

University of Wisconsin – Green Bay

Public Education & Outreach Program

Goals & Objectives

The major goal of the University of Wisconsin – Green Bay (UWGB)'s public education & outreach program is to increase awareness of stormwater pollution impacts and to encourage changes in public behavior in order to improve the quality of and reduce the quantity of stormwater runoff.

The Wisconsin Department of Natural Resources (WDNR) requires that a public education and outreach program include, at a minimum, the following eight elements (*note: some of these may not be directly applicable on the UWGB campus*):

1. Promote detection and elimination of illicit discharges and water quality impacts associated with such discharges from municipal separate storm sewer systems.
2. Inform and educate the public about the proper management of materials that may cause stormwater pollution from sources including automobiles, pet waste, household hazardous waste and household practices.
3. Promote beneficial onsite reuse of leaves and grass clippings and proper use of lawn and garden fertilizers and pesticides.
4. Promote the management of stream banks and shorelines by riparian landowners to minimize erosion and restore and enhance the ecological value of waterways.
5. Promote infiltration of residential stormwater runoff from rooftop downspouts, driveways and sidewalks.
6. Inform, and where appropriate, educate those responsible for the design, installation, and maintenance of construction site erosion control practices and stormwater management facilities on how to design, install and maintain the practices.
7. Identify businesses and activities that may pose a stormwater contamination concern, and where appropriate, educate specific audiences on methods of stormwater pollution prevention.
8. Promote environmentally sensitive land development designs by developers and designers.

NOTE: The public involvement and participation program is included in the public education & outreach program.

Audiences on the UWGB campus

The stormwater education and public participation topics developed for the UWGB campus target the specific audiences that are on campus. Campus audiences fall into two broad categories:

1. A general audience that includes:
 - a. Students
 - i. On-campus residents
 - ii. Commuters
 - b. Faculty & staff
 - c. Arboretum & golf course users
2. Campus facilities, grounds, golf course and maintenance staff

Objectives

1. Audiences on the UWGB campus will have an understanding of stormwater runoff and the impacts of excess stormwater runoff and stormwater pollution, such as water quality impacts, the effects of impervious surfaces, variations in flow and the environmental consequences.
2. Campus audiences will understand where the stormwater conveyance system goes (including storm drains and swales) and will not dump material into them.
3. Campus audiences will know where to get information on Best Management Practices (BMPs).
4. Campus facilities, grounds, golf course and maintenance staff will understand and implement appropriate BMPs and pollution prevention practices.

Program components

UWGB will partner with the City of Green Bay whenever possible in all permit condition areas, including public education & outreach and public involvement & participation.

Staff will partner with and encourage student involvement in activities pertaining to education of the campus community on stormwater management issues. Potential routes for involving students include working with the Public Environmental Affairs Council (PEAC) and involving the fall 2008 graduate Capstone class in stormwater management issues on campus. PEAC is a student organization on the UWGB campus whose purpose is “to stand up for the environment by taking part in educating the public on important environmental and humanitarian issues. With lots of hands-on work by enthusiastic people, the organization has been and will continue to be successful in achieving its goals.” The graduate Capstone class is designed to provide students with opportunities to research environmental science or policy issues of local or regional scale. One or more research teams are formed to address the topic or topics selected, often at the request and with the cooperation and support of a government agency or an NGO. The projects are not theoretical or broad in scope, but rather focused on the kinds of problems that graduates might expect to face.

The campus will develop and implement multiple channels of communicating stormwater management goals and information to the campus community. This communication program may include any combination of the following:

1. Display stormwater management educational materials at selected campus locations and during selected campus events. This might include placing posters in campus hallways, placing ads/PSA's on napkin holders in campus dining areas.
2. Periodically publish stormwater educational articles and disseminate public service announcements regarding stormwater management goals and guidelines through campus media such as the student newspaper Fourth Estate, the campus radio station WGBX, the campus Phlash TV channel 20.

3. Install informational signage pertaining to stormwater management features on campus.
4. Periodically update campus websites with pertinent stormwater management goals, guidelines, information and external links. These might include the following websites: PEAC; Facilities; Residence Life; and will include links to other stormwater related websites. This effort might also include periodically sending campus-wide email with pertinent stormwater management goals, guidelines, information and external links via the campus LOG and Campus Life email. It might also include periodically developing and posting informational and educational stormwater management podcasts/videocasts to campus websites.
5. Give short presentations about general stormwater education and stormwater issues to campus classes and groups.
6. Distribute informational brochures to all on-campus student residents via the Office of Residence Life and to parking permit holders via the parking permit issuance procedures.

Program component details

The elements of the proposed public education and outreach program are detailed below, including best management practices, measurable goals and implementation dates. These dovetail with the public involvement program.

