A New Paradigm

Are P3s the key to achieving our clean water goals?

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There are a number of ways to economically manage public facilities. One successful approach is the design, build, operate and maintain method, which has demonstrated the ability to reduce overall costs. Taking this process a step further, municipalities also are looking at public-private partnerships (also known as "P3s") to help solve large-scale challenges associated with environmental regulations and overburdened infrastructure. Can this approach provide a paradigm shift to help implement the retrofit of storm water control measures?

As an example, the total maximum daily loads for Chesapeake Bay are being used to set goals to retrofit 20% of the impervious surfaces of the bay's tributaries by 2025. The enormity of this effort is almost unthinkable, especially in an environment where municipal funds are limited, bonding authority is tapped out and the cost of implementing these measures is high. P3s could be used to jump-start this process, reduce overall implementation costs, energize local economies and—most importantly—protect our receiving waters in an expedient fashion.

The overall concept of P3s is relatively straightforward. First, a regulatory authority such as a city or county establishes a storm water utility. This is done with the assistance of an independent group with procedures in place and a track record of understanding the legal, logistical and social aspects of implementation. Simultaneously, a consortium of engineers, low impact development experts, contractors, product manufacturers and maintenance providers offer guidance and estimates on an area-wide retrofit, using permeable paving, green roofs, rainwater harvesting, bioretention/filtration, grey infrastructure improvements and more.

The final player in this partnership is private equity. Private equity provides up-front financing based on guaranteed return on investment using revenue generated by future utility fees. The consortium becomes highly efficient as it repeats the process and develops expertise from repetitive function. Once the project is in place, long-term maintenance is provided to ensure compliance.

The benefits of P3s include:

- Water quality goals will be implemented more quickly.
- Many jurisdictions will not need additional staff to develop expertise and manuals, plan review, etc., which saves significant sums of money.
- Consortiums provide a high level of expertise using experienced analysis, design and implementation staff. Cost savings come not only in design efficiency, but in the design process as well. Multiple plan revisions, meetings and changes are eliminated from the process.
- Long-term maintenance is organized and proactive, not reactive.
- Much of the work is performed by local contractors, engineers and maintenance providers, which helps support the local economy.

There are some complicated factors to this approach: How do you measure compliance? Is it by sampling runoff or reduced runoff volumes, or is it though a presumptive approach, which assumes compliance if the storm water control measures are installed and maintained correctly?

This approach also would need some level of recognition by a permitting authority, such as the U.S. Environmental Protection Agency. Clearly, it would be difficult for private equity to put up hundreds of millions of dollars or consortiums to take the risk without some level of assurance that success can be recognized.

P3s are not new, and success stories exist. Their success is dependent on careful planning and the people involved. Open communication, give and take, common goals, shared vision and trust all are critical elements of success. SWS

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