MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item #
5/27/2010

MEMORANDUM

Date: May 14, 2010

TO: Montgomery County Planning Board

VIA: Mark Pfefferle, Acting Chief, Environmental Planning MP

FROM: Marco Fuster, Senior Planner, Environmental Planning

REVIEW TYPE: Forest Conservation Plan and Water Quality Plan Reviews

APPLYING FOR: Final Forest Conservation Plan (FFCP) and
Special Protection Area Water Quality Plan

PLAN NAME: Maydale Park Stream Restoration Project

PLAN NUMBER: SC2010010

LOCATION: Within Maydale Park approximately 2,500' east of the intersection of Briggs Chaney and Good Hope Road.

APPLICANT: Montgomery County Department of Parks (M-NCPPC)

ENGINEER: WBCM, LLC

HEARING DATE: May 27, 2010

STAFF RECOMMENDATION:

A. Approval of the Final forest Conservation Plan with the following conditions:

1. Applicant to obtain services of an ISA certified arborist, or a Maryland Licensed Tree Expert, to perform the required tree preservation measures and appropriately protect the Save Trees.

2. The final sediment and erosion control plan must match the limit of disturbance as shown on the Final Forest Conservation Plan and be consistent with its recommendations for tree protection.

B. Approval of the Special Protection Area (SPA) Water Quality Plan without conditions.

DISCUSSION

There are two items for the Planning Board review for the Maydale Stream Restoration Project. The first is the Forest Conservation Plan and the second is the Special Protection Area Water Quality Plan. This memorandum covers staff's review and recommendations on both the forest conservation plan and the special protection area water quality plan.

The Board's actions are regulatory and binding.

SITE DESCRIPTION

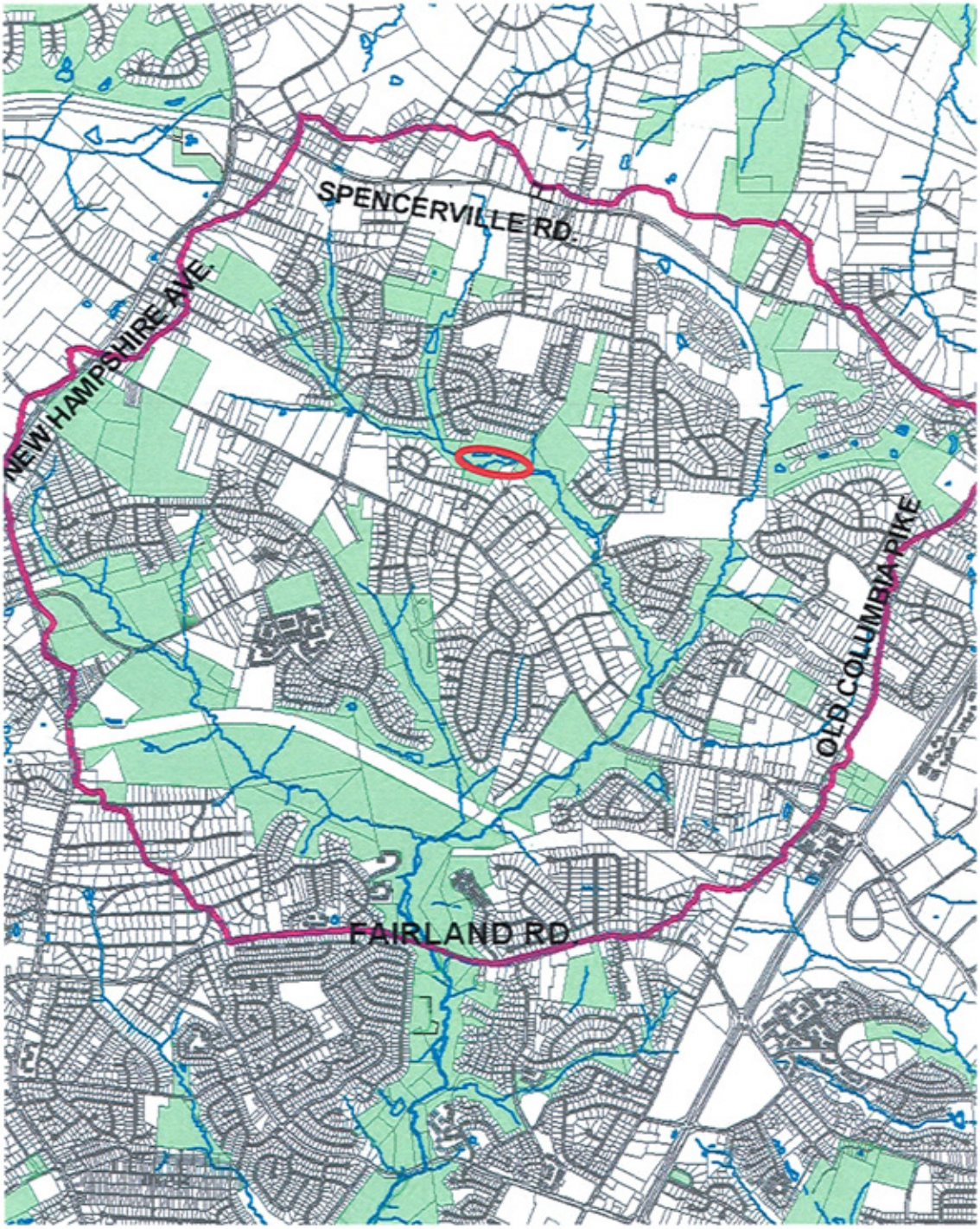
The subject property, Maydale Conservation Park lies within the Upper Paint Branch SPA. The park is bordered by residential homes to the north and south, and is connected to other stream valley parks toward the northwest and southeast. The park contains high quality forest areas associated with stream valley, floodplain and wetlands. The park also includes two ponds, hiking trails with a number of foot bridges, parking and former residential house which had been closed for some time. The entire vicinity is within the Upper Paint Branch watershed; Use III waters (refer to SPA exhibit below). Forest and a 150-foot environmental buffer encompasses the majority of the site except for the western-most section of the property where the existing house is located. Figures 1 and 2 below indicate the location of the project site within the special protection area.

