

Summary of Meeting 3
Citizens Advisory Committee
Greenwich Bay Special Area Management Plan
Wednesday, November 5, 2003 6:30-8:30 PM
Warwick Sewer Authority, RI

At the third meeting of the Citizens Advisory Committee for the Greenwich Bay SAMP, members reviewed the findings of fact for pathogens, developed goals for water quality and reviewed draft policies and recommended actions.

Committee Matters

Members approved the meeting summary notes for October 22 (add flushing element) and the CAC Guidelines. A CAC 'Q&A' document has been established to provide an overview of the CAC's evolution and correspondence between the CAC and the SAMP management team. This document in updated form will be available to CAC members at meetings. The CAC website is updated with a new format and documents to be added over time.

Understanding the Pathogen Issue for GB

DEM presented additional information on their analysis of existing bacteria data. Based on this data of fecal coliform bacteria, which indicates the possible presence of pathogens, the SAMP has concluded that the majority of bacteria originate in the tributaries (inland streams and rivers). Unlike the excess nitrogen issue, where a percent reduction in loadings will produce a beneficial effect, the levels for all pathogen sources need to be extremely low to have any effect on such issues as beach and shellfishing closures. Therefore all sources of pathogens need to be a priority.

The CAC members agreed that the sources of pathogens include septic systems, cesspools, illicit storm sewer connections, wildlife, waterfowl, pets and boats. Members requested a pathogen budget, similar to the nitrogen budget, to highlight the level of loading between sources. DEM and CRMC believe that creating a pathogen budget would be expensive and unproductive to addressing the problem. The reasoning for this conclusion is based on the difficulty in identifying pathogens (from specific sources and not the general bacteria indicator) and the naturally changing environment (mobility of wildlife). A bacteria budget would not provide answers that would change present policies for meeting standards.

The RI health standard for unfiltered drinking water is 20 cfu's (colony forming units)/100 ml and 14 cfu/100 ml for saltwater. However, surface waters within Greenwich Bay are not designated as public drinking water sources. Greenwich Bay closes to shellfishing during wet weather because years of monitoring have shown that storm events lead to high fecal coliform levels. Closures to conditional shellfishing areas are based on the fecal coliform standard of a geometric mean of 14 fc/100 ml and not more than 10 percent of the samples can exceed 49 fc/100 ml. Water quality improves as samples are taken farther from coves. Adding to the difficulty are over 150 stormwater drains in the watershed. In order to get low numbers and meet water quality standards, all pathogen sources need to be addressed. For more information link to: http://www.healthri.org/environment/beaches/how_we_sample.htm.

Members asked if dredging could improve the water quality in coves. The main source of pollution is coming from tributaries, meaning if upland pollution sources are not addressed water quality problems will continue. Dredging to open recently closed channels in combination with addressing pathogen sources may increase flushing and improve water quality. However dredging deep areas will likely reduce the flushing of the coves.

Many questions were asked regarding changing the shellfishing closure areas. There are two steps involved to change the management rules. First water quality needs to be improved to levels below 14 cfu. Then, to change a water body's classification, a political process needs to be initiated to debate the merits of changing the permitted use. The Food and Drug Administration has the authority for designating what are allowable activities near shellfishing areas (i.e. no harvesting where there are marinas or wastewater

treatment facilities). Therefore it is unlikely that shellfishing will be allowed in many of the areas currently closed.

According to DEM, the conditional closure shellfishing grounds are managed so that if there is rainfall or snowfall of ½ inch or greater in less than twenty-four hours, Greenwich Bay's conditional area closes automatically for seven days. Monitoring occurs as the seven days end to ensure that it can be reopened again. Since the soils in the watershed are highly permeable (they are glacial), bacteria can enter the bay almost instantly. Samples reveal more closures occur during the winter (when there is more precipitation).

Draft Water Quality goals generated by the CAC:

Members were asked what to define their goals for water quality in the Bay. These goals will be refined as meetings progress.

