

## Lower Providence Township EAC Storm Water Directive 2021

The following document describes the township's storm water issues in general scope. The text also includes tasks to be undertaken by the EAC as directed by the Board of Supervisor to identify, assess, offer solutions, and roughly estimate associated costs in remediating the identified issues.

### AREAS OF CONCERN

- **Skippack Creek/MS4** – State NPDS mandates involving the reduction of sediment in the water, and the participation from the 7 townships affected.

Key Interface – Tim Woodrow, LP Township Engineer; Kent Morey, P.E., Open Space Committee advisor and expert on MS4, Spotts, Stevens & McCoy

It's worth noting that the MS4 obligations about which we are already aware are for only one creek in our township, which has several tributaries. If those mandates were to be expanded to other waterways, the financial obligation would increase exponentially.

#### Assigned Tasks

1. **Scope** – Discuss with the township engineer, and the Open Space engineer, the detail of the mandate, understand the township's responsibility.
2. **Extension** – Discuss with the township engineer the contribution to the problem caused by discharge of water into the Skippack within the township. Include in this assignment the effect contributed within the Evansburg State Park as part of the township.

- **LPT Piping Infrastructure** –

Key Interface – Joe Chillano, Interim Public Works Director

#### Assigned Tasks –

1. **Documentation** - Work with the township to obtain a map of the current stormwater pipe system; and document age, construction materials, condition, dimensions.

- **Areas with Storm Water drainage Issues** –

Key Interface Mike Mrozinski, Tim Woodrow

The top 20 (±) locations and or neighborhoods with consistent complaints, infrastructure repairs or issues. The areas documented would be deemed to comprise at least 75% to 85% of the township problem.

## **Assigned Tasks**

1. Working with the Code Enforcement Officer and the Township Engineer, identify and document the major areas by location.
2. Establish a rating or priority type system to qualify key target areas:
  - Property ownership should be noted (private property, twp. property, state property, etc.)
  - Size of problem area
  - Causes of flooding (street runoff, stream flooding, improper grading, etc.)
  - Source of flooding (private or public)
  - How long has the issue existed
  - Estimate a volume effect of storm water in excess of flow resulting from 1" or more of precipitation or runoff per day.

## **POTENTIAL SOLUTIONS**

Having Assessed the Major Areas of Concern, use available means and consultation with township consultants and managers, determine alternatives to be considered as corrective action for these areas. The solutions should preliminarily address scope of work and appropriate timeline.

## **Assigned Tasks**

1. Recommendations for the Skippack Creek / MS4
2. Recommendations for piping infrastructure improvements and additions.
3. Areas with Storm Water drainage Issues
  - a. One of the best results could be our continued efforts and those of the EAC to educate our residents about what they can do on their private property to help address these matters.
  - b. short term or near term things that can provide some relief now with minimal cost i.e. neighborhood action plans where a group decides to work on swales and or berms together.

## **CORRECTIVE ACTION PLANS**

This section will estimate and address mediation and necessary costs; identify possible funding sources; describe education and actions.

## Assigned Tasks

1. Skippack Creek – Estimated cost, time period for action and completion
2. Piping Infrastructure – Estimated cost, time period for action and completion
3. Areas with Storm Water drainage issues –
  - a. methods,
  - b. Education – reaching out to the community; guest speakers, environmental literacy grants, etc.
  - c. Communication – public meetings for specific geographic areas, and specific problems.
  - d. provide an estimate of costs for large and mid size projects,
  - e. recommend projects to address for the biggest impact
4. Funding Sources
  - a. Grants -DDEP, National Lands, Penn Environment, etc)
  - b. Fund raising
  - c. Tax impact
  - a. Storm Water Fee -Seek outside assistance in determining the elements required to establish a fee addressing storm water costs. Consult with the township manager, the township solicitor, and the township engineer.  
Prepare presentations for the BOS to include typical components of a study:  
an overview of the challenges, the potential costs for the study, what the intended results of the study should be and how to approach the process.
5. Community Involvement - Develop set of community engagement projects (trash pickup, buffer renewal, stream banks, etc) for scouts, school kids, work release, rehab, etc.
  - a. Educational component can be incorporated by utilizing the EAC
    1. Inventory process
    2. Identifying critical projects (major and minor)
    3. Integrating BMP's
    4. How stormwater impacts our community and the cost of stormwater