Action	Public Education & Outreach	Implementation Date
1	<p>Action: Display stormwater educational materials</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • develop and collect a library of materials • number of potential display locations <ul style="list-style-type: none"> • Student organization fairs/events • campus Earth Day events • dining areas • Biodiversity Center • Golf course club house • Residence hall bulletin boards • number of posters, brochures, literature on display <p><i>Target audiences:</i> all campus and visiting public</p>	<p>2008/2009</p> <p>2008/2009</p> <p>2009</p>
2	<p>Action: Publish educational articles/PSA's and ads in the campus newspaper</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • number of topics identified: <ul style="list-style-type: none"> • general stormwater awareness/UWGB's stormwater permit • storm drain stenciling • car maintenance & washing • fertilizer, pesticides, leaf collection, yard care • number of articles and ads published <p><i>Target audiences:</i> all campus and visiting public</p>	<p>2008</p> <p>2008/2009</p>
3	<p>Action: Install signs to educate about stormwater pollution</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • number of signs installed <p><i>Target audiences:</i> campus community; arboretum and golf course users</p>	<p>2009</p>
4	<p>Action: Use campus websites to educate about stormwater issues</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • number of website uses <ul style="list-style-type: none"> • stormwater general information/articles • links to other websites: WDNR, USEPA, CWP, UW System • promote municipal programs: leaf collection, Clean Sweep, etc. • update websites <p><i>Target audiences:</i> all campus</p>	<p>2008</p> <p>2009</p>
5	<p>Action: Distribute stormwater educational materials</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • develop/collect a library of materials • number of potential distribution methods <ul style="list-style-type: none"> • with parking permits • <i>Our Watershed</i> Newsletter • through Office of Student Life • number of educational materials distributed <p><i>Target audiences:</i> faculty/staff and commuting students</p>	<p>2008/2009</p> <p>2008</p> <p>2008</p>

Public Involvement & Participation Program

Goals and objectives

The major objective of UWGB's public involvement and participation program is to notify the campus of activities required by the stormwater permit and encourage public input. Specific goals of the public involvement activities are to:

- provide opportunities for the campus community to participate in UWGB's stormwater program
- develop public support for UWGB's stormwater program

UWGB's public outreach and education program is combined with its public involvement and participation program. Public involvement differs from public education in that it not only informs the public, but also provides opportunities for direct community input and action. When community members participate in a project's decision-making process, they are more likely to support the final outcome. This part of the program describes ways in which the UWGB community can play an active role in developing and implementing the campus stormwater management program. A unique attribute of the UWGB campus community is that it has valuable resources in the knowledge of the faculty, the educational setting of a university, and the energy and capabilities of a student body. UWGB also has an interdisciplinary emphasis on environmental science. The involvement of an informed and involved campus community can be a valuable information resource and can help build compliance with the program.

Objectives

1. Campus audiences will have knowledge of and access to UWGB's stormwater permit and its requirements.
2. Selected groups of students and faculty will participate in educational efforts for the campus regarding stormwater runoff and pollution.
3. Faculty and students will be included in campus-wide stormwater planning.

Program components

UWGB will partner with the City of Green Bay whenever possible in all permit condition areas, including public education & outreach and public involvement & participation.

Staff will partner with and encourage student involvement in activities pertaining to education of the campus community on stormwater management issues. Potential routes for involving students include working with the Public Environmental Affairs Council (PEAC) and involving the fall 2008 graduate Capstone class or selected project-based courses in stormwater management issues on campus.

The campus will develop and implement multiple channels of notifying the campus community of activities required by the stormwater permit and providing opportunities for public participation. This program may include any combination of the following:

1. Public review and access to stormwater program
2. Presentations to campus groups
3. Participation in storm drain marking
4. Seek continued involvement of students & faculty in stormwater program

Program component details

The elements of the proposed public involvement and participation program are detailed below, including best management practices, measurable goals and implementation dates. These dovetail with the public education and outreach program.

Action	Public involvement & participation	Implementation Date
1	<p>Action: Public review of & access to stormwater program</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • Post links to the permit and UWGB's NOI on campus websites • Public review of final stormwater management plan <ul style="list-style-type: none"> • place copy of stormwater management plan on campus website • place copy of stormwater management plan in campus library <p><i>Target audiences:</i> all campus</p>	<p>2009</p> <p>2009</p> <p>2009</p>
2	<p>Action: Participation in storm drain stenciling</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • Publicize storm drain stenciling in campus media • Number of students that participate in stenciling • Number of storm drains stenciled <p><i>Target audiences:</i> all campus</p>	<p>2008</p> <p>2008/2009</p> <p>2008/2009</p>
3	<p>Action: Presentations to campus classes/groups by students/staff</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • Develop stormwater presentation • Number of classes presented to • Number of students/class • Post stormwater presentation on campus website <p><i>Target audiences:</i> all students</p>	<p>2008</p> <p>2008/2009</p> <p>2008/2009</p> <p>2009</p>
4	<p>Action: Seek continued student/faculty involvement in campus stormwater program</p> <p><i>Measurable goals:</i></p> <ul style="list-style-type: none"> • Attend & work with PEAC each semester • Publicize opportunities for students/faculty to comment on campus stormwater program • Provide opportunities for stormwater topics to be incorporated into project-based courses • Implement system to document student/faculty comments <p><i>Target audiences:</i> all students</p>	<p>2008 & ongoing</p> <p>2009</p> <p>2009</p> <p>2009</p>

