## WORKGROUP SCENARIO #1 (Little Big Borough)

The permittee is a medium-sized borough surrounded by mostly large semi-rural townships, and is "downstream" within the watershed.

Permittee was issued a permit in 2003. They essentially "counted the beans" until a few years ago, and have made significant strides in developing their MS4 program. They are currently conducting an MS3 delineation exercise (and they believe they have approximately 30 MS3s) based on a completed outfall re-designation which found 20 outfalls (with 11 of them as MS4 Outfalls) and several areas with incidental dispersion. They have delineated approximately 40% of the MS3s at this time.

There are 4 receiving waterways in the jurisdiction with discharges from the regulated system. All the waterways have 303(d) listed impairments due to nutrients (Nitrogen and Phosphorus), siltation and total dissolved solids (TDS) from agriculture, urban runoff/storm sewers, and abandoned mine drainage sources; with TMDLs called for in a few years. Last year, the permittee conducted a survey to measure the general knowledge of anyone that would answer the survey (that ended up including mostly residents, municipal staff, and several business owners). The permittee found 21% of the respondents possessed general knowledge of stormwater, stormwater pollution causes, and the impairments of the local waterways.

Permittee is currently developing a wet weather outfall, stream, and IDD&E sampling and monitoring program – and is aiming to have it completed by the end of the year with full monitoring in place starting next permit year. Some sampling has been conducted as MS3s are delineated to help develop the program, but has been minimal thus far. However, they have found one MS4 Outfall had elevated phosphates in the sample analyzed. The outfall is located within an MS3 that has a municipal park and high-density residential land uses. The permittee is unsure at this time if any discharges are contributing and/or causing the impairments overall though.

Public works has implemented a street sweeping program due to excessive litter and debris generally present in the gutters, and continually clogging inlets.

The permittee has a good relationship with the local watershed group that has expressed interest in pursuing grants for stream restoration/improvement projects; and has indicated they would be willing to help the municipality as much as they can with the resources they have.

## SCENARIO #1 (Little Big Borough)

MCM #1 (Public Education & Outreach)

Focal points of plans to inform individuals/households about reducing stormwater pollution

Focal points of plans to inform individuals/groups about involvement with the stormwater program

Target Audience Groups (and why selected)

Targeted pollutant sources

Outreach strategy and methods to be used to reach target audience groups

Measurable goals (and why selected)

How success will be evaluated

Other Notes:

MCM #2 (Public Involvement/Participation)

Focal points of plans for public involvement in program development and implementation

Target audiences for the involvement in the program (and why) Possible types of public involvement activities Measurable goals (and why selected) How success will be evaluated

Other Notes:

## WORKGROUP SCENARIO #2 (Suburbia Township)

The permittee is a suburban township adjacent to a medium-sized borough, and located in "midstream" within the watershed.

Permittee has a well-established and comprehensive MS4 program in place. They have delineated, investigated, and mapped all 24 MS3s and outfalls (including 14 MS4 Outfalls).

Permittee has an extensive monitoring program in place – sampling wet weather discharges from MS4 outfalls every year for the past 9 years.

There are 6 receiving waterways in the jurisdiction with discharges from the regulated system. One of the waterways has an impairment due to nutrients (Nitrogen and Phosphorus).

One MS4 outfall discharging to a waterway with no impairments listed has consistently shown elevated concentrations of pathogens in collected samples for the past 2 years. The MS3 of the outfall includes a large park with basketball courts, skate park, dog park, tennis courts, and community gardens; and a large low density residential sub-division. A documented investigation by the permittee has led to a determination that dog waste in the park may be the source of pathogens carried by stormwater run-off, but the municipality is unsure if this is the sole source. The public works department goes to the dog park and cleans up dog waste when time allows – usually twice a summer.

There are 2 MS4 outfalls and 5 MS3s that are located by/discharge to the waterway with the impairment due to nutrients. Most of the land use in the MS3s are medium density residential subdivisions with supporting commercial facilities (gas stations, convenience stores, car washes, etc.). None of the outfalls and/or discharge points monitored has ever shown any elevated signs of Nitrogen in discharges, but one has elevated Phosphorus levels from recent sampling. However, sampling over the past few years has shown an increasing trend in sediment in discharges. The one MS4 outfall with elevated Phosphorus has also recently started showing elevated concentrations of oil, surfactants, and dissolved/suspended solids. Field investigations (including IDD&E investigations) has led to observations of foam in discharges – but only wet weather discharges. The MS3 tied to this outfall is mostly residential land uses with two commercial gas stations, a commercial car wash, and a shopping plaza with a variety of businesses (restaurants, boutiques, etc.). A desk-top analysis reveals the pollutants found in the discharges are generally associated with car washing, but a field investigation has not yielded any results/determination yet.

Citizens have been calling in complaining about received inspection reports titled "PCSM Inspection Report" for a stormwater facility from the Engineer-of-Record (EOR) they are supposedly responsible to maintain, and most are unaware what they are actually supposed to do and were unaware they were supposed to do anything.

## WORKGROUP SCENARIO #3 (Booming Township)

The permittee is a large semi-rural township with a few villages located within its jurisdiction, and is located "mid-stream" within the watershed.

Permittee was issued an MS4 Permit back in 2003. However, the permittee has essentially done nothing with program development/management; and has essentially "counted the beans" since permit issuance. Each year they meet the permit requirements associated with checking off the boxes in the annual report (have info on website, report number of outfalls investigated under MCM 3, adopted an ordinance, etc.). They have links to the DEP and EPA websites on their website.

The permittee is not entirely sure how many outfalls they have, but they believe around 50 from a mapping exercise conducted just to meet the permit requirement of having a system and outfall map. The permittee does not conduct any sampling – even with IDD&E investigations as required by the permit (only visual assessments). A recent IDD&E investigation revealed a milky-colored dry weather discharge from an outfall, but the permittee only noted it on the screening form and did not document a follow-up investigation. The screening also revealed the outfall pipe opening was half-buried under sediment. Other field investigations revealed no dry weather flows, but found a number of outfalls half-buried in sediment. Public works has further indicated there are large amounts of sediment deposits on roads, in gutters, and clogging the drainage system.

Land uses are mixed across the regulated area – residential (low density, medium density, rural, etc.), industrial, institutional, commercial, manufacturing, parks/open space, and even some agricultural areas due to recent development activities. Development has been booming in the municipality for the past few years with residential sub-divisions and commercial facilities/campuses popping up all over the township.

There are 12 waterways within the jurisdiction, and all with multiple impairments (new impairments show up with each 303(d) list issued). Impairment causes now include siltation, nutrients, pathogens, metals, and organic enrichment/low D.O. TMDLs are called for all impairments as well within the next few years.