

**PADEP Stormwater Manual Oversight Committee  
Rachel Carson Building First Floor Conference Room  
May 4, 2004**

**DRAFT Minutes**

**I. PADEP Announcements/Inputs**

Ken Reisinger chaired the meeting and was assisted by Dennis Stum. Denny announced that PennDOT's representative, Rebecca Burns, will be replaced by Anthony Miller. Denny reminded participants: type "stormwater" at the PADEP webpage, then go to General Information, in order to get to the Oversight Committee and Manual materials. Information on the manual will be posted here as soon as possible. The committee was also reminded to make note of the meetings added to the original schedule (June 22, August 24 and October 26).

Ken reiterated that this work was on a very tight timeline. This requires that draft materials be sent out and distributed very much in "draft" form in order to elicit reactions on overall substance rather than editorial details. The sections will be polished and refined as they move closer to completion. Ken clarified that the Villanova University special group participation has been volunteered by the University and is appreciated by PADEP. If any other group would like to provide this type of technical input, PADEP would be happy to accommodate the groups on future agendas.

Ken introduced Deputy Secretary Cathy Myers who greeted attendees and thanked them for their continuing participation and support during this challenging process.

**II. Review and Finalization of Third OC Meeting Minutes and Comments Received**

March 2, 2004 meeting minutes were reviewed and approved without additional discussion. All electronic comments received on Draft Sections 1 and 2 were distributed to the OC members in advance of this meeting. Due to their substantial length, hard copies of the entire comments were not distributed at this meeting. Cahill has compiled and summarized these comments and these summaries were distributed at the meeting. Cahill is revising Draft Sections 1 and 2 (hopefully to be released before the June 22 meeting) and will respond to as many of these comments as possible.

Several general comments were made by OC members (Tim Edinger, Paul Ziegler, Jim Pillsbury), stressing importance of educational efforts in this process, potential value in further partnering with more organizations such as PSATS, intensifying role of conservation districts, importance of user-friendly formatting techniques such as outlining, summarizing, color coding, other design techniques.

### III. Review of Draft Manual Section 5.0

Four major Section 5.0 Structural BMP's had been rough drafted and posted on the webpage prior to the meeting. Hard copies were passed out at the meeting (see webpage for color). Cahill's Michele Adams reviewed and summarized each of the four structural BMP's: Vegetated Filter Strips; Infiltration Trenches; Constructed Wetlands; Filters. All BMP's are drafted in the BMP format, which had been reviewed and discussed at previous OC meetings. Great effort has been made to condense and bullet, as well as provide as many CAD details as possible, in order to make these presentations function as much as a design manual as possible.

Several "blanks" exist in the BMP presentations. Under Pollutant Removal, for example, part of the Cahill team (GeoSyntec) is further investigating water quality performance of the different BMP's and will add this information to all of the different BMP presentations as this analysis is completed. Additionally, more guidance and specific reference to Section 8.0 and its development of methodologies, calculations, credits, etc. will be forthcoming as Section 8 is developed and then cross-referenced back into the respective BMP presentations. Several "protocols," common to multiple BMP's such as soil testing, will be prepared and placed at the end of Section 5 so that this information does not have to be repeated multiple times.

**Reminder: if anyone has good examples of built/completed BMP's with photos, please get to Cahill so that they can be reviewed and possibly included and cited in the Manual.**

Summary of comments:

- Perhaps a section acknowledging "Common Problems" and/or "Problems to Avoid" would be useful; also "Common Misconceptions" and "FAQ's."
- Low/Medium/High ratings for Stormwater Functions and Pollutant Removal may be a good approach, avoiding trying to support more explicitly quantified ratings.
- Consider presenting a summary chart up front with all of the BMP's arrayed.
- Consider maintenance checklist .
- Consider site inspection checklist .
- Stress cost advantages of these BMP's wherever possible.
- General concern voiced regarding how all of this can be maintained and how that maintenance will be funded.
- Under Key Design Elements, be careful to differentiate Essential vs Ideal.
- Be very careful with references; be complete.
- Add Street Sweeping as a BMP (for Section 4.0)
- Try to keep the presentations as brief and simple as possible.

-Some system needs to be developed to identify, reference and evaluate the many different manufactured products on the market; suppliers/vendors may be willing to do this; can it be included in the Manual?

#### **IV. Review of Draft Manual Section 4.0**

Section 4.0 non-structural BMP's had been drafted and posted on the Stormwater website prior to the meeting. Cahill's Wes Horner reviewed the Section with the OC, beginning with the site planning and design procedure for comprehensive stormwater management and the color-coded summary checklist, followed by the different non-structural BMP's themselves. Special emphasis is placed on the initial site analysis portion of the procedure, including several data gathering and evaluation steps, which set the stage for non-structural and structural BMP selection and overall site design.

What is meant by non-structural BMP's? The Section defines the preventive nature of what is meant here by "non-structural" versus the more conventional "structures" (Section 5.0) which mitigate stormwater after generation. A major challenge for Section 4.0 is to define these non-structural BMP's in ways which are as understandable as the Section 5.0 structural BMP's. Given the decidedly different "feel" of most of the non-structural BMP's, Cahill has concluded that it is especially important to cast each non-structural BMP in the same format as the structural BMP's. This becomes a major challenge as the structural BMP's are more explicit and design-oriented than the more policy- and process-oriented non-structural BMP's. Five major "areas" of preventive non-structural BMP's have been identified in Section 4.0 of the Manual:

- 1.0 Protect Sensitive/Special Value Features**
- 2.0 Cluster and Concentrate**
- 3.0 Minimize Disturbance/Minimize Maintenance**
- 4.0 Reduce Imperviousness**
- 5.0 Disconnect/Distribute/Decentralize**

Each of these areas includes several more explicit non-structural BMP's, a dozen in all. The protect sensitive/special value features area includes specific BMP's which involve the site analysis portion of the site planning and design procedure. These BMP's coordinate well with other state programs, such as DCNR's Growing Greener program.

Comments on this section were generally supportive. Some specifics included:

- In BMP 1.1, consider eliminating the potentially confusing differentiation between Primary and Secondary Conservation Areas, as set forth in Growing Greener program.
- In BMP 1.3, add springs, known as exfiltration areas to natural drainage features; rather than "drainage", use "flow pathways."

- Make sure “Key Design Elements” heading is preserved in each BMP.
- Make sure importance of reduction in setbacks is given full treatment in non-structurals, as appropriate.

**V. Review of Draft Manual Section 3.0 Issues:  
Stormwater Management Standards for Pennsylvania**

Dr. Robert Traver then gave an update on the difficult question of statewide stormwater management standards being looked at by the Villanova Urban Stormwater Partnership (VUSP). The VUSP intends to provide some recommendations for PADEP and OC to review and consider for the new Manual. This continues to be a work in progress. Dr. Traver will continue to report VUSP findings to PADEP and the OC.

A discussion followed including a variety of questions and comments from OC members, including:

- Importance of maintaining the role of standards developed as part of Act 167 planning
- Importance of providing for flexibility in standards that reflect regional uniqueness and variability
- Discussion also focused on the significance of these “recommended standards” in this Manual and whether the Manual should include standards of any sort.

**VI. Public Q & A**

Questions and comments from the public audience had been taken during the meeting. The meeting ended at approximately 3 PM.