



November 6, 2017

To: Jim Higgins, Township Commissioner (all electronic only)

Cc: Radnor Stormwater Advisory Committee  
Steve Norcini, Township Engineer  
Bob Zienkowski, Township Manager  
Elaine Schaffer, Township Commissioner  
Richard Booker, Township Commissioner  
Lucas Clark, Township Commissioner  
Donald Curley, Township Commissioner  
John Nagle, Township Commissioner  
Philip Ahr, Township Commissioner

**Re: Radnor Township saves \$450,000 in stormwater management fees**

As you know, the Delaware Riverkeeper Network continues to work tirelessly in Radnor Township and municipalities throughout the Delaware River Watershed to raise awareness about how innovative stormwater management that focuses on volume reduction can provide ecological as well as economic benefits to communities. Recent efforts have included conducting reviews and providing comment (including in Radnor Township) on municipal MS4 Pollution Reduction Plans (PRP) for Pennsylvania municipalities as well as working to advocate for better stormwater management on individual development projects.

On August 14, 2017, Radnor Township's consulting engineer Meliora Design presented their PRP PowerPoint (<http://www.radnor.com/documentcenter/view/16797>) to the Radnor Board of Commissioners (BOC). This presentation walked the BOC and the public through the objectives and intent of the PRP, the volume of pollutant reduction that Radnor must target to meet PADEP's requirements, the volume of pollution reduction each type of stormwater BMP's has been calculated to achieve, and then set targets for the number and type of BMP's Radnor would need to construct to meet that pollution load reduction. Specific to Radnor's PRP, Meliora calculated that the Township must achieve pollution load reduction of 307,280 lbs/yr (<http://www.radnor.com/documentcenter/view/16797> - pg. 9) and identified the number and types of BMP projects Radnor would need to implement to achieve that target.

The recommended list of stormwater strategies to meet these pollution reduction goals included:

- ✓ Retrofitting 10 existing detention basins,
- ✓ Constructing 3 streambank restoration projects,
- ✓ Restoring and retrofitting the West Wayne Woodland Wetland

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- ✓ Constructing bio-retention Radwyn Apartments, and
- ✓ Retrofitting Lincoln Financial

**Meliora estimates the cost of these measures to Radnor Township to be \$7.35 million.** But the above-mentioned 5 measures recommended by Meliora Design only address 93.1% of the required pollution load reduction. The rest of the pollution load reduction obligation is, according to the Meliora-provided chart below, achieved as a result of stormwater management at Villanova University’s new development project on Lancaster Avenue.

It is important to note that when the Delaware Riverkeeper Network was strongly advocating Villanova University to design stormwater best management practices that went beyond the original detention basins as the University was planning and advocating for, we highlight the water quality and volume reduction benefits of using a more progressive approach. While there was significant pushback from the University and its supporters at the time, the Delaware Riverkeeper Network’s advocacy drew the attention of the Pennsylvania DEP and many Radnor residents. Ultimately Villanova agreed to do something better than the detention focused approach it was originally so firmly committed to. And as a result, not only does Villanova have a better project that is in keeping with its own stormwater advocacy, but it is now providing significant benefits to Radnor Township who will be able to meet its stormwater permitting obligations at a much lesser cost.

Villanova’s 20.78 acre infiltration system on Lancaster Ave (Radnor PRP – pg. 38) will reduce TSS pollutant loading by 18,763 lb/yr contributing to an additional 6.1% reduction in pollution loading that helps Radnor meet its PRP target. In other words, Radnor Township can now take that pollution loading reduction credit for a project Villanova paid for. That calculates to save Radnor and Radnor’s tax-payers of \$450,000. Generally speaking, that places the cost of pollution on the polluter. That \$450,000 will now enable the Township’s Stormwater Impervious Coverage fee to go that much further.

We highlight this important local case study because it supports the work we have been doing in Radnor, and the many reasons the Delaware Riverkeeper Network has been urging that Radnor advance a progressive stormwater ordinance and that every penny of Radnor’s stormwater fee be invested in a way that addresses volume reduction and water quality, while at the same time addressing peak rate issues.

	Load Reduction	Cost
1. Retrofit 10 Existing Detention Basins	28%	\$0.74M
2. Stream Restoration – 3 projects	45%	\$1.6 M
3. West Wayne Wooded Wetland	7.5%	\$0.71M
4. Villanova improvements	6.1%	\$ 0
5. Bioretention – Radwyn Apartments	1%	\$1.2M
6. Retrofit Lincoln Financial	12%	\$3.1M
<b>TOTAL</b>	<b>99.6%</b>	<b>\$7.35M</b>

Radnor Township PRP, (Page 18) illustrating the cost savings the Villanova University stormwater BMP project provided to Radon Township.

The economic and ecological benefits documented as a result of the Villanova University example can be magnified throughout the Township through a scientifically driven, and modern, Stormwater Management Ordinance.

Thank you for consideration of this input

A handwritten signature in blue ink that reads "Maya K. van Rossum". The signature is fluid and cursive, with a long horizontal line extending from the end.

Maya K. van Rossum  
the Delaware Riverkeeper

A handwritten signature in blue ink that reads "Fred Stine". The signature is cursive and somewhat stylized, with the first letters being larger and more prominent.

Fred Stine  
Citizen Action Coordinator