** COG’s Preliminary MD Phase II WIP Plan Analysis**

COG staff conducted a preliminary analysis for COG member jurisdictions of the urban stormwater and septic system portions of the overall data that MDE issued at the end of March to align county WIP team submissions with the final 2025 targets it has computed for county/source sector.  Below is a table of “percent reductions” extracted by COG staff from the Maryland data, a link to MDE’s website for more information and three charts showing breakdowns for planned reductions by source sectors.

The data indicates that the WIP teams’ submitted scenarios for stormwater practices to be implemented by 2025 did not necessarily meet state target numbers. However, it is important to note that county-wide totals include target load obligations for lands outside county control, such as state, federal and Phase II municipality land. Also, these numbers are based on current watershed model estimates, which are subject to future change and may be significantly inaccurate, such as in the septic sector.

Nevertheless, MDE, using MAST output, has updated the WIP team scenarios (see results under the 2025 Final Strategy column) to achieve the target reductions it has calculated for each sector. According to Lee Currey of MDE, for the urban stormwater sector, this generally involved adding additional acres of certain BMPs until the phosphorus target was achieved (i.e., achieving the phosphorus target was more difficult than achieving the nitrogen target). However, since the new practices added by the state also reduce nitrogen, there are additional reductions from the 2025 WIP Team Column to the 2025 Final Strategy Column for nitrogen as well. In fact, in many cases the 2025 Final Strategy nitrogen total is lower than the Final Target nitrogen total.

In the case of septic systems, none of the WIP team scenarios addressed load reductions in this sector, so MDE added denitrification retrofits of existing systems to reach the final target load.

Currey said that the state numbers are preliminary and MDE does not necessarily expect that counties will be able to achieve these BMP totals by 2025. However, they provide a basis for counties to plan future implementation and determine where trading and other adjustments may be necessary.

**Percent reduction data derived from:** <http://www.mde.state.md.us/programs/Water/TMDL/TMDLImplementation/Pages/WIP_Phase_II_County_Strategy_Summaries.aspx>\*

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|   |   | **Percent Reduction 2010 Progress to 2025 Final Strategy** | **Percent Reduction 2010 Progress to 2025 WIP Team[[1]](#footnote-1)** | **Percent Reduction 2025 WIP Team to 2025 Final Strategy** |
| Frederick | TN Urban Stormwater | 12.0% | 1.54% | 10.6% |
| TP Urban Stormwater | 14.3% | 0.0% | 14.3% |
| TN Septic | 24.5% | 0.0% | 24.5% |
| Charles | TN Urban Stormwater | 20.9% | 0.84% | 20.3% |
| TP Urban Stormwater | 20.0% | 0.0% | 20.0% |
| TN Septic | 33.2% | 0.0% | 33.2% |
| Prince George’s | TN Urban Stormwater | 24.4% | 16.7% | 9.3% |
| TP Urban Stormwater | 25.0% | 16.7% | 10.0% |
| TN Septic | -34.0% | 0.0% | 34.0% |
| Montgomery  | TN Urban Stormwater | 17.7% | 7.4% | 11.1% |
| TP Urban Stormwater | 21.2% | 11.2% | 11.3% |
| TN Septic | 26.6% | 0.0% | 26.6% |

• Data derived from MAST. Stormwater sector includes numbers from the following sectors: State Highway Administration, federal facilities, State lands, industrial facilities, Phase I and II MS4 and non-regulated stormwater where applicable. These inclusions could skew the county percentages significantly.

**Total Nitrogen Reductions from Stormwater Sector**

TN, thou-sands of pounds/year

Total Phosphorus Reductions from Stormwater Sector

TP, thou-sands of pounds/year

Total Nitrogen Reductions from Septic Sector

TN, thou-sands of pounds/year

To meet state targets for stormwater sector, MDE added additional acres primarily in the following BMPs:

* Impervious Urban Surface Reduction
* Urban Filtering Practices
* Urban Forest Buffers
* Urban Nutrient Management

To meet state targets for septic sector, MDE added additional septic denitrification retrofits.

1. Frederick County did not submit an official draft Phase II WIP plan to the state back in November; it is not clear how the state derived its 2025 WIP Team numbers for the county. [↑](#footnote-ref-1)