

TMACOG

MAUMEE BAY BACTERIA TASK FORCE

Date: May 20, 2008 Place: UT Lake Erie Center
Present: Rahel Babb (OEPA), Deanna Bobak (UT), Amie Brady (USGS); Kevin Czajkowski (UT), Scott Denham (ODNR), Daryl Dwyer (UT); Kurt Erichsen (TMACOG), Tom Hays (Oregon), Ryan Murphy (Hull), Don Nelson (Oregon), Bill Petruzzi (Hull), Paul Roman (Oregon), Alan Ruffell (Toledo/Lucas County Health Department), Von Sigler (UT), Pam Struffolino (UT), Melissa Taylor (ODNR), Paul Wetzel (Corps).

Kurt Erichsen gave an opening to the meeting. We have completed a year and a half project that gave us conceptual plans for a wetland system to control bacteria impacting the Lake Erie beaches at Maumee Bay State Park. The purpose of this meeting is to follow up with the wetlands concept, and identify future actions to protect the beaches. Much of today's meeting is to update everybody on the several ongoing projects in the watershed related to bacteria issues.

Scott Denham reported on status of Maumee Bay State Park wetland proposal within ODNR. The report is being reviewed by central staff; they have a lot of questions but generally response is favorable. Will need approval of chief of parks division. Does not need further support from committee at this time

Paul Roman reported on Oregon's sewer projects that have eliminated many septic systems from the watershed. In all, Oregon has spent \$8 million on sanitary sewers extensions. The first leg was Seaman; the second was Stadium, which eliminated the Clay and Oregon Municipal Building package plants; and the third was Pickle Road, in the heart of wolf watershed. About 60% of Oregon's portion of Wolf Creek is now sewerred. Oregon is conducting quarterly stream sampling of bacteria and other parameters. Oregon is also mapping all of the storm sewer system outfall points into Wolf Creek. The program is driven by Oregon's Phase 2 permit. So far 3 years' of data has been collected. The sampling does not show definite trends, but neither does it indicate big sources of bacteria. Amie commented that quarterly sampling may not be frequent enough to reveal trends; too subject to weather variations.

When sewers were installed along Seaman and Stadium, the Toledo/Lucas County Health Department gave them five years to tap, on the grounds that many of the houses had new septic systems. The Toledo/Lucas County Health Department gave houses 5 years to tap on Seaman, Stadium and Pickle; that time is ending and houses will be required to tap. For the Coy Road sewer project, houses were given one year to tap.

Discussion of septic system testing. It's been five years since last testing. Paul asked whether Jerusalem Township areas had been tested, notably between North Curtice and two miles to the east. Alan Ruffell noted that the sanitarian who conducted the Wolf Creek watershed sanitary survey was no longer with the Health Department; he agreed to check into any recent sampling in the area.

Daryl Dwyer outlined past and current Lake Erie Center projects. These include research of different wetland system designs and their effectiveness in controlling bacteria. Daryl believes a subsurface flow design may be most effective.

Lake Erie Center is also studying biosolids application and whether it impacts e coli levels in streams. Results do show an increase from biosolids application fields after rain events.

UT and USGS are working to add a second stream gage at Wolf Creek on the southwest side of seaman. Pam Struffolino discussed sampling program and data: both in stream and in the bay at the beaches. Hull is developing a model for a wetland system.

Details of potential wetland systems were discussed. One question was whether it could it flow by gravity. Bill Petruzzi responded possibly, but would require a lot of excavation. Depending on design storm, some pumping probably would be required.

Use of dredge materials in conjunction with a wetland system was discussed. There was discussion of dredge disposal issues and current proposals to create habitat restoration units (HRUs).

Amie Brady discussed USGS's predictive model for estimating likely E. coli levels at a beach. The program is called "Nowcasting," and is based on monitoring results at a specific beach under various weather and water conditions. USGS is collecting the first year's data in 2008; at least two years' data will be needed to develop a working model for the Maumee Bay State Park Lake Erie beaches. The goal is to predict, based on real time data, whether beach is safe for body contact. The model gives a percent probability whether the water E. coli levels will exceed 235. Similar models have been developed for beaches in the Cleveland area; so far its predictions match actual data 83% of the time.

Kurt Erichsen discussed potential funding sources for projects to address bacteria issues. He split these into two broad categories: implementation grants which could construct a wetland system, and studies to provide into or reach decisions. He provided a handout, a partially updated funding source spreadsheet developed by Hull. The list includes many possible implementation funding sources. He noted that we could be ready to pursue one or more of these programs when we have a definite consensus as to what kind of wetland system we should build. In general, these are expensive grants, in that their matching fund requirements are high, usually 1:1. Most do allow in-kind contributions to be counted, though some have restrictions. Kurt reported that he did try to put together a \$319 application for a Maumee Bay State Park wetland; he was unable to find a partner who could provide the 40% match against \$300,000 of grant funds.

He highlighted the Water Resources Restoration Sponsor Program (WRRSP). This program requires a sponsorship from a local government who borrows funds from Ohio EPA for a sewerage project. The sponsor works with the project agency (e.g., ODNR Maumee Bay State Park in this case) to submit a proposal to Ohio EPA DEFA. If the proposal is accepted, Ohio EPA provides the project funding, and the interest rate for the sponsor's loan is reduced by 0.1%. The sponsor need not necessarily be the City of Oregon — it could be any sewerage agency in Ohio that borrows money through DEFA.

Kurt also discussed the ODNR Coastal Management grant program. This is the program that funded the recently completed study. If there is a funding round this year and it works the same as in the past, about \$50,000 will be available requiring a 1:1 match and a deadline of mid-November. Several potential ideas were discussed:

- GIS evaluation of potential upland bacteria sources — loading rates, times of travel. Pull together

information from the several independent projects that have been conducted.

- Develop implementation plan for a Maumee Bay State Park wetland system. Work with Maumee Bay Bacteria Task Force members, particularly ODNR and Lake Erie Center to reach agreement on details of a wetland system for which to pursue funding.
- Provide funding to increase sampling the City of Oregon conducts in the Wolf Creek watershed to identify trends and bacteria sources; and for Toledo/Lucas County Health Department to conduct sanitary surveys/septic system testing in the watershed.

Kurt agreed to work with Maumee Bay Bacteria Task Force members on these potential project ideas and determine their potential usefulness and feasibility.

[I didn't specifically discuss it at the meeting, but the National Fish and Wildlife Foundation is also a good possibility for study funding. Grants range from \$35,000-\$100,000 and require 1:1 match. Deadline is November 15. -ke]

The date for our next meeting was not set, but it was agreed to meet in about two months. Kurt will coordinate the meeting.