

**American Society of Civil Engineers
Environmental Water Resources Institute (EWRI)
2011 World Environmental & Water Resources Congress
Palm Springs, California**

Stormwater BMP Maintenance Task Committee

Meeting Minutes
May 24, 2011
5:30 pm – 9:30 pm

1. Call to Order 5:38 PM

2. Introductions

A sign in sheet (attached) was distributed for signatures. Attendees were as below:

Meeting Attendance

Name	Email	Organization
Michael T. Buechter	Mtbuec@stlmsd.com	St. Louis MSD
Blaine Linkous	Blinkous@wbcm.com	Whitney Bailey Cox & Masnani
Andy Erickson	Eric0706@umn.edu	St. Anthony Falls Lab, UMN
Michael Kimberlain	Mkimberlain@kristaer.com	Kristar
Mike MacIntyre	mmacintyre@charlottenc.gov	City of Charlotte
John Gulliver	gulli003@umn.edu	Univ. of Minnesota
Vincent Lee	Vincent.lee@arup.com	ARUP
Lamar Lewis	Stormwater.ascemd@gmail.com Llewis@baltimorecountymd.gov	ASCE SWM Committee Baltimore County, MD
Kevin Flynn	Kmf206@gmail.com	Villanova university
Jason Wright	Jason.wright@tetrattech.com	Tetra Tech

Current Task Committee Officers include Blaine Linkous (Chair), Vincent Lee (Vice-Chair), and Michael Buechter (Secretary). Mike McIntire joined the meeting by phone.

3. Review Committee Purpose

A discussion regarding the Task Committee purpose was held. It was noted the Task Committee was originally formed with the goal to:

“To further the current state of knowledge pertaining to operation and maintenance of structural stormwater best management practices (BMPs). The BMPs investigated will include: extended detention basins, wet ponds, stormwater wetlands, sand filters, bioretention, vegetated filter strips, and wet/dry swales (See Joint WEF/EWRI Manual of Practice 87, Design of Urban Stormwater Controls). The committee will seek input from engineers, designers, landscape architects, contractors, facility managers, and property owners. Further, the scope of the committee will be to enhance design methodologies to allow for efficient, regular, and effective maintenance and to provide contractors and owners with cost effective techniques to manage their stormwater infrastructure.”

Mr. Gulliver questioned why the Committee goal was limited to only certain types of BMPs. The response provided by Mr. Linkous and Mr. Buechter was that the committee purpose was written to avoid conflict with other EWRI committees, especially those responsible for LID or proprietary BMPs.

It was discussed that limiting data collection and presentation to just certain types of BMPs may be problematic. This is because those that maintain BMPs do not only think of certain BMP types, but rather maintain all BMPs for which they are responsible. Therefore, if they collect data; it will be for all BMP types for which they are responsible.

Based upon this discussion it was decided that any data collection would cover all BMPs, and not be limited to only certain types.

4. Committee Objectives

Possible committee objectives and schedule were discussed. It was mentioned by Mr. Buechter and agreed by Mr. Linkous that a literature review may be a suitable first step. However, it was added that this might overlap the data collection stage.

Mr. Flynn volunteered to take the lead on the literature review. Mr. McIntire will provide some text or references for any literature review. Mr. Erickson suggested that the Minnesota Stormwater Manual would be a good resource for data on BMP maintenance.

(<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-management/minnesota-s-stormwater-manual.html>)

It was agreed that the literature review would be pursued with the intent of being fully complete by the next conference where it may be presented as a paper at the conference. **Mr. Buechter suggested that a track be pursued at the 2012 EWRI Conference specific to BMP maintenance, and volunteered to lead that track.**

5. Maintenance Survey

The draft BMP Maintenance Survey prepared by Mr. Lee was discussed. It was discussed whether the survey should be telephone, web, or email based.

Mr. Erickson described previous surveys he had been involved in, and the survey process. He mentioned surveys may change and update as a result of lessons learned.

It was mentioned that there is an NPDES database that may be useful in finding candidates to interview. Jane Clary (jclary@wrightwater.com) may provide information on the database.

Mr. Linkous was to determine if it would be possible, or if we could access the resources to do an on-line or web based survey. It was further mentioned that on-line survey sites might be used for this purpose.

Kristar may be able to provide maintenance data based upon their maintenance activity. **Mr. Kimberlain is to share contact information for Gary Jones at Kristar who may provide this data.**

It was discussed that New England contacts were needed to round out possible survey sites. It was mentioned that these contacts might be available from the Stormwater Committee.

Kevin Flynn also discussed work he is involved with at Philadelphia Water Department (PWD Green Infrastructure Maintenance and Monitoring) and the John Hopkins University (John Hopkins University Stormwater Master Plan) that may be useful.

Particular items that should be covered on the BMP Maintenance Survey were discussed. Suggested useful data include:

1. Drainage area, overall and for each BMP
2. Impervious to pervious ratio
3. BMP operating efficiency (qualitative), with the intent to tie maintenance to performance
4. If applicable data should be collected from the owner and maintenance firm point of view.

Mr. Linkous will distribute BMP Maintenance Survey for comments.

It was discussed that the BMP Maintenance Surveys will serve also as BMP Maintenance Case Studies.

6. Final Committee Result

It was discussed that the final Committee Report should consist of a single sheet of data for each BMP type to include maintenance and cost data.

It was noted that the committee funding is tentatively for three (3) years.

It was tentatively decided that the committee should be composed of five (5) control members, with no limit on corresponding members.

7. Next Meeting Schedule

Mr. Linkous will schedule a conference call for approximately one month from now.

8. Adjourn

The meeting adjourned at approximately 7:10 pm although several people had left prior to that time.

Action Items/Status as of 7/14/11

Mr. Flynn will take the lead on the BMP Maintenance literature review/Ongoing

Mr. Kimberlain is to share contact information for Gary Jones at Kristar who may provide this data/Awaiting Receipt of this Information.

Mr. Buechter will pursue a track at the 2012 EWRI Conference specific to BMP maintenance/Mr. Linkous submitted the session proposal on 6/14/11.

Mr. Linkous will determine if it would be possible, or if we could access the resources to do an on-line or web based survey/Online survey looks promising, Surveymonkey account has been set up by Mr. Linkous.

Mr. Linkous will distribute BMP Maintenance Survey for comments/Sent out 6/1/11.

Mr. Linkous will schedule a conference call for approximately one month from now/Completed 7/12/11.

BMP maintenance
Attendance:

Name	email	organization
Michael T. Buechter	mtbuec@stlmsd.com	St. Louis MSD
BLAINE LINKOUS	blinkous@wbcn.com	WHITNEY BAILEY COX (MAGNUM)
Andy Erickson	eric.4746@umn.edu	St. Anthony Falls Lab, UMN.
MICHAEL KIMBERLAIN	mkimberlain@kristar.com	KRISTAR
MIKE MCINTIRE		CITY OF CHARLOTTE
John Gulliver		Univ. of Minnesota
VINCENT LEE	vincent.lee@arup.com	ARUP
Lamar Lewis	stormwater.asce.md@gmail.com llewis@baltimorecountymd.gov	ASCE SWM Committee
Kevin Flynn	kconf206@gmail.com	Villanova University
Jason Wright	jason.wright@tetrafresh.com	Tetra Tech