

Meeting Summary

Muskegon Lake Watershed Partnership
September 24, 2007

Attendance

There were 25 people in attendance: Mike Russell, Cynthia Price, Mark Evans, Mike Alexander, Rick Rediske, Marc Tuchman, Tom Berdinski, Bob Fountain, Gary Noble, Theresa Bernhardt, Kathy Evans, Carl Ruetz, Ajit Vaidya, Kathy Neff, George Bailey, Mike Colvin, Charles Wilde, Eric Stern, Greg Mund, Theresa VanVeelen, Eric Bowman, Scott Plummer, Dan Rockafellow, Carolyn Weng and Susan Boehme.

Cynthia opened the meeting, held at GVSU-Michigan Alternative and Renewable Energy Center at 6:05 p.m. Introductions were given by all in attendance.

Minutes

A motion to adopt the August meeting minutes was provided by Mark, with support by Greg. Motion passed.

Partner Updates

- ***Grand Trunk Restoration:*** Mark Evans noted that over 250 volunteers participated in Day of Carking and improved the degraded aesthetics BUI by removing broken concrete, planting seed and native plants and stopping erosion.
- ***MCC Student Monitoring:*** Theresa VanVeelen gave an update on the environmental science course. Seven students monitored an aquatic habitat site on Ruddiman Creek, following the contaminated sediment cleanup. The course will continue. A presentation on the results will be provided to MLWP. Funding to support development of the curriculum was provided from the EPA GLNPO / NFWF grant to set fish and wildlife BUI restoration targets.
- ***Muskegon Lake Shoreline Habitat:*** Carolyn Weng noted that the Muskegon County Nature Club has a member who is a professional ornithologist and will do bird-banding at the Muskegon Nature Preserve in September and October. An astounding number of migrant birds move through the shoreline habitat each year and it is in need of protection.
- ***Master Naturalist Course:*** Kathy Neff reported on her initiative to set up the Master Naturalist Course through MSU-E as a way to train volunteers on techniques to provide on-going stewardship of the Muskegon Lake shoreline, along the bike path and other sensitive areas.

MLWP Business Updates:

- Cynthia noted that the bylaws committee hasn't met, but a draft has been developed and reviewed by e-mail.
- In addition to support from the Community Foundation for Muskegon County and USW Local 1015, funding to purchase a steel roof for the Grand Trunk / Lakeside Picnic Shelter was provided by long-time MLWP supporter and USW Local 1015 member, Jim McCabe.
- Kathy noted that Julie Sims/MDEQ will be working with us to complete a Muskegon Lake biennial RAP update. The BUI implementation strategy will complement that effort and both need to be underway soon. Cynthia noted that we need a facilitator for the process and

requested ideas to generate funds or pro-bono assistance. There are no funds in the PAC support grant for a facilitator. Susan Boehme offered to look into resources for a facilitator. She will follow up with Kathy.

Presentations

Cynthia introduced Marc Tuchman/US EPA GLNPO, to begin the presentation portion of the meeting. Marc provided a PPT presentation about Great Lakes Legacy Act, projects completed and the Ruddiman Creek cleanup.

Marc provided an update on the Muskegon Lake Division Street project, noting that the next steps are this week's Mudpuppy sampling and development of the feasibility study. The MLWP will be asked to give input on the feasibility study and then, the selected remedy/engineering design and MDEQ submittal for a GLLA remediation application will follow. If all goes well, a project agreement will be signed by US EPA and MDEQ.

Legacy Act and CMI funding will make it happen if everything falls into place. A construction project will happen next summer if all goes well.

Mike Alexander noted that there was originally \$25 million in CMI for contaminated sediment sites. There is still \$11 million available. Budget folks are saying that DEQ can move projects through. The Muskegon Lake Division Street site is a priority and it is one of the original sites listed in the CMI appropriations.

Kathy asked about issues with analysis of samples and potential budget issues. Mike noted that a small hold time exceedence won't affect the QAQC. Rick Rediske noted that metals and PNAs are pretty stable. The samples will be in cold storage if the budget shuts down. Dan Rockafellow noted that there is a contingency plan in place. Samples can store for 14 days to extract PNAs/PAHs and 28 days for the metals.

