TOWNSHIP OF FERGUSON

Levels of Service and Policy Discussion to Address in Stormwater User Fee Structure

In the initial Phase 1 portion of this study, it was recognized that there is a clear variability of levels of service (LOS) provided to properties throughout the Township. This is recognized by the density of population and by contrast in the use of properties from residential to agricultural. In addition, the drainage system components that are owned and operated by the Township also vary by similar Township attributes, but also by ownership of the roadway network (which is part of the drainage system). A third impact is the presence within the Township of properties owned, operated and regulated by another water quality permittee entity, namely Penn State University (the University). The degree of variability in service and in the attributes of the stormwater infrastructure is significant enough to warrant consideration for varying assignment of the cost of service to property owners/ratepayers. There are several approaches that can be considered to enhance the sense of equity in revenue generation. These include assignment of cost by the level of service provided by the Township assigned by type/complexity of the systems; by establishing zones based on population or land use characteristics; and/or by credits offered for entities tasked with their own MS4 permit compliance obligations, such as the University. Finally, other options may also be considered such as a variable rate policy, where the actual "rate per user" varies, in lieu of the baseline rate that is modified based on one of these approaches.

Varying levels of service may be addressed within the rate structure through the use of a baseline cost shared by all properties and allocated at a fixed unit with a varying cost based on the services provided. For example, if a community has a resource protection area that mandates down-zoning (large lots greater than 5 acres with developed area within of less than 10% of lot size), the services provided in such an area can be isolated within the cost model and assigned in the rate specifically for those properties within the resource protection area. Similar strategies have been used in other communities to address stark differences in density of development or type of infrastructure served within a jurisdiction.

Service areas can be established based on the infrastructure complexity. Service areas can be contiguous or can be identified by other infrastructure attributes such as the presence of a pipe network, curb and gutter, ribbon pavement/drainage ditches, or similar features. Service areas can be defined in terms of urban attributes versus rural attributes. Other options may include land use characteristics such as residential high-density with water quantity controls, with water quality treatment, or a combination/variation of these. This option may require more administrative effort which can be burdensome to administer.

Ferguson Township can, and should, consider a variety of solutions and concepts, including those the SAC discussed in the July meeting. These discussions will continue in order to provide guidance and refinement in the development of a strategy and policy to address LOS variability.

Analysis of the Township by Complexity of Infrastructure

Using GIS tools, an analysis of the community by complexity of the infrastructure serving properties as well as using ownership of the street drainage system and water quality controls under an MS4 permit,

it was determined that the distribution of impervious area is approximately equal between two service area classifications. The classifications in this initial analysis were:

Service Area 1 – higher frequency and level of service
- Any lot that fronts on a Township street segment that has 50% or more of that street segment with a parallel storm pipe; or
- Any lot that fronts on a Township street segment that has 50% or more of a street segment with curb on one or both sides.

Service Area 2 – lower frequency and level of service
- Any lot that fronts on a Township street segment that is not in the Service Area 1; or
- Any lot that fronts on a street owned by another MS4 permittee, or a private street; or
- Any lot that is covered by a separate MS4 Permit with DEP.

Each service area has about 24,000,000 square feet of impervious area. See the attached Map.

In addition to analysis by type of infrastructure, an analysis of the costs to assign to each service area was estimated. Based on a five-year draft program plan, three primary costs allocations or cost centers, were considered.

1. Program management and Township MS4 compliance (including capital required to comply with the Township's Pollution Reduction Plan), assigned to all property owners.
2. Service Area 1 operations and maintenance of all elements of the underground and above ground drainage infrastructure and capital improvements for pipe lining, new equipment purchases, system inventory update, and drainage system assessment. This service area also has costs assigned for a new foreman and three-person crew added over the five-year period.
3. Service Area 2 operations and maintenance consisting primarily of roadway ditch and cross-pipe maintenance. No capital projects were included in the first five-year program plan.

Questions for Discussion:
1. Property owners in Service Area 2 benefit from the investment in and maintenance of the drainage system in Service Area 1. Should some portion of the costs of operation and maintenance for the Service Area 1 system be assigned to the Service Area cost allocation?
2. Should capital projects for new treatment facilities/quantity controls be a shared cost for Service Area 1 or should these costs be assigned/recovered only to those properties directly served? This could be done through the assessment process, rather than through the rate structure.
3. Should the MS4 program and capital costs be assigned to all properties?
4. Should program administration costs be assigned to all properties?

Attached is a map of the proposed Service Areas. SA 1 is highlighted in RED and GREY.