Appendix F: Wissahickon Watershed Act 167 Plan Public Hearing Comments and Comment Responses

The Watershed Plan Advisory Committee was notified on April 30, 2014, that the Wissahickon Watershed Act 167 Plan was posted on the Temple University Center for Sustainable Communities' web page (<u>http://www.temple.edu/ambler/csc/</u>) for review and comment. A Public Hearing for the Wissahickon Watershed Act 167 Plan was held on June 16, 2014, from 7 to 9 pm at the Whitemarsh Township Municipal Building. The comment period was open until June 30, 2014.

Comments received on the Plan are presented below, followed by comment responses. The first set of comments and responses include those that did not result in changes to the Act 167 Plan and accompanying ordinance. The second set of comments and responses includes those that did result in changes to the Act 167 Plan or the accompanying ordinance.

1-Comments/responses that did not result in changes to Act 167 plan/ordinance:

COMMENT: Rather than establishing applicability based on a defined square footage of new impervious cover, it is recommended that applicability for local storm water management planning be based on the property size (e.g. acres) and the percent increase in impervious cover on that property from the proposed project. The following specific applicability criteria is recommended: (1) a 0.1% increase in impervious cover (versus total property size), OR (2) one (1) acre of earth disturbance, regardless of the size of impervious cover increase, whichever is smaller. (Robert Cavett, Merck, Inc.)

RESPONSE: The Watershed Plan Advisory Committee reviewed and is in agreement with the designated square-foot impervious threshold, therefore the Plan will not be revised to reflect this comment. The proposed applicability criteria based on property size and percent increase in impervious would require a significantly greater effort from the municipalities to administer, without realizing a corresponding increase in stormwater management benefits. Large properties proposing what amounts to a small percentage increase in impervious cover have the option of implementing LID practices listed in the ordinance to reduce stormwater volume and meet ordinance criteria.

COMMENT: Section 106(C)(2), Hotspots, is vague and provides no specific criteria on what would classify a land use as a hot spot. This section on hot spots and the applicable definition need to be completely rewritten to reference and incorporate the applicable PA DEP regulations and establish specific, quantitative criteria for establishing a facility as a hot spot under the Ordinance. (Robert Cavett, Merck, Inc.)

REPONSE: The section includes a list of land uses that are potential hot spots, and a list of land uses that are not usually considered to be hot spots. The purpose of this section is to alert the municipality of the potential of stormwater infiltration facilities in hot spots to degrade water quality, so that the municipality will initiate additional coordination with the applicant to ensure that water quality is protected. The Plan will not be revised to reflect this comment.

COMMENT: Section 403, Erosion and Sedimentation Control During Regulated Earth Disturbance Activities establishes recommendations for applying additional erosion and sedimentation control where infiltration BMPs are proposed. At an absolute minimum, bullet number 2 should be rewritten: "2. To the extent practicable, construction of infiltration BMPs should be delayed until the tributaries to those BMPs have achieved a level of soil stabilization. Following final stabilization of the project site, the infiltration BMPs shall be cleaned and serviced to restore the design infiltration parameters." (Robert Cavett, Merck, Inc.)

RESPONSE: The suggested wording for bullet #2 would not provide sufficient water quality protection, as the phrase, "a level of soil stabilization" is too vague. Therefore the Plan will not be revised to reflect this comment. The existing language for bullet #2 is based on MCCD erosion and sediment control practices. The commenter has suggested language that refers to cleaning and servicing infiltration BMPs to restore the design infiltration parameters. It is our understanding that restoring infiltration in facilities that have received sediment is expensive and is not often successful, as the fine particles in sediment clog pore spaces in the soil and are not easily removed. It makes more sense to avoid sedimentation of the facility by requiring that the drainage area be stabilized before the facility is constructed.

COMMENT: Section 404 (Nonstructural Project Design to Minimize Stormwater Impacts), Section 405 (Groundwater Recharge Requirements), and Section 406 (Water Volume Control Requirements) are too stringent. These sections are imposing the PCSM requirements of Chapter 102 that are reserved for HQ and EV waters in the regulation. The Ordinance must be rewritten to require the management of storm water runoff quality and/or quantity to manage the net change of the design storm runoff without requiring non-discharge alternatives or antidegradation best available combination of technologies. (Robert Cavett, Merck, Inc.)

