

# WASHINGTON COUNTY



## WATERSHED IMPLEMENTATION PLAN PHASE II WIP REPORT – LOCAL INFORMATION

July 15, 2012

**Washington County**  
**Watershed Implementation Plan Phase II**  
**WIP Report – Local Information**  
**July 15, 2012**

1. Overview of the Local Team’s Process

The Washington County Watershed Implementation Plan (WIP) Phase II Local Implementation Team was formed in February 2011, with the first meeting of the local governmental agencies occurring March 15, 2011. A complete list of Local Implementation Team membership is included in Appendix A.

The WIP committee formed two primary workgroups to focus on the septic and Urban (stormwater) sectors. The groups focused on the implementation milestones for FY12/13; the MAST (Maryland Assessment Scenario Tool) development for the 2017 and 2020 WIP Scenarios and development of a report for the sector. The reports focused on the alternatives and estimated costs to meet full implementation of the Best Management Practices (BMP) needed to achieve the target loading allocations for Washington County. The short term goals of these workgroups are in the following text while the long term strategies of these workgroups have been included in Section 2 – County Area Phase II WIP Strategies.

The septic workgroup’s short term goal was to analyze the current progress in installation of Best Available Technology (BAT) septic tanks and to review current Washington County Health Department policies that could easily be modified to increase the installation of BAT systems progress in FY12-17. The workgroup prepared a summary of these findings and the cost analysis of meeting the target load reduction. This report can be found in Appendix B. The results of this short term analysis have been included in the MAST 2017 and 2020 scenarios.

The short term focus of the Urban/MAST workgroup was to evaluate the MAST tool and the current progress/policies of watershed practices both recognized and unrecognized in the MAST tool for development of the FY12/13 Milestones and MAST scenarios. In review of the MAST tool, the workgroup generated a number of questions that the group needed answered in order to fully develop the MAST scenarios and Milestones. These questions were submitted to MDE, while enough information has been

received from MDE to move forward with estimating preliminary costs to address the stormwater sector, the workgroup has determined that additional areas of clarification and data improvement will be necessary in the next steps of this process. Therefore, development of the documents for the June 30, 2012 submittal reflects the data and material received from MDE with the knowledge and understanding that additional work is required to better define the stormwater areas. The Urban workgroup report is located in Appendix C.

Overall the Teams approach to meeting reduction targets for both sectors was to:

1. Identify current policies and practices being utilized to address watershed quality improvements in the County and document these items in the FY12/13 Milestone and MAST 2017 and 2020 Scenarios.
2. Review current policies and practices for potential expansion/improvement to expand watershed water quality improvement projects.
3. Review the MAST tool for potential practices which could be added to the current practices and policies for watershed quality improvement projects.
4. Develop a report for the elected bodies on the remaining loading reduction requirements for each sector to meet the 2017 and 2020 load reduction numbers. These reports contain options which can be utilized to meet the reductions; the estimated costs for implementing the BMPs and an overall recommendation to the elected bodies. The reports were presented to the applicable elected bodies for direction and approval on how to proceed.
5. Incorporate the report decisions into the final WIP Report and MAST Scenarios for submission by July 1, 2012. Develop future two-year milestones based on these decisions as well.

The County agencies have been successful in implementation of multiple watershed water quality projects which include, but are not limited to:

- Obtaining Bay Restoration Fund (BRF) funding for the installation of BAT septics in the County.
- Successfully receiving grant funding to implement stream restoration and stream buffer planting projects.
- Tree plantings at locations across the County.
- Land preservation and Forest Conservation Programs.



- Completion of the City of Hagerstown's WwTP Enhanced Nutrient Removal (ENR) Upgrade project in January 2011 with operational performance meeting the ENR NPDES Permit limits

The County Team has discussed the future challenges of developing and implementing the WIP Phase II load reduction requirements. For this document the following items have been identified with revisions and further development of these items forthcoming as the WIP process continues to develop and as it progresses through the next stages.

- Implementation costs which are financially unachievable.
- Funding availability – concern with the amount of funding available in the various grant programs versus the need across the State and that projects located closer to the Bay will rank higher, limiting the amount of funds for the outlying areas.
- Manpower to complete the work.
- Public involvement, participation and buy-in.
- Ability to implement urban storm water retrofits and other mechanisms to meet the WIP load reductions without deterring private development and investments.

## 2. County Area Phase II WIP Strategies

The following strategies were developed based on the findings of the individual reports and the direction received from the elected bodies. The recommendation to each of the elected bodies is located in Appendix D and a copy of each elected bodies' response to their participation in the WIP Phase II process is located in Appendix E. These items reflect the knowledge and understanding of the MAST tool and process as of the date of this report and will be updated as the process progresses.

- Septic Sector:
  - Continue pursuit of and distribution of the State Bay Restoration Fund septic tank upgrade funding for upgrades of septic tanks to BAT levels.
  - Pursue additional potential funding sources for implementation of the BMPs outlined in the septic report.
  - Pursue a mechanism to track and record the septic tanks being voluntarily pumped on routine basis in the County and incorporate into the MAST.
  - Effective July 1, 2013 (FY14) all repairs on one (1) acre lots or smaller will be required to install BAT technology.