PROJECT DESCRIPTION

Montgomery County Department of Parks is proposing a stream restoration project on the upper Left Fork of the Paint Branch Stream within Maydale Conservation Park. The Montgomery County Department of Parks of the Maryland-National Capital Park and Planning Commission (M-NCPPC) observed site conditions requiring restoration and voluntarily included this project for funding through their Capital Improvement Program (CIP). The purpose of the project is to restore approximately 1,600 linear feet (LF) of stream extending from a pond intake weir located near the existing parking lot to the confluence with an unnamed tributary near Craddock Street. The proposed project is designed to achieve numerous environmental enhancements (as stated in the Water Quality Plan):

- Replace the existing failed fish ladder with a new fish ladder that promotes fish migration upstream of the Maydale Conservation Park.
- Replace the existing twin culvert bridge at the entrance of Maydale Conservation Park with an environmentally sensitive vehicular crossing.
- Stabilize eroding stream banks and provide grade control to prevent further head cuts from migrating upstream.
- Protect existing infrastructure including the exposed WSSC manhole.
- Naturalize areas previously impacted by manmade structures.
- Replace the previous multiple pedestrian stream crossings with a pedestrian bridge built on helical piers.
- Reduce impervious areas by removing several parking spaces at the Maydale Conservation Park parking lot that are currently not used. This will reduce the amount of runoff generated from the parking lot and promote infiltration in areas which are currently impervious.
- Protect existing wetlands and ponded areas that provide important amphibian habitat by protecting outflows to prevent future head cuts from draining these areas.

Figure 1. Upper Paint Branch Special Protection Area (SPA)



Legend:
Project Location
SPA Boundary
Parkland

Figure 2. Park boundary containing proposed stream restoration.