Dan Rockafellow, MDEQ and Ajit Vaidya, US EPA began a PPT presentation at 6:47 p.m. The 2005 sampling sites were reviewed. They were toxic to aquatic organisms. In 2005, water sampling during wet and dry weather events did not find any ongoing sources of contamination. The historic sources of contamination are under control. In 2006, sampling provided a picture of the volume and extent of contamination. The most elevated concentrations of mercury were near the marina and additional sampling showed that there were not elevated levels within the marina itself. 1 ppm would be a cleanup goal. There is a lot of oil and grease associated with this mercury contamination.

Scott asked about safety in coming into contact with the 1 ppm mercury concentration when brought up on a boat anchor. Dan noted that it is a bio-accumulative concern and also that a clean cover would be considered to cover sediment following the cleanup. The top 2-3 feet is anticipated for removal. Additional sampling this week will determine how deep the vertical break will be for the cleanup.

Q&A revolved around sample locations and the kreging maps that illustrate contamination locations, various levels and extents throughout the Hartshorn bay.

Ajit noted that EPA and DEQ want to make sure that they remove the PAHs while removing mercury, so it is not left behind.

Mike Alexander noted that there will be an opportunity for public comment on the feasibility study.

The Mudpuppy will sample 21 locations this week to fill any data gaps from 2005 and 2006. The samples will determine the vertical extent with one (1) foot intervals down to four (4) feet in most areas and down to seven (7) feet in hot spots. This sampling will further define the volume estimate. Physical data/characteristics of the sediment will be collected for the feasibility study. Sediment samples will also be collected to bench test the soil washing treatment. The area to be dredged is approximately 2.5 million square feet.

The feasibility study will look at a variety of alternatives including dredging, capping and soil washing with beneficial reuse. It will provide a detailed volume estimate of contaminated sediment; evaluate cost and technical feasibility (including a treatability study and a soil washing study). The feasibility study will evaluate barriers to implementation of alternatives and evaluate logistical considerations including recreational use of the marina and identification of potential staging area and, offloading sites. The feasibility study will result in the selection of the preferred alternative for an engineered design.

Eric Stern, US EPA Region II gave a PPT presentation that included information about a variety of management and technology options for sediment cleanup. It was noted that integrated approaches to contaminated sediment management has become the norm.

Questions centered on soil washing and beneficial reuse. It was noted that bench scale testing for the Muskegon Lake sediment project will need to be done to determine the feasibility of soil washing and beneficial reuse. Pilot scale testing is not necessary. Moving from buckets of sediment to barges is a challenge in moving pilot scale technology to a full scale project. Environmental sustainability and environmental manufacturing includes building bike paths, landscaping, landfill closure, etc. Cement can also be a beneficial reuse with waste to energy electricity.

Charles Wilde, Biogenesis provided a PPT about the soil washing process, noting that Biogenesis develops solutions and partners with firms to carry out project elements. Public outreach is an important component of Biogenesis projects and they work at it from the very beginning of the project. Charles interpreted the soil washing process flow diagram. After large material is removed, wet sediment is stored (not dewatered). Then, pre-processing occurs before sediment washing. The contaminants are desorbed and put into the water stream. From there, treatment occurs and the particles are removed. The water with contaminants goes into the standard treatment technology to remove the mercury. The wastewater can be discharged by NPDES or POTW. All of the mercury is taken out in the clarifier where polymers aggregate it. Participants noted that, in Michigan, the mercury limit is a 1.9 ng. Questions centered on the technology's ability to remove all mercury from the wastewater stream before discharging to the Muskegon County Waste Management System. Charles noted that Biogenesis would look to water treatment experts to tell them what to do to prove through bench testing that they can meet the standards.

Final Business Items

The MLWP endorsed the Land Conservancy's initiative to acquire private land that includes a portion of Lost Lake in order to add it to the Muskegon State Park. A motion to endorse the project was given by Greg Mund with support by Theresa Bernhardt. Motion passed.

Meeting adjourned

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