

MS4 Thoughts

The objectives of MS4 are noble. It is difficult, or impossible, to conclude that development, land use and heavy, more concentrated, precipitation is not resulting in the unhealthy movement of nutrients and sediment throughout our environment.

The funding mechanism is controversial and as popular as plantar warts. Those who are taxed feel inequitably targeted. While there are historical agreement-based justifications for the targeted areas, people see similar areas without storm water fees. The funding mechanism causes polarization within what should be something everyone sees as prudent. Which fundamental need is responsible for causing the issue that requires a solution? Is it production, for example on a farm or in a factory? Is it consumption, which has an infinitely larger geographical footprint than production? Why is site geography the primary factor in cost? That is where the perception of inequity stems.

My personal experience with the process leads me to believe there is a tremendous amount of room for economic and impact efficiencies. This may stem from the Dallas Area Municipal Authority's inefficiency, or, as I believe, inefficiency may be present across the whole value chain.

I based my conclusion on how soft costs compare to the total expenses of the project. Most commonwealth grants limit engineering and consultation costs to a range of five to ten percent. Internal numbers at the Dallas Area Municipal Authority yield a result of 22% for engineering expense, 38% for internal expenses, such as project maintenance, project management, and overhead, 25% for the acquisition of fixed assets, and 15% for actual construction, where the rubber meets the road. No non-governmental business would survive these ratios. I would add the commonwealth's review and governance expenses to the categories of engineering and overhead, further diluting the economic effectiveness of the current MS4 value chain, and add any federal expenses upon that.

Where are the greatest values within the value chain? The Pennsylvania Department of Environmental Protection (PA DEP) is the gate keeper, the boss, and the expert. The department knows what it wants and what it will approve. The engineer is critical in design, and the contractor brings projects to fruition. With that said, we can assume a change in funding sources, funding distribution, management, and the concentration of high yield results to dollars projects can increase economic efficiency and environmental impact.

For example, what if the townships and authorities did not define geographical areas or hold the responsibility of results? How might it affect outcomes if pollution reduction targets were set at the county or regional level instead? What if there was more funding for PA DEP that resulted in a faster, more pointed review and approval process? What would happen if funding were based on consumption rather than calculated per square foot of roof space?

The Pennsylvania Department of Environmental Protection may find that increasing its staff would help it accomplish its goals more efficiently within specific regions. Goals driven by conservation districts through a competitive grant application process would drive larger, higher impact, projects that dilute soft costs by increasing actual corrective and preventative construction. You might imagine townships and authorities attempting to reach goals through a menagerie of disparate projects that require scattered maintenance, or massive regional high impact projects that focus resources and amplify the impact of each dollar.