

University of Minnesota Duluth Storm Water Pollution Prevention Program Annual Meeting 4/18/2008 - Summary of Activities for 2007

The mission of the University of Minnesota Duluth storm water pollution prevention program is to reduce, to the maximum extent practicable, the possible negative impacts of the campus on the surrounding watersheds and ultimately the Lake Superior ecosystem. Our Storm Water Pollution Prevention Program report is at <http://www.d.umn.edu/fm/stormwater/downloads.htm>

UMD's 2007 Storm Water Pollution Prevention Program included these activities and Best Management Practices:

Minimum Control Measure 1: Public Education and Outreach

UMD student education:

- David Wyring's Anthropology senior seminar students conducted a research project on storm water
- Beth Ruark's Technology in Education class continues to devote a class period each semester to a storm water presentation and Rain Garden tour for future science teachers

Other University of Minnesota stormwater education:

- UMD Storm Water website is being updated as part of a larger UMD environmental site
- Beautiful U Day cleanups and Tischer Creek clean up provided service learning opportunities
- UMD Theatre and the Office of Civic Engagement invited community groups involved in water quality to staff literature tables, connecting the Urinetown play's audience to its corresponding message
- Storm Water Pollution Prevention Program website: www.d.umn.edu/fm/stormwater

Brochures / Presentations / Tours:

- "Making a Great Lake Superior" conference was hosted by MN Sea Grant on Oct. 29 -31 in Duluth. A diverse audience of 444 researchers, teachers, resource managers, mayors, public works employees, attended.
- UMD Stormwater efforts were presented to the AIA (American Institute of Architects) "Reconnecting to Our Water Ways" speaker series, Minnesota Erosion Control Association and Minnesota College Personnel Assoc.
- The UMD Rain Garden continues to draw attention. Over 250 people have participated in formal tours in 2007.
- A bus touring innovative storm water efforts stopped to view the UMD Rain Garden and pervious pavers
- Grand Rapids DNR toured the Rain Garden as a starting point for storm water education
- UMD neighbors received information about rain gardens and other storm water BMP's at the annual neighborhood meeting in response to a City of Duluth program to discharge footing drains into yards
- 550 UMD Rain Garden brochures, 420 storm water brochures and 170 storm water bookmarks were distributed
- Minnesota Sea Grant and Wisconsin Sea Grant *Trips on the Lake*

UMD also supported these Regional Stormwater Protection Team education and outreach activities:

- Watershed Festival: UMD participated in the 2nd June festival to educate homeowners and the general public
- *Superior Streams Partners*: RSPT will encourage the local business community to incorporate stormwater best management practices into their operations and to provide financial support for RSPT
- Water quality experts, architects, city and county planners, developers, residents, and others are collaborating with MN Sea Grant to recommend design improvements for property near west branch of Amity Creek
- Erosion and Sediment Control Workshop
- Snowplow Workshop for Correct Application of Salt/Sand
- TV & Radio educational spots, Home Show booth
- Site design toolkit at www.lakesuperiorstreams.org website sponsored by Natural Resources Research Institute, Sea Grant College, University of Minnesota - Duluth and City of Duluth Stormwater Utility
- www.lakesuperiorstreams.org: Rick Axler reports that he receives about 400,000 requests and 75,000 page requests per month. Over 2,000,000 pages of information were requested by Minnesotans in 2006-2007.
- Superior Streams Partnership Program developed

Minimum Control Measure 2: Public Involvement and Participation

- The SWPPP defines the UMD "public" as employees, students, and contractors that make up the campus community
- Annual review meeting invites public comments which will be documented and responded to
- UMD is represented on the Regional Stormwater Protection Team (RSPT), a coalition of 26 local communities and interested agencies jointly promoting stormwater education and addressing shared storm water issues
- The UMD SWPPP Steering Committee meets quarterly and is made up of members appointed by the Vice Chancellor of Finance and Operations
- The 2007 Storm Water Steering Committee included two students, three faculty, two MN Sea Grant educators, six staff, and there were three students hired as storm water interns in 2007
- Office of Civic Engagement is matching students to storm water internship projects
- Over 220 students participated in Beautiful U Day and Earth Day litter cleanup events
- ROTC & FM planted 800 native tree seedlings to provide shade along W. branch Tischer Creek