RESPONSE: The introduction and part A. of Section 404 encourage the applicant to minimize stormwater impacts through practicable methods, as evidenced by the use of the word, "should" instead of the phrase, "is required". "Practicable is further defined in Section B as "available and capable of implementation after taking into consideration existing technology and logistics in light of overall project purposes and other municipal requirements". This effort to encourage reduction of stormwater impacts has been part of stormwater plans in Southeast Pennsylvania in recent years, therefore the Plan will not be revised to reflect this comment. Section 405 contains reasonable requirements for infiltration. The ordinance recognizes that infiltration may not be achievable in all projects, and Section 106 C provides exemptions to the infiltration requirement in these instances.

COMMENT: The plan and ordinance should include a fee-in-lieu-of (FILO) alternative for small projects. This was done for the Neshaminy Act 167 Plan. The criteria should include the following:

(a) Project activity must be within a residential zoning district; (b) Small project (i.e. less than 5,000 sf impervious surface); and (c) a municipal program for implementation of BMPs and basin improvements must be developed and adopted by the municipality prior to adoption of the FILO option. (James Dougherty, Gilmore Associates for Montgomery Township)

SIMILAR COMMENT: The proposed ordinance will dissuade property owners from utilizing the fee in lieu of (FILO) SWM given that once they reach the 1,000 square foot threshold, they

will be required to control impervious surfaces that were previously installed per township requirements. Will there be a mechanism in the ordinance to allow for the use of the fee in lieu of SWM for all improvements below the threshold with no clawback provision? (Jim Blanch, Whitpain Township)

RESPONSE: The current ordinance and appendix do not include a Fee In Lieu Of (FILO) option. The FILO alternative prepared for the Neshaminy Act 167 Plan was very narrowly defined, as it needed to address concerns of both the township and PADEP. PADEP's concerns related to protection of water resources during construction of the small project, and from the time period between the small project and completion of the municipal implementation of BMPs and basin improvements for the basin(s) receiving runoff from the small project site. For Montgomery Township it was demonstrated that in the vast majority of cases, drainage from the small project would flow to an existing basin that would trap sediment and filter at least some pollutants, thus protecting water quality of the receiving stream. In the remainder of the cases, runoff flowed over significant areas of vegetation before reaching a stream. If the municipality were to adopt a FILO, the conditions stated in this response pertaining to storm basins and overland flow areas would need to exist, in addition to the points (a), (b), and (c) stated by the commenter above. It is very unlikely that any municipality besides Montgomery Township currently could meet these standards; therefore the Plan will not be revised to reflect this comment.

The Small Project Stormwater Management (SWM) Site Plan for Residential Development can be used by a residential property owner with a small project to reduce the costs of compliance with applicable ordinance criteria. The Small Project option in intended for use by residents, with no threshold criteria for consecutive projects, so long as each small project is proposed and managed as a separate, distinct project.

COMMENT: The counties should enforce stormwater requirements in cases where municipalities cannot or will not enforce them. (Roger Egleston, Fort Washington, oral comments presented at June 16, 2014 public hearing)

RESPONSE: The County does not have the jurisdiction to do this, therefore the Plan will not be revised to reflect this comment.

COMMENT: In Section 301, paragraph A - General, #3 refers to structural computations for all stormwater management facilities. What does this mean and what components of the SWM Site Plan require structural computations? (Jim Blanch, Whitpain Township)

RESPONSE: The ordinance defines stormwater management facilities as "*Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff quality, rate, or quantity. Typical stormwater management facilities include, but are not limited to, detention and infiltration basins, open channels, storm sewers, pipes, and infiltration structures.*" This definition can be modified by the Township if it so desires, so long as the municipal engineer will be provided with the structural computations needed to assure that the requirements of the ordinance are being met.

COMMENT: In Section 301, it does not specifically state that the plan must be signed and sealed by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Pennsylvania. Is this a requirement? (Jim Blanch, Whitpain Township)

RESPONSE: It is not a requirement of the ordinance as written. The municipality may require that the plan must be signed and sealed by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Pennsylvania, if it so desires.

