PA Water and Wastewater Infrastructure Gap Study
Status and Expectations

July 22, 2008

In the past, data on infrastructure needs was generally limited to those *capital* needs that were reported to the U. S. Environmental Protection Agency (EPA) as part of the every-four-year national Needs Surveys. The PA Water and Wastewater Infrastructure Gap Study is designed to provide both *capital and operation/maintenance needs*. It will also provide a sense of *how much of those needs can be affordably provided on a local level*. The study is therefore an excellent source of information for the Needs Assessment Subcommittee of the Governor's Task Force. The study will also serve as Pennsylvania's collection medium for future EPA Needs Surveys.

The study is expected to be an ongoing effort. The information from the study will therefore continue to improve as additional data is collected. The October 1, 2008 Governor's Task Force Report will make use of the data collected to date.

The information collected on individual systems includes:

- General utility information: Information on the components of the utility, the number of operators, ownership, the area and population served
- Information on rates, rate structure, revenues, and capital budget
- Operations & Maintenance (O&M) budget
- Capital Improvement Plan and debt service
- Description of the assets (such as approximate length of pipe, pipe sizes, length, material and condition)
- Plans for future improvements
- Median Household Income (MHI) for the community

The status of the study is that data is for the first time being compiled and the programming created to create a series of graphs and tables. Those graphs and tables will provide, by July 25, information like the following:

1. Table: Estimate of total funds that will be needed statewide by water and sewer systems over the coming 20 years. Calculations will be made on an individual community level, and extrapolated to estimate the statewide totals. The need will include capital and, separately, O&M. The two numbers together represent the "total need."
2. Graph: Distribution of user charges compared to MHI. This will show, for example, the proportion of systems which have user charges which are less than 1.5% of MHI. A community with user charges of $450 per year is charging 1.5% of MHI if the MHI of that community is $30,000.
3. Graph: User charges relative to population served. Are user charges higher in small towns or larger towns?
4. Graph: Estimate of the difference between "total needs" and locally-affordable revenues. The revenues will be calculated using a range of rates based on different percentages of MHI. The effect will be to show how the gap between total needs and local revenues decreases as rates increase. The gap can then be quantified, and used to show how much subsidy money is needed depending on what level of local rates is considered affordable. The gap will be calculated for each system that was interviewed for the study, and extrapolated to a statewide estimate.
5. Graph: Dollars of gap per capita depending on the size of the community. It would be broken out separately for drinking water and wastewater. This would indicate whether small towns have a bigger or smaller problem, on a per capita basis. The same thing could be shown on a basis of miles of piping, to show whether larger systems have a greater or lesser gap than smaller systems.
6. Table: Ownership type (municipal, municipal authority, private-investor-owned, or private-non-investor-owned) to show relative user charge rates.
7. Table: Degree of infiltration / inflow problem in wastewater systems, and unaccounted-for-water in drinking water systems, varying with the age of the system.
8. System Manager Ideas: System managers were asked to provide "good ideas" that they wanted to share with state officials. The ideas will be consolidated and the number of similar inputs will be shown.

Other graphs and tables will also be generated. As the amount of data collected increases it will also be possible to describe differences resulting from location across the state (by drainage basin). Information will not be provided that can be attributed to specific systems.