Public education and involvement topics for the UWGB campus

Education and public participation topics that are and will be promoted in brochures, posters, presentations, articles and activities are geared at the education goals listed above and in permit condition 2.1 of WPDES permit no. WI-S050075-1. These include:

1. General introduction/overview of stormwater and stormwater pollution
 - a. definition of stormwater runoff and stormwater runoff pollution
 - b. where stormwater goes on campus
 - c. how stormwater becomes polluted
 - d. effects of impervious surfaces
 - i. quantity of runoff
 - ii. heating of runoff
 - e. impacts of stormwater runoff quantity and stormwater pollution
 - i. flashiness of local streams
 - ii. extreme variations in flow
 - iii. decreased baseflow
 - iv. degraded water quality of receiving water bodies
 - v. environmental impacts (degraded habitat etc)
 - f. typical stormwater pollutants on UWGB campus
2. Overview of UWGB's stormwater permit and permit requirements
3. Proper management of materials/practices that may cause stormwater pollution
 - a. automobiles
 - b. use of lawn care products
 - c. collection and storage of yard waste
 - d. storage of hazardous materials
4. Sources of additional information on stormwater topics

Certain audiences will be targeted with more specific messages in addition to the general messages listed above. For example, the campus and golf course grounds crews will receive more specific training on practices relating to proper management of grass clippings and leaves, as well as proper application and storage of fertilizers and pesticides. Students and staff who commute to campus by car will receive information about proper car care with their parking permits. There will also be campus-wide publicity and education about the storm drain stenciling campaign. This will be geared at educating the community about what can and cannot go down the storm drains.

Public education and involvement program implementation during 2008

Several education initiatives were implemented in 2008. In spring 2008, UWGB grounds crew, golf course crew and maintenance staffs were given presentations about general stormwater education as well as stormwater pollution prevention training in their specific areas (proper management of leaves & grass clippings, proper application of fertilizers, general good housekeeping practices etc.).

A newsletter geared at educating the public about current events and issues on the Fox River Basin and Green Bay's TMDL is published collaboratively by UWGB staff and students. Entitled *Our Watershed*, the publication covers public meetings and notices, offers tips and suggestions on improving local water quality, discusses water quality issues, and presents opportunities that the community can use to protect local water resources. Two issues were published in 2008.

One of the major implementation goals for fall 2008 was to get UWGB students involved in the stormwater education and public participation segments of the permit requirements. This was done by seeking the involvement of the student environmental organization, PEAC, and the fall 2008 graduate Capstone class.

Facilities staff met with PEAC during spring 2008 to discuss the group's interest in stormwater issues on campus and potential cooperation on stormwater education projects. PEAC members expressed interest in participating in education initiatives on campus, particularly displaying posters, distributing educational materials and performing storm drain stenciling. PEAC students distributed brochures and displayed posters at an all-campus event in September geared at introducing students to organization opportunities on campus. PEAC also arranged to have an article about stormwater issues on campus in the campus newspaper, the Fourth Estate.

Students in the fall graduate Capstone class chose to focus on helping the university meet and exceed some of the MS4 permit requirements. One of their targets was to achieve measurable results in the areas of public education and public involvement. The Capstone students researched which education methods were most effective at reaching students and selected two of the most effective: in-class presentations and information tabling. For the in-class presentations, the graduate students identified mandatory general education courses and targeted those courses with the highest student enrollments. Graduate students gave PowerPoint presentations which gave students a basic background on stormwater issues and suggested simple actions students could take to prevent stormwater runoff pollution. It was interesting to note that, on several occasions, the professors of the classes to which the graduate students had just given presentations, incorporated stormwater pollution into their subsequent lecture. In one instance, an economics professor asked his students how environmental protection tied into economic development. In another case, a human development professor tied the topic of pollution into his discussion on mid-life issues, citing a common mid-life concern of how an older individual feels about the condition that his generation leaves the world for future generations. The graduate students estimated that they gave presentations to between 1200 to 1780 students.

In addition to directly addressing classes, an outreach event was organized for public participation and involvement. Press releases and email notices were sent campus-wide inviting students to the stormwater event and asking for participation. The event included two different activities: 1) a special public appearance by "Ronnie the Raindrop" a mascot that had been developed to create the public's association of rain and stormwater; and 2) an information booth and poster that were set up in a high-traffic area near a cafeteria. The mascot increased public attention and initiated stormwater inquiries and discussions. Additionally during the outreach event, informational brochures were distributed by Ronnie Raindrop and other graduate students. Approximately 250 stormwater brochures were distributed to the UWGB public. Capstone students also spoke with students, staff, and faculty about stormwater issues, answering questions and offering additional stormwater information.

Capstone and PEAC students also organized and carried out storm drain stenciling on campus storm drains in November 2008. Approximately 120 storm drains were stenciled. The students plan to stencil remaining storm drains in spring 2009.