- Effective July 1, 2013 (FY14) all new septics and all repairs in sensitive areas will be required to install BAT technology. (Note: only septic repairs can be counted in the MAST.).
- Educate septic tank owners on proper care of their systems and make them aware of the benefits of BAT technology.
- Urban/Stormwater Sector
  - Continue to work with MDE to understand how the Construction numbers were developed; develop mechanisms to determine how many acres are under construction versus permitted for construction at one time and continue to monitor the number of acres under construction for potential impact if not enough has been allocated to meet demand.
  - Monitor the extractive subsector for continued compliance and verify the land use data to determine if the excess reductions in this subsector can be applied to another subsector.
  - Work with MDE to reconcile the land acres provided to the County for the Municipal MS4 and County Phase II MS4 areas and refine the target load allocations provided to the County accordingly.
  - Work with MDE to determine why areas have been included in the stormwater areas which do not appear to fall under the stormwater permit definition and refine the target load allocations accordingly.
  - Work with MDE to obtain a map of the Non-regulated Urban areas; refine this information bases on local data and reconcile the numbers with refinement to the target loading areas.
- All Sectors
  - Incorporate approved operating and CIP budget line items which work towards achieving the target loads with the caveat that full implementation is contingent upon continued funding availability.
  - Development of project list which can be utilized in development of yearly funding requests from the elected bodies and grant sources.
  - County staff to continue investigation into new and alternative methods of working towards the target load reductions.
  - Pursue potential funding sources for implementation of projects.

- Development of a tracking and reporting system for BMP implementation in Washington County.
- Work on an offset policy for future development in Washington County.
- Education of the citizens on the WIP and what they can do to reduce the nutrient and sediment load in Washington County.
- Work with MDE staff to refine the loading allocations assigned to Washington County to reflect the true county conditions and not from a broader Bay model perspective.
- General administrative functions as required to work on the WIP and that do not commit Washington County to any work which is not already funded.

### 3. Local Area FY2012 – 2013 Milestones

The Milestones for FY12/13 have been included as Appendix F in this report.

### 4. Area Implementation Tracking, Verification and Reporting Methods

The Local Implementation Team has formed a workgroup to evaluate the tracking, verification and reporting practices of the local agencies and stakeholders for the development of a central consolidation of this information with the Washington County Division of Environmental Management for WIP Phase II Management. The investigation and development of a tracking, verification and reporting system is to occur in the FY12/13 Milestones with implementation anticipated in the FY14/15 Milestone period. Extent of implementation will be contingent upon funding and approval by local elected bodies.

### 5. Relationship of Local Watershed Planning Framework to Phase II WIP

Washington County Government has designated a new area of operation under the Division of Environmental Management dedicated to the watershed planning and management associated with the local TMDLs, Water Resource Element, and the Chesapeake Bay TMDL. The staff of this Department will be responsible for integrating all these components into a unified watershed management approach for the County. This will include, but is not limited to working with all agencies and stakeholders within the County to track progress, develop projects, educate and provide technical assistance.

6. Identification of technical discrepancies, such as data concerns, and recommended future steps to address these concerns (update based on bullet points above.)

- Impervious acreage under Municipal Phase II MS4 is higher than local GIS numbers calculate and will need to be reconciled with the State.
- Determination of what areas of the County fall under the County Phase II MS4 and Non-regulated Urban categories
- Continue to work with MDE to understand how the Construction numbers were developed.
- Work with MDE to identify the lands which have been designated as extractive and reconcile as required.
- Work with MDE to determine why areas have been included in the stormwater areas which do not appear to fall under the stormwater permit definition and refine the target load allocations accordingly.
- Continue evaluation of data and identify any additional discrepancies.

7. Appendices

Appendix A - List of Local WIP Phase II Implementation Team Members

Appendix B – Septic Report

Appendix C – Urban Report

Appendix D - Overall Recommendation on the WIP Phase II Document with Overall Cost Estimate for Washington County

Appendix E – Position documents from the Elected Bodies

Appendix F – Milestones for FY12/13



APPENDIX A –  
LIST OF LOCAL WIP PHASE II  
IMPLEMENTATION TEAM MEMBERS

# Washington County

## Watershed Implementation Plan Phase II

### WIP Report -

#### Appendix A – List of Local WIP Phase II Implementation Team Members

July 1, 2012

#### Organization Names

Maryland Department of Natural Resources

Washington County Division of Environmental Management

Washington County Administrator

Washington County Division of Public Works

Washington County Division of Plan Review & Permitting

Washington County Department of Planning & Zoning

Washington County Department of Engineering

Washington County Soil Conservation District

City of Hagerstown – Utilities Department

City of Hagerstown – Department of Community and Economic Development –  
Planning and Code Administration Division

City of Hagerstown – Department of Parks and Engineering –  
Engineering Division