ENVIRONMENTAL GUIDELINES

The applicant submitted a Natural Resources Inventory/ Forest Stand Delineation (NRI/FSD) number 420100190 and subsequently received approval of the NRI/FSD on January 27, 2010. There is a perennial stream with a mostly forested buffer occurring on the property. There are a number of wetlands and associated buffers with the project boundary. The site is within Upper Paint Branch Special Protection Area (SPA).

FOREST CONSERVATION PLAN

This property is subject to the Chapter 22A Montgomery County Forest Conservation Law because the project is located within a Special Protection Area and is required to obtain a water quality plan. A Forest Conservation Plan has been submitted for approval. The net tract area for the project is 1.54 acres and contains 0.21 acres of forest to be cleared. Due to the nature of linear projects, which base the tract area on the limits of disturbance (LOD), all of the forest within the LOD is considered to be cleared. There is a forest conservation planting requirement of 0.44 acres which will be met onsite. The proposed plantings also included 100 shrubs which are above and beyond reforestation requirements. The additional plantings will serve as mitigation for impacts to trees subject to variance requirements.

FOREST CONSERVATION VARIANCE

Section 1607(c) of the Natural Resources Article, MD Ann. Code, identifies certain individual trees as high priority for retention and protection. Any impact to trees, including removal or any disturbance within a tree's critical root zone (CRZ), requires a variance. An Applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the Montgomery County Code. The law requires no impact to all trees that measure 30" diameter at breast height (DBH) or greater; any tree designated as the county champion tree; trees with a DBH 75% or greater than the diameter of the current State champion for that species; rare, threatened and endangered species; and trees part of a historic site or associated structure. Since this project did not obtain approval of a Preliminary Forest Conservation Plan prior to October 1, 2009 and the FCP proposes to impact 22 trees $\geq$ 30 inches DBH a variance is required (note: none of the subject trees are proposed for removal).

There are 22 subject trees that will have impacts to their critical root zones. The trees are not proposed to be removed but they will be impacted by the construction activities. In some cases, the proposed work will benefit the trees by stabilizing the stream bank reducing bank erosion and undercutting of the trees. In all cases where impacts are proposed, appropriate trees preservation/stress reduction measures will be performed under the supervision an appropriate tree care professional.

In accordance with Montgomery County Code, Section 22A-21(c) the Planning Board referred a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection and other appropriate officials or agencies for a written recommendation prior to acting on the request. The County Arborist has 30 days to comment. In this case, the variance request was referred to the Montgomery County Arborist on April 23, 2010. The County Arborist responded on April 26, 2010 and will not provide a recommendation since they believe the tree variance provision does not apply to development applications submitted before October 1, 2009. In accordance with Section 22A-21(e), Environmental Planning staff recommends a finding by the Planning Board that the Applicant has met all criteria required to grant the variance:

a) *Will not confer on the applicant a special privilege that would be denied to other applicants.* The maintenance of public water resources and sewer infrastructure is the responsibility of public agencies in executing their duties to the public. It should also be noted that this project is located in the middle of two other stream restoration projects currently funded by the Maryland State Highway Administration (SHA) as part of the environmental program associated with the Intercounty Connector (ICC). Therefore, restoring this reach is a critical component of the larger restoration effort within the Left Fork of Paint Branch and is not a special privilege to be conferred on the applicant.

b) *Is not based on conditions or circumstances which are the result of the action by the applicant.* The goals of this stream restoration project includes stabilizing eroding stream banks, improving fish habitat, and removing fish blockages to promote fish migration. However, due to the nature of stream restoration projects, temporary impacts during construction to specimen trees are unavoidable and anticipated. Without these unavoidable impacts it would not be possible to conduct this stream restoration project. Extensive measures have been taken to minimize impacts as much as possible and mitigation for impacts to subject trees has been included.

c) *Does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property.* The requested variance is a result of the proposed

restoration work and infrastructure maintenance on the subject property and not as a result of land or building use on a neighboring property.

d) *Will not violate State water quality standards or cause measurable degradation in water quality.* Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality. Conversely, this project should result in an improvement in water quality as a result of stabilizing eroding banks, increasing planting within the forested buffer, and removal of impervious areas in the stream valley. Furthermore the project will protect an exposed and sanitary sewer manhole structure (preventing potential failure of the system which could result in severe water quality degradation). All stream channel work will be carried out using a stream flow pump-around to minimize erosion and maximize sediment control by working in dry stream channels. All disturbed areas will be stabilized on a daily basis. All activities in these areas will be conducted in accordance with appropriate permits, processes and guidelines.

