Sustainable Water Infrastructure Task Force Questions

Needs Assessment

• What are the total infrastructure financing needs, and what are the causes for those needs?

To obtain sustainable water and wastewater systems, the task needs to consider different key elements, i.e. conservation measure, reuse and replacement. Impacts, such as regulations, financial capacity and system manpower, play an important role in the systems owner's decisions to improve the operation and management of the system.

Capital Improvement Planning (CIP) is a tool available to help the system owners; however, this tool is rarely completed. CIP points to consider:

- the condition of the existing infrastructure, including the projected need for repair or replacements
- the likely demand for improvements
- the estimated cost of the improvements
- available public resources, including cost sharing and federal/state funding
- the level of overlapping debt
- the relative benefits and costs of alternative uses of funds
- operating costs of the proposed improvements
- alternatives for providing services more efficiently through shared facilities
- Should we include in our needs assessment non-capital costs?

Yes, the efficient use of public funds should consider both capital and non-capital costs.

• Should we be taking affordability into account in estimating financing needs? In other words, how should we factor in that some communities can afford a higher percentage of the total financing need than other communities?

Yes. Evaluating planning (CIP, WQ Management Plans, Act 537, etc.) done by the system, municipality and County and utilize an assessment of financial capabilities of the community and its relationship to the needs of protecting public health.

Innovative Measures:

• What are the types of new technologies or treatment concepts and non-structural alternatives available to improve water quality in lieu of infrastructure? What is their effectiveness? What are the costs and benefits?

Technologies and alternatives to improve water quality in lieu of infrastructure are being investigated on a daily basis. The problem is not finding concepts, but the State's regulation and policy structure impedes any real measure of their effectiveness, cost and benefits.

• What other types of non-structural solutions are available to enhance system planning efforts? How can they be incorporated into a system's planning process? How can trading, water conservation and reuse strategies be incorporated into this planning process?

The disposition for planning to address sustainable infrastructure needs to change. The issue is not incorporating system planning but Pennsylvanian recognizing the importance of managing their current resources. Pennsylvania's climate is not severe that the public feels the need to conserve or reuse water. Economically, water/wastewater treatment and conveyance is a low priority for the taxpayer and user. Industrial and residential development wins out. Instead of limiting building, we expend a lot of time and money on new technologies such as desalination. We masked the problem of limited resources by placing requirements for water saving devices on new home development or "trading" the problem with the farming community.

Financial Resources:

• What aspects of the operation of a water or wastewater system should be eligible for subsidized funding from the local, state or federal government? How about onlot system management and the promotion of community sewage management programs?

Any success and investment in sustainability must allow various types eligibility. The percent of assistance could be broken down and weighted into major categories for planning, construction, non-construction, management and operation. This should encompass all watershed programs, which would include onlot management.

Financial Sustainability:

• What methods and tools should be developed to assist water and wastewater systems in delivering cost-effective service while maintaining public health, safety and environmental standards?

Tools for water and wastewater systems are already available. They are readily available through EPA; technical assistance programs/providers; and water, wastewater & municipal associations. The predicament is how to get the systems to use the tools and methods available. Training requirement for operators and SEOs, although effective in operation/compliance of the system, has not improved the sustainability of the system.

• Are there specific workforce and management training programs that should be developed to assist water and wastewater system staff to more effectively operate and manage their systems?

The capacity programs are available and more should be developed to assist the systems. There are several training providers and associations who can effectively administer training. These training providers and associations need DEP support and funding.

• What methods can be employed to encourage cost-effective sizing of systems, including regionalization or decentralization? Are there specific incentives that would be necessary to facilitate this approach? Does regionalization to create efficiencies of scale make sense generally, or only in certain circumstances?

The political composition of Pennsylvania doesn't cultivate regionalization. Collaboration may be a better option - "The process of working in a collaborative fashion to plan for the future can be at whatever level the communities are comfortable with. Communities do not have to agree to give up any autonomy or to physically interconnect unless that is what they choose to do. The extent of collaboration can be identified as part of the planning process, with complete public input." EFC -New Mexico Guide for Water Systems Area-Wide Planning for Long-Term Sustainability. The attitude within DEP has to change for decentralization to work. Limitations have been established either by policy or opinion that discourages decentralization i.e. POU/POE treatment.

• What eligibility criteria would you apply if additional state financing was devoted to water infrastructure?

Eligibility criteria should include:

- Need of the community/system,
- Other federal/state/ county funding received,
- Does the project bring the system into compliance?
- History of compliance
- Water Quality Improvement
- Collaboration
- Impacts on other facilities and watersheds
- Planning and agreement documents in place
- Board Member(s) Capacity Development Training

Legislative and Regulatory Issues:

• What are the statutory and regulatory barriers to enhancing our infrastructure improvement efforts within the Commonwealth while still protecting public health and the environment?

Many of the regulations are focused on specific end criteria making them inflexible to try alternative processes. Protocols for studies should be evaluated. Currently, studying technologies are laborious or requires opening up a permit that leads to scrutiny of the permit.

Other barriers as a result of regulations that will be impacting our ability to enhancing infrastructure will be the deregulation of electricity and the declining work force.

• Through the legislative or regulatory process, what can be done to encourage greater local investment in infrastructure and eliminate or lessen the cost of providing infrastructure improvements?

There are a variety of challenges that need to be overcome before this goal is achieved. In addition, there is a growing gap between the needs and funding. Studies conducted by EPA on the infrastructure gap for water infrastructure EPA 816-R-02-020, September 2002. Since then, our economics are greatly changed. The development of regulations should be a low priority instead the increase capacity development/technical assistance programs.

General:

• Aside from the issues identified above, are there other issues are you facing that you think the Task Force should consider?

No response at this time.

• What recommendations do you have for the Task Force to address these issues?

No response at this time.