City of Hagerstown – Utilities Department –  
Wastewater Division

Town of Boonsboro

Town of Clear Spring

Town of Hancock

Town of Funkstown

Town of Keedysville

Town of Sharpsburg

Town of Smithsburg

Town of Williamsport  
Washington County Health Department  
Home Builders Association  
Antietam Creek Watershed Association  
Farm Bureau  
National Park Service - Antietam Battlefield  
Washington County Board of Education  
National Park Service - C&O Canal  
Maryland Prison System  
Beavercreek Watershed Association  
Washington County Economic Development Commission  
Hagerstown Prison Complex (Maryland Environmental Services)



APPENDIX B –  
SEPTIC REPORT

**Washington County Watershed Implementation Plan  
Septic Report  
February 3, 2012**

The State of Maryland has issued a loading allocation for septic tanks in Washington County. The report, as follows, provides background information on the loading, the initiatives in place regarding loading reduction in septic tanks, the policy revisions being implemented by the Washington County Health Department to increase loading reductions, and information including scenarios for use by the elected bodies to provide direction to staff on future policies that address the loading reductions needed to meet the septic loading allocation.

It should first be noted that septic tanks only contribute total nitrogen (TN) to the ground water of the County and ultimately to the Chesapeake Bay. This is because any phosphorus that is discharged from a septic tank attaches to the soils and does not reach the ground water. An exception to this would be any failing septic system which is directly discharging to a water body.

The Washington County Loads not associated with Federal and State Facilities (Non-Federal Loading) are as follows for the septic sector:

**Non-Federal Deliver Loading – Septics**

2010 MAST Progress	Calculated loads coming from septics in the County being delivered to the Bay	93,690.6
2017 Target Load	The calculated load target the County is to reduce the septic loading to by 2017	77,337
2025 Target Load	The calculated target load the County is to reduce the septic loading to and maintain by 2020.	70,921

The above referenced target loads result in the County being responsible for reducing the Septic tank nitrogen loading being delivered to the Bay by **22,770 pounds**.

**Current Initiatives**

Currently the Washington County Health Department is working with Canaan Valley Institute to apply for, receive, and administer State Bay Restoration Fund Grant monies to upgrade failing septic tanks with Best Available Technologies (BAT). These technologies are designed to reduce the septic nitrogen discharge levels by 50%. During

the period of February 18, 2009 to June 24, 2011, 71 BAT upgrades were completed in the County.

Based on current BRF funding levels from MDE, approximately 20 systems are upgraded each Fiscal Year (FY). If this level of funding is maintained from MDE, an additional 280 upgrades could occur between FY 12 and FY 25.

### **Proposed Policy Revisions**

In response to the Watershed Implementation Plan and allocation targets for septics in Washington County, the Health Department re-evaluated the current policies for septic tank repairs and installation. Based on this evaluation, the following policy changes will be implemented to increase the number of septics being upgraded to BAT and more importantly improving the local ground water quality in areas that have been identified as being sensitive to nitrogen pollution.

- Effective July 1, 2013 (FY 14) all repairs on 1 acre lot size or smaller will be required to install BAT technology.
- Effective July 1, 2013 (FY 14) all new septics and all repairs in sensitive areas will be required to install BAT technology. (Note only repairs can be counted in BAT)

Based on these changes it is predicted that an average of 10 septics a year in the sensitive area will be required to upgrade to BAT for an additional 120 septics upgraded to BAT between FY 14 and FY 25. Another 50 small lot sizes are estimated to be required to upgrade to BAT between FY12 and FY25. This will result in a total of 400 BAT upgrades by 2025.

### **Best Management Practices (BMP) for Septics and Scenario Information**

#### **A. Connection of Septic Tanks to Enhanced Nutrient Removal Wastewater Treatment Plant.**

In development of the Water Resource Element for Washington County 2,151 septics located near a sewer service area and within a structured subdivision were identified as having a potential to connect to a public sewer system. These areas are as follows and are separated by sewer service area:



Conococheague Sewer Service Area

<b>Subdivision</b>	<b>Number of Septics</b>	<b>Total Nitrogen (TN) reduction in lbs. by connecting to ENR WwTP</b>
Cedar Lawn	107	363.8
Clover Heights	87	295.8
Rocky Springs	33	112.2
St. James	162	550.8

City of Hagerstown Sewer Service Area

<b>Subdivision</b>	<b>Number of Septics</b>	<b>Total Nitrogen (TN) reduction in lbs. by connecting to ENR WwTP</b>
Spring Valley	574	1,951.6
Hunter Hill Apartments and Single Family Homes	140	476
Jefferson Boulevard	569	1,934.6

Smithsburg Sewer Service Area

	<b>Number of Septics</b>	<b>Total Nitrogen (TN) reduction in lbs. by connecting to ENR WwTP</b>
Septics in sewer service area	479	1,628.6

However, several issues impact the implementation of this BMP:

1. Connection of septic to the Smithsburg WwTP is contingent upon the completion of the ENR upgrade to the WwTP. This upgrade is contingent upon funding.
2. Connection of septic in the County Joint Sewer Service Area that is treated by the City of Hagerstown Wastewater Treatment Plant will require the City to agree to these systems being connected to their system. This may require agreements between the City and County to accept additional flow at the Conococheague WwTP to offset the flow at the Hagerstown WwTP.
3. Currently the Code of Public Local Laws of Washington County only provides for the County to enter an area for the purpose of expanding sewer if:
  - a. A public health order is issued requiring public sewer to be installed; or
  - b. If the County receives a petition from the property owners and if after a public hearing the Board of County Commissioners (BOCC) determines that a majority of the potential customers are in support of the system.