COMMENT: Several culverts on or near my property, particularly those under the railroad (SEPTA line) are undersized and create flooding. They were not identified in the plan. (Roger Egleston, 425 Ambler Road, Fort Washington, oral comments presented at June 16, 2014 public hearing)

RESPONSE: Section 3.1 Flooding, Page 3-8, describes how bridges and culverts were identified in the plan: *The PWD provided a comprehensive survey of 370 bridges and culverts considered to be significant obstructions to flow. These structures were re-measured by both the PWD and the study team to obtain current dimensions.*

Additional Temple Center for Sustainable Communities response to culvert comment:

The Wissahickon Watershed Act 167 Study included an assessment of flood problems in the watershed in Section 3.

Section 3 of the study documented flood problems as follows:

- Existing FEMA floodplain delineations and counts of the number of structures in the 100 and 500 year floodplain
- Maps showing flood insurance claims
- An inventory of 370 bridges and culverts throughout the watershed with an analysis capacity and overtopping potential. This analysis focused on roadway crossings of open channels. The number of culverts and bridges inventoried and evaluated was limited to those determined by Philadelphia Water Department personnel to be significant obstructions to flow. The analysis did not include all obstructions in the watershed.
- A survey of each of the 16 municipalities, to which forms were provided to document flood problems. A total of 163 flood issues were identified as reported by the municipalities.

The study relied on the municipal survey to identify specific flood problems. The survey provided an opportunity for a range of flood problems to be identified. As the study notes on page 3-18, specific problems with stormwater piping and inlets were not identified in the survey. Surcharge of stormwater collection facilities, especially in areas with older infrastructure, was acknowledged as a problem throughout the watershed.

2-Comments/responses that did result in changes to Act 167 plan or ordinance sections:

COMMENT: My property has severe flooding and stormwater problems. Two large retention basins contribute to the problem. They were not identified in the plan; how did plan determine location and size of basins to include in plan? (Roger Egleston, 425 Ambler Road, Fort Washington, oral comments presented at June 16, 2014 public hearing)

RESPONSE: Section 6.1 Detention Storage Facilities describes how these basins were identified in the plan. The first paragraph of Section 6.1 was revised by Temple Center for Sustainable Communities as follows to provide more detail on the identification method:

"A total of 277 existing and potential detention sites were inventoried. GIS files with the locations and dimensions, for 185 of these facilities were provided by the Philadelphia Water Department (PWD)(see Appendix E PWD report). The remaining sites were added by the Center for Sustainable Communities (CSC) based on field inspections as well as review of orthophotography and terrain data. Existing inventoried sites with surface areas greater than a quarter of an acre were field inspected."

The PWD study that identified stormwater basins with retrofit potential was added to the Act 167 Plan as **Appendix E:** *Final Report: Inventory of Existing Stormwater Management Facilities with Retrofit Potential Within the Wissahickon Creek Watershed*, Philadelphia Water Department, completed September 30, 2007, updated March 10, 2008.

To include the flood problem at 425 Ambler Road, Figure 3.2.B (Municipal Problem Areas) and Table 3.1.A (Buildings affected by Floodways and 100- and 500-Year Floodplains) were modified. A dot representing the problem area has been added to Figure 3.2.B, and the number of flood problems in Upper Dublin Township have been increased by one.

COMMENT: WVWA recommends that the Act 167 plan encourage and/or permit municipalities to establish by ordinance standards and criteria to address the functionability of existing stormwater facilities so as to provide municipalities with the tools, such as the ability to monitor and inspect private stormwater facilities and man-made structures, to reduce runoff when feasible and thereby improve water quality issues. (Dennis Miranda, WVWA, presented oral comments at June16, 2014 public hearing and follow-up comments in July 10, 2014 letter) WVWA recommends that the Act 167 plan encourage municipalities to establish stable funding sources by means or methods most suitable to each municipality so as to provide municipalities with the funds to effectively monitor and improve, when feasible, existing stormwater facilities or man-made structures owned by the municipality or that are the responsibility of the municipality. (Dennis Miranda, WVWA, presented oral comments at June16, 2014 public hearing and follow-up comments in July 10, 2014 letter)