General Water Quality

- 1) By 2024, swimming and clamming will be allowed year round in all of Greenwich Bay (where the FDA allows such uses).
- 2) By 2014, debris will be removed from the Bay & watershed area to improve the aesthetics of the Bay.
- 3) By 2014, there will be no more marina expansions in Greenwich Bay.
- 4) By 2014, stormwater will be managed with regulations in place to maintain healthy water quality

Nitrogen

- 5) By the year 2014, 90% of the homes in Greenwich Bay will be tied-in to the sewer system.
- 6) By the year 2014, all human pathogen sources will be eliminated.
- 7) By 2014, nitrogen inputs to the watershed will be reduced by at least 50%. (Nitrogen inputs need to be explained in terms more easily understood by the public. For example, X amount of fertilizer bags = X amount of nitrogen)
- 8) By 2014, phytoplankton problems will be addressed to improve water clarity (eelgrass as an indicator).
- 9) By 2014, the Bay's bottom will be managed to improve flushing.
- 10) By 2014, vegetative buffer zones will be maintained and homeowners will be educated on how to preserve them.

Pathogens

- 11) By 2024, there will be no more beach closures.

Review of Draft Policies and Recommended Actions

The CAC members reviewed the draft policies and recommended actions in the current draft of the water quality chapter.

- 1) Recommendation that transfer of property is not allowed without sewer tie-in.
- 2) In respect to vegetative buffers (Policy # 8 on handouts), CAC members want buffers to be required. CRMC says the buffer zone requirements are very specific and are evaluated on a case by case basis. CRMC encourages everyone to include buffer zones where they are needed, but does not always require them.
- 3) Testing for chemical contaminants (i.e. pesticides and herbicides) should be included in the monitoring program (Policy # 11)
- 4) Add to pump-out policy that the City of Warwick should be implementing their Harbor Management Plans, it should read "enforce and monitor." Also the CAC would like pump-out fees to be charged to boaters and placed in a restricted fund for no discharge zone monitoring and enforcement. (policy #4)
- 5) There should be a policy addressing efforts to combat global warming
- 6) It should be included for storm water control that a buffer zone between the lawn and the coast is a good idea as it discourages geese (Policy # 9).
- 7) A policy about BMPs (Best Management Practices) for compost stations for both municipalities.
- 8) Add a recommendation that there be management policy addressing large animal facilities and how they handle waste disposal (for example horses at Goddard Park or active farms in the watershed).
- 9) Support the development of a management/awareness plan for waterfowl and other wildlife.
- 10) Members recommend that more analysis is needed of where pathogen sources are coming from in order to apply policies and funds.

In response to the last bullet above, DEM agrees that an analysis of sources could be beneficial. However, not at a watershed level since the environment is constantly changing, different specialist are needed for DNA studies, and a study at this scale would require enormous coordination and a well designed program. Managers feel they know enough about the sources to act so that further study should not delay implementation of actions. They can now determine how many swans are in watershed and sub-watershed areas to make an estimate about their contribution to pathogen inputs. DEM does see the benefit of targeted DNA studies for smaller catchment areas, such as certain beach areas. Policies will likely not change, but an accurate assessment of the sources for a localized area could be developed.

Action Items

- 1) The CAC Facilitator will be meeting with individual group members to develop communication strategies with for their organization.
- 2) CAC members should review the latest draft of the Habitat Chapter before the meeting. The draft will be posted on Friday Nov. 14.
- 3) The CAC website will be updated with TMDL links and last meeting's documents.
- 4) SAMP management team will revise the water quality chapter based on CAC comments.

Next Meeting

The CAC will meet next on November 19 from 6:30 – 8:30pm at the Warwick Sewer Authority. The focus of the discussion will be on reviewing the Habitat chapter and developing a public communications strategy.

Attendees

CAC Members

Jerry A. Meyer, E.G. Chamber of Commerce
Rich Langseth, Buttonwoods Bay Committee
Carol Fritz, Cedar Tree Point Assoc.
Bill Bergan, RI Shellfish Assoc.
Steve Insana, Buckeye Brook Coalition
Catherine Murphy, Defenders of GB
Jack Early, Defenders of GB
Karen Way, Buttonwood Beach Garden Club
Leah Robinson, Buttonwoods Bay Comm.
Stephen Medeiros, RI Saltwater Anglers Assoc.
Ernest Theetge, Warwick Watershed Action

Management Staff & Technical Committee

Chris Turner, DEM
Heidi Travers, DEM
Chris Deacutis, DEM
Michael Tikoian, CRMC Chair
Grover Fugate, CRMC Ex. Director
Megan Higgins, CRMC
Glenn Ricci, URI Coastal Resources Center
Michael Campana, URI CRC
Lora Harris, URI-GSO Graduate Student
Kristina Perrelli, URI Student
Charlie Festa, URI Student

Individual Citizens

John Williams, Warwick Cove Marina
Don Pryor