Based on these current practices, it is unlikely that any large number of septic tanks can be connected to a WwTP prior to 2017 and potentially not before 2025. However, these issues need to be reviewed by the political bodies for direction to staff on interest in this approach and changes to facilitate its occurrence in future years.

B. Pumping of Septic Tanks on a three year cycle.

A county wide pumping program would require that a septic tank be pumped by a septic pumping service once every three years. This is a recommended practice by the Washington County Health Department; however, there are no regulations in place to require this to occur. The following items need to be considered in utilizing this approach for loading reduction:

1. The cost to the homeowner will be approximately \$300 every three years.
2. The CIPF facility is the designated receiving facility for septic pumping in the County. The addition of a pumping program would be handled by the CIPF facility in accordance with the Lease Agreement between the County and Spirit Services. However, it should be noted that if CIPF were to no longer process septage, the Conococheague WwTP is not designed to handle treatment of this material at full strength without a large impact on the available capacity of the facility. This amount could be upwards of 3,900 Equivalent Dwelling Units (EDU) for every 91 septic tanks treated. (See Appendix A for septage analysis.) Therefore, the County would either have to retain CIPF (if the lease was terminated) for pretreatment of this material or build a pretreatment facility to reduce the strength of this material to domestic strength.
3. Pumping of tanks normally increases in the warmer months which will cause seasonal loading fluctuations. Therefore, if this program is implemented, a more detail analysis on impact to treatment facilities and possible need for flow control will have to be evaluated.
4. In order for this program to work, a management program will need to be implemented. The Health Department projects this will require one additional employee plus an increase in the operating budget for office supplies, postage and computer system.

C. Upgrade of septic systems to BAT.

BAT systems are septic tanks that have been designed to remove a minimum of 50% of the total nitrogen level of a conventional septic tank effluent discharge. These systems require mechanical aeration devices for this treatment and therefore electrical costs and maintenance costs are associated with them. Maryland Department of the Environment (MDE) has established a list of these systems which meet the above criteria. The following items need to be considered in the utilization of these systems to reduce loading.

1. Cost to upgrade a septic tank with the BAT system and a 5 year maintenance contract is approximately \$10,900.
2. The BAT requires electricity to operate with an estimated yearly expense of \$127.
3. The BAT systems require pumping every 5 years with a cost of approximately \$300. If the implementation of a three year pumping program occurs, these systems would be placed into that program and pumped every 3 years.
4. Approximately 75% of all BAT upgrades require upgrades to the disposal portion of the septic system in addition to the BAT technology upgrade. This expense is approximately \$10,000.
5. Cost of maintaining the maintenance contract after year 5 will range from \$200 to \$300 per year. (Note: for purposes of this report, \$300 was utilized for the cost analysis).

**MAST Scenarios:**

The County’s 2025 target requires that 22,770 pounds of nitrogen be reduced from the existing septics. As outlined above, this can be achieved by several BMP mechanisms. The following provides four scenarios for consideration. These scenarios are starting points and can be adjusted to reflect a plan that meets the direction of the Commissioners. The cost analysis for the implementation and maintenance over a 20 year period for each scenario is in Appendix C. Appendix B breaks down the cost per BMP over a 20 year period.

Scenario 1:

<b>BMP Implementation Plan</b>	<b>No. of septics impacted</b>	<b>Reduction Achieved</b>	<b>Pounds (lbs) reduced per BMP</b>
<b>BRF funding and new BAT policies being implemented</b>	680	1,246.7	1.83
<b>100% of the septics with the ability to connect to an ENR WwTP be connected. Note this assumes that the hurdles listed above are overcome and that we can connect 100% of the systems.</b>	2,151	7,933.4	3.69
<b>100% of septic tanks in County to be enrolled in a Septage Pumping Program</b>	20,020	4,684.6	.23
<b>Upgrade of septic to BAT at a level sufficient to meet the 2025 target (NC)</b>	4,853	8953.3	1.8



Scenario 2:

<b>BMP Implementation Plan</b>	<b>No. of septic impacted</b>	<b>Reduction Achieved</b>	<b>Pounds (lbs) reduced per BMP</b>
<b>BRF funding and new BAT policies being implemented (NC)</b>	680	1,246.7	1.83
<b>100% of septic tanks in County to be enrolled in a Septage Pumping Program</b>	20,020	4,684.6	.23
<b>Upgrade of septic to BAT at a level sufficient to meet the 2025 target (NC)</b>	9,153	16,866.6	1.84