SIMILAR COMMENTS: The Pennsylvania Environmental Council (PEC) believes that the Regulated Activities within the plan should include language that encourages municipalities to obtain information relating to the effects and performance of existing structures including detention basins, culverts, and bridges (Patrick Starr, PEC)

PEC believes the Model Ordinance in the Plan should explicitly address municipal jurisdiction over the functionality of existing stormwater facilities including the ability to monitor and

inspect private stormwater facilities and man-made structures to reduce runoff when feasible. (Patrick Starr, PEC)

PEC has actively supported legislation to provide municipalities with stable funding options for stormwater management and suggests that the Model Ordinance address funding. (Patrick Starr, PEC)

Friends of the Wissahickon (FOW) request that the following elements be added to the Act 167 Plan:

- Encourage/permit municipalities to establish ordinance standards that address the functionability of existing stormwater facilities in order to provide the municipalities with the tools needed to reduce stormwater runoff (such as the right to monitor and address facilities on private property).
- Encourage municipalities to develop recurring funding sources (through means appropriate to each municipality) that will enable them to monitor and improve existing stormwater facilities and man-made structures involved in watershed management. (Maura McCarthy, FOW)

RESPONSE: PADEP has indicated that the Act 167 plans are to address conditions moving forward from the start of the plan process, in order to keep existing problem areas from becoming worse and new problem areas from arising. This has been the interpretation of the scope of Act 167 Plans since the late 1980s, when Montgomery County began developing watershed based stormwater management plans under the DEP program. The definitions for "Earth Disturbance Activity" and "Regulated Activity" in the Plan are taken from the definitions in the PA Model Stormwater Ordinance drafted under the Act 167 Program. They determine how the ordinance is applied. They relate to activities that involve the alteration or development of land and construction or other human activity which disturbs the surface of land. These are all future events.

However, we note that, due to recent changes in legislation, the municipalities are able to create a stormwater authority which could collect funds from 'users' that could then be used to assess and improve existing stormwater facilities. Such an authority could also be the entity which obtains information relating to the effects and performance of existing structures including detention basins, culverts, and bridges, and the functionality of existing stormwater facilities through monitoring and inspection of private stormwater facilities and man-made structures. Therefore, the following language will be added to Section 5 of the Plan:

"The municipalities should note that language could be added to the stormwater ordinance when it is adopted that would encourage or permit the municipality to study and collect data on existing components of the stormwater management system, such as detention basins, culverts and bridges, and their impact on stormwater flows. This could be required of a developer for these components of the stormwater management system that are affected by a proposed development. Additional requirements could be added to the ordinance that would enable the municipality to monitor and inspect private stormwater facilities and other constructed portions of the stormwater management system. This information could prove useful in identifying potential impairments and in developing a stormwater management program that reduces runoff and improves water quality." "Funding for such activities is always an issue. The municipality can include language on fees in the stormwater ordinance. This may be desirable, especially if the municipality is considering developing a stormwater authority or user-fee program. The municipalities should consider establishing a stable funding source by the method most suitable to the municipality to provide the funds needed to monitor and improve existing stormwater facilities and other components of the stormwater management system."

COMMENT: Section 302, Plan Submission establishes the distribution requirements for a land development Stormwater Management Plan Site Plan. Bullet #2 requires two (2) copies to be submitted to the County Conservation District. This section significantly exceeds both the regulatory requirements and the current role of the Montgomery County Conservation District. (Robert Cavett, Merck, Inc.)

RESPONSE: The Montgomery County Conservation District (MCCD) was contacted after the public hearing to determine its plan submission needs. According to MCCD, two copies of the SWM Plan need to be submitted. One will be retained for inspection and records, and one will be sent back to the applicant once is deemed satisfactory. Therefore, no change will be made to the Plan pertaining to the number of copies to be submitted to the Conservation District.