As a result of the above findings, Environmental Planning staff recommends the Board approve the applicant's request for a variance from Forest Conservation Law to impact 22 specimen trees associated with the site. The variance approval is assumed into the Planning Board's approval of the final forest conservation plan.

SPECIAL PROTECTION AREA

Review for Conformance to the SPA Requirements

Section 19-62(c) of the County SPA law states that "before engaging in any land disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan."

Under the provision of the law, the Montgomery County Department of Permitting Services (DPS) and the Planning Board have different responsibilities in the review of a water quality plan. DPS has reviewed and approved the elements of the water quality plan under its purview. The Planning Board responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and site imperviousness limits have been satisfied.

DPS has determined that Department of Parks' written description of the project meets the intent of the SPA regulations. DPS has conditionally approved Preliminary/Final Water Quality Plan (PFWQP) on April 27, 2010 (Attachment 1).

Environmental Planning Staff has reviewed and recommends Board approval of the elements of the SPA water quality plan under its purview:

Site Imperviousness

The Department of Parks is not requesting "pervious surface credits" for the removal of existing parking spaces and the miscellaneous concrete structures. The project does not propose additional impervious area.

Environmental Buffers

Stream restoration work by definition requires disturbance to occur within the stream and its associated environmental buffers. The project was designed to minimize the LOD and avoid access or other disturbance within existing wetlands. Replanting will occur within the disturbed areas.

County DPS SPA Review Elements

DPS identified Parks staff's letter containing an addendum dated April 22, 2010 as the water quality plan for this project. DPS has conditionally approved the Water Quality Plan (Attachment 1).

Stormwater Management Concept
Since the project does not propose any development, there are no storm water management requirements.

Sediment and Erosion Control
Immediate stabilization of disturbed areas is emphasized for this project. The use of super silt fence will be acceptable for small area of disturbance.

Site Performance Goals
In a typical SPA review process, a pre-application meeting is held between the applicant, DPS, DEP, and M-NCPPC. At the meeting, DPS identifies the specific performance goals that apply to the proposed project. The following goals were established:

1. Stream/aquatic life protection.
2. Protect seeps, spring and wetlands.
3. Minimize sediment loading.

Monitoring of Best Management Practices
Monitoring is required per DEP Monitoring Protocols and are explained in detail on the DPS April 27, 2010 letter (Attachment 1).

NOTIFICATION AND COMMUNITY COMMENT

All adjoining and confronting property owners and interested parties were notified of the public hearing on the proposed amendment in accordance with Planning Board policy. Any comments received will be forwarded to the Board. The Department of Parks held a public meeting November 12, 2009 at the Spencerville Recreational Center to solicit feedback from nearby residents and the general public. Overall, the public response was very supportive.

SUMMARY

a. Staff recommends approval with conditions of the Final Forest Conservation Plan.
b. Staff recommends approval without conditions of the Special Protection Area Water Quality Plan.

DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett
County Executive

Carla Reid
Director

April 27, 2010

Mr. Blaine Linkous
WBCM, LLC
849 Fairmount Avenue, Suite 100
Towson, MD 21286

Re: Preliminary/Final Water Quality Plan
for Maydale Conservation Park Stream
Restoration
SM File #: 237828
Tract Size/Zone: 19.45 acres / RE-1
Total Concept Area: 1.6 acres
Lots/Blocks: N/A
Parcel: P17, P828
Watershed: Upper Paint Branch

SPECIAL PROTECTION AREA

Dear Mr. Linkous:

Based on a review by the Department of Permitting Services, the Preliminary/Final Water Quality Plan (PFWQP) for the above mentioned site is conditionally approved. This approval is for the elements of the Preliminary/Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream valley buffer encroachments.