Scenario 3:

<b>BMP Implementation Plan</b>	<b>No. of septic impacted</b>	<b>Reduction Achieved</b>	<b>Pounds (lbs) reduced per BMP</b>
<b>BRF funding and new BAT policies being implemented (NC – 5.5)</b>	680	1,246.7	1.83
<b>Upgrade of septic to BAT at a level sufficient to meet the 2025 target (NC: 94.5% and C: 0.5%)</b>	11,997	21,540.8	1.79

Scenario 4:

<b>BMP Implementation Plan</b>	<b>No. of septic impacted</b>	<b>Reduction Achieved</b>	<b>Pounds (lbs) reduced per BMP</b>
<b>BRF funding and new BAT policies being implemented (NC – 5.5)</b>	680	1,246.7	1.83
<b>Upgrade all remaining septic</b>	19,340	45,598.6	2.35

Appendix A – Septage Analysis

	Number of septics	Gallons of septage per year	No. of EDUs per day *	Concentration multiplier	EDU impact per day
<b>Total</b>	20,020	20,020,000			
<b>Per Year on three year cycle</b>	6,674	6,674,000	91	43	3,920

\* Septage pumping typically is higher in warmer months than winter months so for a more accurate analysis this number would to be run by season.

EDU concentration analysis	Septage	Headwork's allowed concentrations	Concentration multiplier	Est. hydraulic no. of EDUs per day	EDU equivalent based on parameter	Flow equivalent based on parameter (gpd)
<b>Total Suspended Solids</b>	12,862	300	43	91	3,920	783,936
<b>Biochemical Oxygen Demand</b>	6,480	300	22	91	1,975	394,955
<b>Total Kjeldahl Nitrogen</b>	588	47	13	91	1,144	228,756
<b>Total Phosphorus</b>	210	8	26	91	2,400	479,979

Based on EPA documentation published in 1994 using average concentration numbers.

**Impact to CIPF**

Estimated No. of tanks per day	91
Average gallons per tank	1,000
ADF from septage pumping	91,000

Appendix B- Cost to implement BMPs based on a 20 year cost cycle.

**Septic Tank Connection to ENR WwTP per septic system.**

Construction Cost	\$ 50,000.00
County Connection Fee	\$ 6,900.00
Quarterly User rate for 20 years assuming no increase and 12,000 gallons	\$ 10,489.60

**Total \$ 67,389.60**

Cost per pound (TN) reduced (20 year cycle)	\$ 18,263.00
Cost per pound (TN) reduced (Construction Cost)	\$ 15,420.00

**Septic Tank Pumping Costs based on a 20 year cost cycle per septic.**

Assume 6 pumping in 20 years	\$ 1,800.00
Cost per pound (TN) reduced (20 year cycle)	\$ 7,826.00

**BAT upgrades with BRF Grant Funds without disposal upgrades on a 20 year cost cycle per septic.**

BAT Upgrade w/ 5 yr contract	\$ 10,900.00
Electric for 20 years	\$ 2,540.00
Maintenance Contract for year 6-20	\$ 4,500.00
Pumping every three years assume 6 in 20 yrs	\$ 1,800.00

**Total \$ 19,740.00**

MDE Grant pays for	\$ 10,900.00
Cost to homeowner	\$ 8,840.00

Cost per pound (TN) reduced (20 year cycle)	\$ 10,967.00
Cost per pound (TN) reduced (Construction Cost)	\$ 6,055.00

**BAT upgrades with BRF Grant Funds with disposal upgrades on a 20 year cost cycle per septic.**

BAT Upgrade w/ 5 yr contract	\$	10,900.00
Disposal Upgrade	\$	10,000.00
Electric for 20 years	\$	2,540.00
Maintenance Contract for year 6-20	\$	4,500.00
Pumping every three years assume 6 in 20 yrs	\$	1,800.00
	<b>Total</b>	<b>\$ 29,740.00</b>
MDE Grant pays for	\$	10,900.00
Cost to homeowner	\$	18,840.00
Cost per pound (TN) reduced (20 year cycle)	\$	16,522.00
Cost per pound (TN) reduced (Construction Cost)	\$	11,611.00

**BAT upgrades with No Grant Funds without disposal upgrades on a 20 year cost cycle per septic.**

BAT Upgrade w/ 5 yr contract	\$	10,900.00
Electric for 20 years	\$	2,540.00
Maintenance Contract for year 6-20	\$	4,500.00
Pumping every three years assume 6 in 20 yrs	\$	1,800.00
	<b>Total</b>	<b>\$ 19,740.00</b>
MDE Grant pays for	\$	-
Cost to homeowner	\$	19,740.00
Cost per pound (TN) reduced (20 year cycle)	\$	10,967.00
Cost per pound (TN) reduced (Construction Cost)	\$	6,055.00

