needed and requested.
- Legal Authorities
 - Identify gaps in legal or regulatory authority among potential responsible parties Coordinate with source workgroups.
 - Propose alternative solutions or methods to fill gaps in legal or regulatory authority (ordinance adoption, legislative action, etc.)
 - Consider impacts of adaptive implementation on backsliding.
 - Propose priorities for obtaining necessary legal or regulatory authority.
 - Propose a schedule for obtaining necessary legal or regulatory authority.
- Funding
 - Review and integrate proposed schedules prepared by other workgroups. Summarize the estimated costs to governments, citizens, businesses, and other entities performing implementation activities.
 - Identify current funding levels and mechanisms.
 - Identify funding gaps and possible funding alternatives.
- Prioritization and Scheduling.
 - Propose an implementation plan revision process and timeline.
 - Review and integrate proposed schedules prepared by other workgroups.
 - Review priorities and schedules and adjust as appropriate. Document rationale.
 - Prepare master implementation schedule showing proposed control actions, research activities, monitoring activities, implementation plan updates, permitting, and other related activities.

Watershed Outreach: Includes the following:

- Develop criteria for classifying impaired segments for the purpose of prioritizing implementation activities. Apply criteria to stream segments. Communicate results to workgroups.
- Recommend a prioritized phasing plan for each watershed for identified implementation activities.
- Identify and involve potential new stakeholders within each watershed (e.g. source water protection stakeholder group at Lake Houston).
- Coordinate communications in conjunction with each workgroup and the BIG with those within the watersheds.
- Identify and evaluate current education and outreach in place in this region that address bacteria in the waterways.
- Develop Outreach and Media plans on the facts, impacts, and reduction of bacteria in local waterways.
- Consider the use of the internet.
- Support the BIG and Workgroups with information and input as needed and requested.