Site Description: The site is located at 1636 Maydale Drive. This proposal is for the restoration of approximately 1,600 linear feet of stream along the Left Fork of the Upper Paint Branch. This watershed has been designated as a Special Protection Area.

Stormwater Management: Since this project does not propose any development, there are no stormwater management requirements.

Sediment Control: Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance. Immediate stabilization is to be emphasized. This includes disturbance associated with the installation of the utility connections.

Performance Goals: The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary and Final Water Quality Plan. They are as follows:

1. Stream/aquatic life protection.
2. Protect seeps, spring and wetlands.
3. Minimize sediment loading.

Monitoring: See "Attachment to the Final Water Quality Plan for Maydale Stream Restoration Description of SPA BMP Monitoring Requirements" dated April 22, 2010.

Conditions of Approval: The following conditions must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the subsequent plan reviews:

1. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.

2. A floodplain study is required to define the limits of the 100-year floodplain through the project. A Floodplain District Permit is required for this project.

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

If you have any questions regarding these actions, please feel free to contact Mark Etheridge at (240) 777-6338.

Sincerely,

Richard R. Brush, Manager
Water Resources Section
Division of Land Development Services

RRB:dpm:CN237528

cc: C. Conlon (MNCPPC-DR)
C. Bunnag (MNCPPC-ED)
R. Giuzio (MCDEP)
SM File # 237528

Qtr: NA
Qtr: NA
Recharge: NA

Attachment to the Final Water Quality Plan for Maydale Stream Restoration
Description of SPA BMP Monitoring Requirements

SM: #237528
Date: April 22, 2010

The purpose of this attachment is to add specificity to the standard monitoring requirements and procedures contained in the SPA BMP monitoring protocols. Some supplemental QA/QC, data analysis, reporting, and record keeping tasks will also be explained.

Monitoring efforts and reports must employ scientific methods to document achievement of SPA Performance Goals. The performance goals identified for this project are:

- Goal #1 – Stream/aquatic life habitat protection
- Goal #3 – Protect seeps, springs, and wetlands
- Goal #8 – Minimize sediment loading

Monitoring is to be done according to DEP Monitoring Protocols. Consistent methods are to be used so results can be compared with other SPA monitoring projects as well as other monitoring conducted in the County. Methods and assumptions are to be detailed, thorough and careful analysis of data is required. If design elements change at any time, DEP reserves the right to modify monitoring requirements as needed.

Monitoring Requirements

1. Monitoring reports must include a table with dates of all major stream restoration and disturbance activities which take place on the site. Monitoring reports must follow the "SPA Restoration Monitoring Report Structure" which is provided as an attachment to this letter.

2. A 75 meter representative stream segment is to be selected and monitored for stream channel herpetofauna. A Rapid Habitat Assessment is also to be conducted in conjunction with herpetofaunal monitoring. Changes in stream habitat and this biological community are to be assessed and evaluated prior to restoration and post-restoration over time.

3. Monitoring of wetland conditions, setting, and faunal usage of Wetlands B and D using the Montgomery County Vernal Pool and Wetland Data Sheet and accompanying protocols provided by DEP is required. An assessment of the stabilization and grade control and placement of the access road around Wetland B should be included in the analysis and reporting. DEP is under the assumption that a seed mix is to be used in wetland D. If plantings are used, this monitoring requirement will need to be modified to include procedures for wetland vegetation

and botanical reforestation data collection. The success of the seed mix and grade control associated with Wetland D is also to be included as part of the monitoring and assessment of Wetland D.