**BAT upgrades with No Grant Funds with disposal upgrades on a 20 year cost cycle per septic.**

BAT Upgrade w/ 5 yr. contract	\$	10,900.00
Disposal Upgrade	\$	10,000.00
Electric for 20 years	\$	2,540.00
Maintenance Contract for year 6-20	\$	4,500.00
Pumping every three years assume 6 in 20 yrs	\$	1,800.00
	<b>Total</b>	<b>\$ 29,740.00</b>
MDE Grant pays for	\$	-
Cost to homeowner	\$	29,740.00
Cost per pound (TN) reduced (20 year cycle)	\$	16,522.00
Cost per pound (TN) reduced Construction Cost	\$	11,611.00

Appendix C- Scenario Cost to implement BMPs for a 20 year cycle

Scenario Number	BMP Type	Number of Septics	20 Year Life Cycle Costs				Infrastructure Costs Only	
			Cost potential Funded by MDE Grant	Costs to be funded by Homeowner	Homeowners - 75% required Disposal upgrades	Total	MDE Grant Construction Costs	Homeowner Construction Costs
ONE	BRF Funded BAT Upgrades	280	\$ 3,052,000	\$ 2,475,200	\$ 2,100,000	\$ 7,627,200	\$ 3,052,000	\$ 2,100,000
	New Policy BAT Upgrades	400	\$ -	\$ 7,896,000	\$ 3,000,000	\$ 10,896,000	\$ -	\$ 7,360,000
	Septic connection to ENR WwTP	2,151	\$ -	\$ 144,955,030	\$ -	\$ 144,955,030	\$ -	\$ 107,550,000
	Septage Pumping Program	20,020	\$ -	\$ 36,036,000	\$ -	\$ 36,036,000	\$ -	\$ -
	BAT Upgrades	4,853	\$ -	\$ 93,798,220	\$ 36,397,500	\$ 132,195,720	\$ -	\$ 89,295,200
			<b>Grand Total</b>	<b>\$ 331,709,950</b>	<b>\$ 3,052,000</b>	<b>\$ 206,305,200</b>		

Scenario Number	BMP Type	Number of Septics	20 Year Life Cycle Costs				Infrastructure Costs Only	
			Cost potential Funded by MDE Grant	Costs to be funded by Homeowner	Homeowners - 75% required Disposal upgrades	Total	MDE Grant Construction Costs	Homeowner Construction Costs
TWO	BRF Funded BAT Upgrades	280	\$ 3,052,000	\$ 2,475,200	\$ 2,100,000	\$ 7,627,200	\$ 3,052,000	\$ 2,100,000
	New Policy BAT Upgrades	400	\$ -	\$ 7,896,000	\$ 3,000,000	\$ 10,896,000	\$ -	\$ 7,360,000
	Septage Pumping Program	20,020	\$ -	\$ 36,036,000	\$ -	\$ 36,036,000	\$ -	\$ -
	BAT Upgrades	9,153	\$ -	\$ 180,680,220	\$ 68,647,500	\$ 249,327,720	\$ -	\$ 168,415,200
				<b>Grand Total</b>	<b>\$ 303,886,920</b>	<b>\$ 3,052,000</b>	<b>\$ 177,875,200</b>	

Scenario Number	BMP Type	Number of Septics	20 Year Life Cycle Costs				Infrastructure Costs Only		
			Cost potential Funded by MDE Grant	Costs to be funded by Homeowner	Homeowners - 75% required Disposal upgrades	Total	MDE Grant Construction Costs	Homeowner Construction Costs	
THREE	BRF Funded BAT Upgrades	280	\$ 3,052,000	\$ 2,475,200	\$ 2,100,000	\$ 7,627,200	\$ 3,052,000	\$ 2,100,000	
	New Policy BAT Upgrades	400	\$ -	\$ 7,896,000	\$ 3,000,000	\$ 10,896,000	\$ -	\$ 7,360,000	
	BAT Upgrades	11,997	\$ -	\$ 236,820,780	\$ 89,977,500	\$ 326,798,280	\$ -	\$ 220,744,800	
				<b>Grand Total</b>	<b>\$ 345,321,480</b>	<b>\$ 3,052,000</b>	<b>\$ 230,204,800</b>		

Scenario Number	BMP Type	Number of Septics	20 Year Life Cycle Costs				Infrastructure Costs Only		
			Cost potential Funded by MDE Grant	Costs to be funded by Homeowner	Homeowners - 75% required Disposal upgrades	Total	MDE Grant Construction Costs	Homeowner Construction Costs	
FOUR	BRF Funded BAT Upgrades	280	\$ 3,052,000	\$ 2,475,200	\$ 2,100,000	\$ 7,627,200	\$ 3,052,000	\$ 2,100,000	
	New Policy BAT Upgrades	400	\$ -	\$ 7,896,000	\$ 3,000,000	\$ 10,896,000	\$ -	\$ 7,360,000	
	BAT Upgrades	19,340	\$ -	\$ 381,771,600	\$ 145,050,000	\$ 526,821,600	\$ -	\$ 353,856,000	
				<b>Grand Total</b>	<b>\$ 543,344,800</b>	<b>\$ 3,052,000</b>	<b>\$ 365,316,000</b>		



APPENDIX C -  
URBAN REPORT

## Washington County Watershed Implementation Plan Urban Report

April 12, 2012

The State of Maryland has issued a loading allocation target for the Urban Sector in Washington County. The report, as follows, provides background information on the loading target, the initiatives in place regarding loading target reductions in the urban sector, and information for use by the elected bodies to provide direction to staff on future policies that address the loading target reductions needed to meet the urban loading target.