The Montgomery County Planning Commission (MCPC) has considered its SWM Plan submission requirements, and has determined that in cases where the SWM Plan would normally be submitted with a land development plan for review under Act 247, it will be sufficient to be notified by letter (at the time of land development plan submission) that a SWM Plan has been submitted to the municipality and MCCD. In all other cases, a SWM Plan will not be required to be submitted to MCPC. Therefore, the Plan will be changed to indicate that *"the Montgomery County Planning Commission will be notified by letter regarding submission of the SWM Plan to the municipality and MCCD, and that no SWM Plan need be submitted to MCPC."* (This language will replace what is now in Section 302.B.3).

COMMENT: How will the coordination be managed between the municipality and MCCD given that the MCCD must review and approve SWM site plans prior to submission? (Jim Blanch, Whitpain Township)

SIMILAR COMMENT: In Section 302, paragraph B, it states that 2 copies of the SWM site plan must be submitted to the MCCD. What type of review/correspondence will MCCD provide to the applicant or municipality during the review and approval process? Will the Municipality be able to issue their SWM site approval prior to MCCD approval? Will an approval from MCCD be required if the earth disturbance is less than 5,000 SF but the impervious surface is greater than 1,000 SF? (Jim Blanch, Whitpain Township)

RESPONSE: According to the Montgomery County Conservation District, the review goes first to the municipality and then to the District. The municipal comment letter should accompany the plan when it is submitted to the District, which has the final review. The municipality and Montgomery County Planning Commission are copied on all of the District review letters.

However, Section 301.A.4 of the model ordinance states that all reviews and letters of adequacy from the Conservation District shall be submitted with the SWM Site Plan. Since the Conservation District has the final review of the Erosion and Sediment Control Plan, the Erosion and Sediment Control plan can be submitted to the municipality with the SWM Site Plan, and approval of the SWM Site plan can be granted contingent on the applicant obtaining approval from the Conservation District for the Erosion and Sediment Control Plan. Section 301 A.4. will be revised to read, "An erosion and sediment control plan. The applicant is required to obtain a letter of approval or adequacy from the Conservation District for the Erosion and Sediment Control Plan. The applicant is required to obtain a letter of approval or adequacy from the Conservation District for the Erosion and Sediment Control Plan."

COMMENT: We would request that the final Wissahickon Watershed Plan state that: If a municipality has adopted a recent, stormwater management ordinance associated with a DEP approved Act 167 watershed plan, that it is sufficient and meets the intent of the Wissahickon Plan with the exception of the site specific peak rate controls for Wissahickon Watershed management districts. (Jeff Morgan, P.E., SC Engineers representing Lansdale Borough) **SIMILAR COMMENT**: Whitpain Township should be allowed to customize our stormwater management ordinance to address the intricacies of its two watersheds. (Jim Blanch, Whitpain Township)

RESPONSE: An additional two sentences have been added to Section 107 Repealer for the Montgomery County portion of the watershed: "Municipalities with land area in more than one watershed may enact a single ordinance provided that its provisions are at least as restrictive as the provisions herein. The specific peak rate controls and management districts in Section 408 shall be included in the ordinance." It should be noted that municipalities are permitted some deviation from the model ordinance, as long as the standards and criteria contained in the municipal ordinance.

COMMENT: The draft ordinance's definition of Waters of the Commonwealth is not inconsistent (sic) with current Commonwealth law. Change the definition to match the definition as it exists in the PA Clean Streams Law. (Robert Cavett, Merck, Inc.)

RESPONSE: The current CWA Definition of Waters of the Commonwealth omits a reference to wetlands that the Wissahickon plan retains. This was done because wetlands are an important resource, and are a useful tool in stormwater management. However, to be consistent, the definition in the Plan will be revised to remove the reference to *"wetlands"*.

COMMENT: Sections 303 (SWM Site Plan Review), 304 (Modification of SWM Site Plans), and 305 (Resubmission of Inconsistent or Noncompliant SWM Plans) present an "all or nothing" approach to municipal review and approval (or disapproval) of an Applicant's SWM plan. The SWM Site Plan review process as presented in these three sections of the Ordinance are inconsistent with the current permit review process that the regulated community is accustomed to dealing with, and is completely unreasonable. These three sections must be rewritten to be consistent with the current PA DEP permit review process. (Robert Cavett, Merck, Inc.)