4. Quantitative habitat (stream geomorphology) will be surveyed for the stream length of the restoration project. The stream channel surveying will include: 1) longitudinal profile, 2) cross sections, and 3) DEP adapted Wolman pebble count. The survey is to be completed using DEP approved protocols prior to any disturbance at the site to establish pre-restoration conditions. Subsequent measurements are to be surveyed during post-restoration years one, three, and five. Up to five cross-sections will be required. Initial set up of survey site, including establishment of benchmarks and cross section locations, is required pre-restoration in coordination with DEP and following DEP protocols. An assessment of the success of maintaining grade control needs to be included as part of the analysis.

5. Photodocumentation is required in conjunction with 1) wetland monitoring, 2) cross-section monitoring, 3) habitat assessment and amphibian monitoring at the 75 meter stream segment, and 4) to document activities at the following areas: a) Removal of the existing log drop / fish ladder; b) Removal of culvert and paving and replacement with Con/Span modular bridge and associated paving; c) Removal of depositional island portion and associated flow diversion; d) Removal of existing pedestrian bridge and new cross vein grade control and bank stabilization; e) Bank stabilization using bamboo stabilization and native plantings at downstream limit of project; and f) Installation of the demonstration rain garden.

The wetland monitoring photodocumentation should clearly show wetland condition and setting throughout the duration of monitoring. Photos should be taken at maximum width and maximum length. Fauna observed in pools should also be photographed. The access road for the restoration should be visible in at least one of the photos for Wetland B. It is important to capture the stabilization efforts and seed mix plantings associated with Wetland D. Select photo locations to document success of the proposed wetland enhancement at this location.

DEP protocols are to be followed for photodocumentation of cross sections. This includes capturing the: a) Downstream View, b) Upstream View, c) Left Bank View, d) Right Bank View. Leave measuring tape stretched across the cross-section as part of the photodocumentation. The upstream and downstream view at the midpoint of the 75 meter stream segment must also be captured.

Additional photos not specified may be used in conjunction with data analysis and documentation of performance goal fulfillment. All photos need to be taken at the same aspect so that change can be tracked over time. Photodocumentation must occur prior to restoration activities and years 1, 3, and 5 post-restoration.

6. **The placement of an educational sign along the natural surface trail near the point where it approaches the wetlands is required as a means of long term protection of springs and seeps. The design and placement of the sign is to be determined through consultation with DEP.**

7. **Locations of all monitoring stations are to be provided to DEP within one week of station establishment.** GIS locations are preferred, but a map with the approximate locations marked will be acceptable for the initial submission. GPS coordinates (decimal degree) will need to be included as part of the data submission with the annual report. Coordinates for the monitored stream segment should be collected at the downstream end of the reach (i.e., the "0 meter mark". GPS coordinates must also be collected at: a) the upstream and downstream limits of the longitudinal profile, b) each cross-section (both benchmarks), and 3) the wetland monitoring locations. DEP will create an ArcMap layer showing locations of all monitoring stations in Special Protection Areas.

8. **DEP is to be provided a sequence of events and schedule of when work is to occur in advance of any stream restoration activity or land disturbance. DEP must be notified prior to any fish relocation activities, as agreed upon in the approved pre-application meeting minutes (dated September 29, 2009).**

The post restoration period is defined as years 1, 3, and 5 following restoration efforts and as-built approval and certification. Items 1, 2, 3, 4 and 5 must occur prior to any restoration or disturbance activities and continue through the post restoration period.

A report on pre-restoration conditions must be deemed acceptable by DEP and DPS prior to the issuance of a sediment control permit. For subsequent periods an annual draft monitoring report is due to DEP by **October 31** of each year. Final copies of the report, as well as electronic data, are to be submitted to DEP and DPS. Additionally, quarterly progress reports are to be submitted. These reports are to document the status of the ongoing monitoring, identify any problems, and assure monitoring is on schedule. All information submitted to DEP will be public information that DEP may freely copy and distribute.

Questions on the monitoring requirements and procedures may be directed to the **following personnel:**

Rachel Gauza (DEP)
(240) 777-7729
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Jennifer St. John (DEP)
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Leo Galanko (DPS)
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