The urban sector is further broken down into several categories which directly impact different stakeholders in the County. Any of these categories which fall under State or Federal government control either through land ownership or permitting are not the responsibility of Washington County. These subsectors have an \* and are included here for informational purposes only and therefore will not be discussed or included in any detail in this report. The urban sector categories are as follows:

**Municipal Phase II MS4** – land area which is under Municipal Separate Storm Sewer System (MS4) Phase II permits which include the City of Hagerstown and the Town of Smithsburg.

**County Phase II MS4** – this subsector is not easily defined as the County MS4 permit area which is what would be expected. This subsector does contain the area in the County was defined by EPA to be under a MS4 Phase II permit. However, a map provided by MDE shows the areas within the municipalities which are currently not covered under a Municipal MS4 Phase II permit and areas in the County outside the EPA defined area. This is discussed in further detail below.

**State Phase II MS4 \*** – land in the County which is owned by the State of Maryland and under a State Stormwater Permit issued to the applicable State agency.

**SHA Phase I/II MS4 \*** – land in the County under Maryland State Highway Administration control and which falls under their State Stormwater Permit.

**Regulated Industrial Facilities \*** – private land in the County which is operated in a fashion which requires the land to be permitted under a State Stormwater Permit.

**Construction** – MDE has designated a set amount of land acres which they will allow to be under construction at any one time and maintain compliance with the target loading allocation for this sector.

**Extractive** – land in the County which is utilized for extractive activities both active and inactive.

**Non-regulated** – developed areas in the County such as municipalities and dense population areas that do not fall under the Phase II Stormwater Permit jurisdiction.

**Federal Developed** \* – this is lands that are owned and under the control of the Federal Government for example the C&O Canal, Antietam Battlefield and Post Offices. The federal lands have been assigned a separate target load and will be submitting a separate WIP Phase II document.

The Watershed Implementation Plan (WIP) Committee and its urban subcommittees evaluated each of the subsectors affecting Washington County stakeholders and political subdivisions and have developed the following information for review and direction:

Construction: Maryland Department of the Environment (MDE) has completed a calculation for each geographical jurisdiction in the State on the amount of land acres that had been and can be under construction at any one time to meet the urban loading target allocation. For the geographical area of Washington County this is 1,727 acres. MDE has indicated that in order to expand the number of acres, loading will need to be generated to offset the additional acres. In reviewing past records of acres permitted for construction in the County, the amount of acres has ranged from 2,120 acres in 2004 to 530.9 acres in 2009. However, the permitted acres do not necessarily reflect the amount of acres under construction because a permit can be issued and not be under construction for up to two years after issuance, or potentially not constructed at all. Currently, the amount of acres which has been allotted for construction is adequate; however, this could become restrictive in the future and will have to be monitored for impact. It is recommended that the WIP Committee continue to monitor this sector; develop mechanisms to determine how many acres are actually under construction versus permitted for construction at any one time, and continue its conversation with MDE on the calculation methodology used to develop the acreage. In addition, the WIP Committee will work on mechanisms which will allow for the amount of acres under construction to be expanded if necessary in the future.

Extractive: Areas in Washington County that are designated as extractive which are active or inactive fall under the sediment and erosion control regulations in the County. In reviewing the Maryland Assessment Scenario Tool (MAST), it was determined that no sediment and erosion controls practices were applied to these lands. By applying the sediment and erosion control best management practices to these lands, the 2025 target loading allocation is achieved with 1,343.8 lbs. total nitrogen and 236.2 lbs. of total phosphorus in excess. It is recommended that the WIP Committee continues to monitor this subsector and to verify that it continues to meet the target allocation assigned to this subsector. After full review and verification of the land areas which MDE has designated for this subsector are completed, the Committee can prepare a recommendation on use of the excess allocation.

Extractive Target Loading Allocation Table

	Total Nitrogen lbs. delivered	Total Phosphorus lbs. delivered
2010 Baseline	10,140.2	1103.0
2025 Target Loading Allocation	8,949	898
Loading after BMP application	7,605.2	661.8
Excess Loading reductions	1,343.8	236.2

County Phase II MS4; Municipal Phase II MS4 and non-regulated areas: All these subsectors relate to urban stormwater and utilize the same set of best management practices (BMPs) for loading reductions; therefore they have been grouped together for the purpose of the report. The BMPs which are applicable to these subsectors are described in Appendix A of this report as well as items which require consideration when determining which BMPs to apply to a jurisdiction.