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

- Developed procedures for locating portable toilets on campus
- The storm sewer systems for the Lower Campus were reviewed and maps were updated
- We continued the review of building sumps and drain tile systems. We added a review of the sanitary system to verify that we have no storm water discharges connected to the sanitary system. Storm sewer discharges to sanitary systems contribute to sanitary overflows during wet weather.
- We videotaped our sanitary sewer lines to determine their condition and are working on repairing broken and cracked pipes. Broken and cracked sewer pipes allow infiltration and can contribute to sanitary overflows during wet weather.
- We had several reports of illicit or potentially illicit discharges
 - A contractor had a hydraulic line ruptured and sprayed fluid across a wide area. The release was reported to the MPCA and professionally cleaned up.
 - A neighbor had placed partially full cans of chemicals onto University property. The materials were removed and the Department of Environmental Health and Safety conducted a neighborhood informational program.
 - Facilities Management and the Department of Environmental Health and Safety discharged fire extinguisher chemicals into a storm drain during training. The material was swept up and the storm drain was protected for future trainings. An alternative training program is being investigated.
- The Department of Environmental Health and Safety (DEHS) has drafted for comment an Administrative Policy on Environmental Management and an associated Administrative Procedure on Storm Water Compliance. Illicit discharges, spills and dumping are included as part of the Administrative Procedure on Storm Water Compliance. When finalized, the Policy and Procedure will be submitted to the University's Administrative Policy review process for incorporation into the Administrative Policies of the University of Minnesota. If you would like a copy of the DRAFT Policy / Procedure to review, contact Andrew Phelan at andyph@umn.edu

Minimum Control Measure 4: Construction Storm Water Runoff Control

- The draft Administrative Policy on Environmental Management and an associated Administrative Procedure on Storm Water Compliance contain information on construction site requirements and controls.
- The DEHS continues to review each project for inclusion of proper storm water controls, relating to erosion and soil runoff from construction sites.

Minimum Control Measure 5: Post Construction Storm Water Management

- The draft Administrative Policy on Environmental Management and an associated Administrative Procedure on Storm Water Compliance contain information on post construction run off requirements and controls.
- 800 seedlings were planted in the spring of 2007 along banks of the West Branch Tischer Creek
- BARR Engineering designed storm water improvements for Eric Clarke and Fire Hall Ponds. Projects are waiting for funding.
- BARR Engineering investigated design options for the controlling discharge volumes on the Oregon Creek watershed portion of campus. Full watershed control is cost prohibitive at this time.
- The rain garden's sedimentation trap was cleaned out 3 times this year, yielding 12 cubic feet of material

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping

- 19 loading docks, loading areas, exterior storage areas, and exposed stock piles were inspected. In general, none of those areas pose a significant environmental risk, however, areas should be kept cleaner, unnecessary items properly disposed off, and procedures for handling liquids should be developed.
- All of our structural storm water management features were inspected in 2007 (4 stormceptors, 1 rain garden, 4 sand filters, 1 bio-retention pond, 2 underground storage tanks, 1 attenuation pond). Minor repairs were needed at seven locations, with three additional locations needing to be watched more carefully this summer.
- Seven outfalls were inspected around Research Lab Building. Several are being looked at for repair with the Oregon Creek wall stabilization project.
- We did not look into street sweeping in 2007 as anticipated. Street sweeping requirements will be developed in 2008.
- All campus dumpsters were inspected in 2007. A.B Anderson open dumpster was replaced with a covered dumpster.
- Salt mixing and storage procedures were reviewed with grounds staff. 6 of 8 full time staff were trained on snow and ice control best management practices by the Minnesota Pollution Control Agency.
- Eric Clarke, Fire Hall and Rock Ponds were inspected for trash, debris and erosion, trash was removed

Awards

- Grounds staff received an Environmental Leadership Award from the Freshwater Society for their efforts to reduce the environmental impacts from salt applications to streets and sidewalks while maintaining equivalent safety standards

Comments on our program are always welcome at <http://www.d.umn.edu/fm/stormwater/hotline.htm>