## Report of Recommendations Prepared By: Commission on the Environment Construction Erosion Control Subcommittee

The Lakes report requested by the Madison Common Council and prepared by the Commission on the Environment (COE), identifies phosphorous as the limiting, and therefore the most important nutrient contributing to algae and weed growth in the Madison Lakes. The report further states that 19% of the phosphorous contribution to the lakes comes from construction site erosion. Given these facts, the COE formed a sub-committee to make recommendations aimed at reducing construction site erosion. The sub-committee was made up of three members of the COE, three representatives of the construction industry and was staffed by the City of Madison Engineering Department.

Jon Standridge, COE representative and chair of the sub-committee Jeff Benedict, City of Madison Engineering Division Bill Sonzogni, COE representative Keith Pierce, COE representative Don Esposito, Veridian Homes Brian Hornung, Findorff Nathan Lockwood, D'Onofrio Kottke and Associates

The recommendations of the sub-committee are posted below, in no particular order of importance.

**Recommendation 1:** The City of Madison Engineering Division should develop and regularly use an Email broadcast alert system built into the existing web based erosion control self reporting system.

Justification:

Regular Emails to permittees would emphasize the importance of erosion control. Emails would also serve as a reminder for self reporters. Repetition from repeat emails would help create attentiveness to erosion control. Emails would serve as a training tool for new players.

Email examples; 1. Madison just experienced a big storm, please remember to reassess your practices and reconstruct erosion control measures where necessary.

2. A large rainfall event is predicted for the next 24 hours. Please check your erosion control devices.

City Engineering Division will prepare a report for the COE on implementation of this initiative.

**Recommendation 2:** The City of Madison Engineering Division should create a means to identify and recognize companies and individuals who have implemented successful erosion control programs.

Example: A list of all projects completed without enforcement notices issued should be created and publicized. The City of Madison Engineering Division could annually select the best three or four projects or construction companies that go above and beyond the minimum construction erosion control practices. Or, a special certificate could be presented to the selected companies or projects recognizing excellence in erosion control practices.

**Recommendation 3:** The City Engineering Division shall require an erosion control pre-construction meeting and training session that will include general contractor employees, all subcontractors and utility installers who will be working on the site. This meeting will be required in the Erosion Control Plan and will be a necessary condition of approval. The pre-construction meeting will be documented with minutes and attached to the permit application.

This recommendation may require changes in operating procedure policies or possible ordinance changes. The City of Madison Engineering Division will report back to the COE on an implementation plan.

**Recommendation 4:** The City of Madison Engineering Division shall create a list of continuing education classes in construction erosion control. These classes would be designed to teach erosion control best management practices (BMP's) to construction contractors, utility installers and storm water design firms. Companies who participate in erosion control training continuing education will be recognized per recommendation 2 above.

The sub-committee determined that some construction erosion control classes are available through NESECA.

The discussion surrounding recommendation 4 included the following concepts captured here for possible future consideration.

Consideration should be given to requiring that continuing education be completed and documented for all city agencies involved in construction and all contractors working on city funded projects. The City Engineering Division should be allowed to require

attendance at continuing education classes in lieu of citations.

**Recommendation 5:** The City of Madison Engineering Division shall consider reallocating staff priorities at the engineering technician level to facilitate additional on-site inspections.

The subcommittee recognized that on-site inspections are a very effective erosion control tool. They also recognized that the in-office duties associated with

erosion control have been steadily increasing. An engineering technician could be used to assist with the data entry office functions as well as do some of the more routine inspection work. The subcommittee recognized that self reporting has been effective, but could be improved with on site visits from engineering staff to build rapport and check on the accuracy of the self reporters.

**Recommendation 6:** Raise fines or consider other options for compelling erosion control practice compliance. The current fine structure has some of the regulated community believing that paying the fines is less expensive than doing the erosion control. A significant increase in fines could improve erosion control compliance. Another option would be to issue stop work orders rather than fines. Implementation of this recommendation might require an ordinance change.

**Recommendation 7:** Establish a policy that states; No deliveries will be allowed to construction sites except from tracking pads or the street.

**Recommendation 8:** Establish a policy requiring all plans for sites larger than 20,000 square feet, be signed by the designer. Further, the plan will state that the designer will have responsibility for on-site monitoring of the erosion plan that continues through the completion of the project.

**Recommendation 9:** Current practice is to design erosion control practices to contain the two year storm event which is 2.9 inches of precipitation in 24 hours. The subcommittee recognizes the reality that the larger storm events can be catastrophic. The subcommittee explored the concept of increasing the design standard to the 5 or 10 year storm, and decided to leave things as they are as current standards are cost effective.

**Recommendation 10:** The City Engineering Division will create a policy to require a mid-course evaluation meeting for the purpose of reevaluation of design plans after construction has begun and preferably after a rain event. This will be an onsite meeting. This may or may not include city personnel and will require minutes submitted to the Engineering Division. This mid-course evaluation meeting will be described in the initial Erosion Control plan.

**Recommendation 11:** The subcommittee encourages all developers and construction companies operating in Madison to consider participation in WDNR Green Tier Environmental Initiatives program. More information can be found at this website.

http://www.dnr.state.wi.us/org/caer/cea/environmental/