RESPONSE: Section 302.C and Section 303.A of the ordinance will be reworded to give municipalities the option of notifying the applicant in the event that a submission is incomplete,

and to request specific information that is missing. To avoid any misunderstanding, these sections will also state that the review clock does not start until the municipality has determined that the submission is complete. The revisions are as follows:

Section 302.C: "If any submissions to the agencies listed above are found to be incomplete, the municipalities have the option of notifying the applicant and requesting specific information missing from the submission. The application review clock will not start until the municipality has determined that the submission is complete."

Section 303.A: "The SWM Site Plan must be consistent with this Ordinance. If any submissions are found to be incomplete, the municipalities have the option of notifying the applicant and requesting specific information missing from the submission. The application review clock will not start until the municipality has determined that the submission is complete."

COMMENT: Section 407, Stream Bank Erosion Requirements (Channel Protection) establishes a requirement for an Applicant to create mandatory riparian buffers along perennial or intermittent streams that flow through the Applicant's site. This section should be redrafted to highlight riparian buffers as a highly desirable BMP, with incentives to voluntarily use such as meeting non-discharge alternative requirements, siltation removal credits, and thermal impacts mitigation (25 PA Code 102.14(e)(3).(Robert Cavett, Merck, Inc.)

RESPONSE: While the intent of this section is to protect streams via forested riparian buffers, it is true that the requirement to vegetate the buffer area with appropriate native vegetation may become onerous. For example, consider a large property with several hundred feet of stream channel where a project is proposed that just exceeds the thresholds for impervious and disturbed area. For this somewhat smaller project, the applicant would be required to install native vegetation in a buffer area 50 feet wide for several hundred feet of stream length, on both sides of the stream. The first paragraph of Section 407 will be revised as follows:

"If a perennial or intermittent stream passes through the site, the Applicant shall create a riparian buffer extending a minimum of fifty (50) feet to either side of the top-of-bank of the channel. The buffer area shall be established and maintained in an undisturbed state. This buffer area may be maintained as a meadow with minimal mowing of the grassed area, or as a forested buffer, being planted with appropriate native vegetation (refer to Appendix B of the BMP Manual for plant lists). If the applicable"... (the rest of the original text is unchanged).

COMMENT: Section 802, Roof Drains mandates that in Montgomery County, roof drains must be connected to infiltration areas or vegetative BMPs to the maximum extent practicable, and shall not be connected to streets, sanitary or storm sewers, or roadside ditches. This requirement fails to provide any flexibility or recognize that for already existing developed sites, the site storm water system for that developed site may already be designed and equipped to accomplish storm water rate, quality, and quantity mitigation. An exemption must also be written into this section grandparenting existing buildings and their respective roof drain systems. The requirement also will increase hydraulic pressure on residences' basement walls, and significantly increase the potential for basement flooding in a rain event. (Robert Cavett, Merck, Inc.)

RESPONSE: The first paragraph of Section 802 will be revised to read, "In Montgomery County, roof drains shall not be connected to streets, sanitary or storm sewers, or roadside ditches, and shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable, except for already existing developed sites where the onsite stormwater system already is designed and equipped to accomplish stormwater rate, quality, and quantity mitigation. The applicant shall, in these cases, submit documentation on the existing stormwater system to the municipal engineer, who shall determine if the stormwater system accomplishes comparable stormwater rate, quality, and quantity mitigation. In the event that an existing developed site is to be redeveloped, existing roof drains that discharge to an existing stormwater system that is designed and equipped to accomplish stormwater rate, quality, and quantity mitigation, those existing roof drains may remain, provided the applicant submits documentation on the existing stormwater system to the municipal engineer, who shall determine if the stormwater system accomplishes comparable stormwater rate, quality, and quantity mitigation.

Standard design of rain gardens and other infiltration areas incorporates isolation distances and other considerations to avoid increasing hydraulic pressure on adjacent buildings. Therefore, the Plan will not be revised pertaining to rain gardens and hydraulic pressure.

Notes:

Last page of Section 7 timeline has changed. Adoption of the plan by counties/PADEP did not occur in spring 2014. Timeline for adoption was changed to spring 2015.