The Urban subcommittee has spent a significant amount of time working with MDE staff to define the areas which were used to determine the make-up of each of these subsectors. Initially, it was defined that the County Phase II MS4 area was the County Stormwater permit area; the Municipal Phase II MS4 was the Municipal stormwater permit area and the non-regulated areas included the municipalities not under a MS4 permit and developed areas in the County not under the MS4 permit. Further discussions with MDE staff and receipt of a map have clarified what areas the State has included in these categories as discussed in the following.

Under the Municipal MS4 subsector area, the City of Hagerstown and the Town of Smithsburg have been included, however, when comparing local GIS data on the acreage of the municipality and the amount of impervious surface area acres within the City of Hagerstown, it was determined that the State numbers are higher than the local numbers. It is recommended that the Committee continue to work with MDE to determine the difference in the numbers and reconcile the numbers with refinement to the target loading allocations as applicable.

Under the County Phase II MS4 subsector area, it was determined that the State has designated the entire Town of Williamsport and Funkstown as being included in this category. The Towns of Boonsboro, Clear Spring, Hancock, Keedysville and Sharpsburg also have a portion of their towns included in this subsector area. The remaining acres defined by MDE maps are within the County. After review of this area it has been determined that while a significant amount of the County area falls into the area recognized as the County MS4 permit area which was based on the EPA data designating the 2000 census urbanized area, there is approximately 445 acres which are outside this area and upon closer review appear not to fall under a stormwater permit definition. While the Town of Williamsport and Funkstown are located within the area defined by EPA in 2000 as urbanized and were required to be evaluated for a MS4 permit at that time, the remaining Towns did not. However, review of the Federal Stormwater regulations does provide language which allows MDE to define these areas as MS4 stormwater areas and require permits in the future. It is recommended that the Committee continue to work with MDE to define these areas in accordance with local data and reconcile the numbers with refinement to the target loading allocations as applicable.

Under the non-regulated area, the remaining areas within the Towns not under a MS4 permit are included under this subsector along with developed areas in the County which are not under the MS4 permit. The County has requested a map of these areas. It is recommended that the Committee continue reviewing these areas and continue to work with MDE to define these areas in accordance with local data and reconcile the numbers with refinement to the target loading allocations as applicable.

Based on the above data the Committee has divided the target allocation to all participants in these subsectors based on acreage so that preliminary cost estimates could be prepared and direction could be received from the elected bodies for submission of the WIP



report in June 2012. The spreadsheets which show the total nitrogen and total phosphorus target loading allocation calculated for each jurisdiction are included in Appendix B.

For these subsectors the target load reduction is significant and the combinations of BMPs available to address the subsector are numerous. Therefore, preparing multiple scenarios is not a time effective or financially responsible method of providing a cost estimate to the elected bodies. In response to this, the Committee utilized the “Cost of Stormwater Practices in Maryland Counties” report prepared by Dr. King for MDE that includes the cost of each BMP and developed a weighted approach to the applicable BMPs for Washington County based on field knowledge and the BMP restrictions, to calculate the estimated cost of achieving the 2025 target allocations for each jurisdiction. These costs are as follows:

Jurisdiction	Estimated cost to achieve 2025 target allocation	Estimate to achieve 20% reduction proposed in MS4 Phase II permit
Washington County Government	\$514,819,051	\$43,744,256
City of Hagerstown	\$210,087,831	\$27,345,615
Town of Smithsburg	\$16,233,028	\$2,280,540
Town of Boonsboro	\$36,545,305	No permit
Town of Clear Spring	\$1,297,653	No permit
Town of Funkstown	\$4,082,626	No permit
Town of Keedysville	\$10,329,110	No permit
Town of Hancock	\$32,814,956	No permit
Town of Sharpsburg	\$2,570,522	No permit
Town of Williamsport	\$11,721,072	No permit

#### **Regulations affecting the WIP and Implementation:**

As discussed above, the urban sector contains areas which are under State MS4 Phase II permits. Currently Phase II permits do not require any retrofits of stormwater infrastructure or other parameters which result in capital improvement projects. However, the Phase II MS4 permits are due for reissuance in 2012 and it has been indicated by MDE staff that the Phase II permits will begin including parameters similar to the recently reissued Phase I MS4 permits. Therefore, it is anticipated that the Phase II permit will be modified to include language which will require that 20% of the acreage in the permitted area be required to retrofit the stormwater structures to meet current design standards. Achievement of this requirement will be limited to the permit cycle which is 5 years. The fiscal impact of this permit requirement for the areas with MS4 Phase II permits is included in the table above. If this parameter becomes part of the Phase II MS4 permit, the permitted jurisdiction will be obligated under State and Federal law to comply.

**Appendix A**  
**Best Management Practices**  
**(BMPs)**

*Note: This document is intended as a general information guide indicating some of the many types of Best Management Practices available for use in the reduction of TMDL Loads.*



## **BioRet - Urban**

### ***Bioretention/Raingardens***

An excavated pit backfilled with engineered media, topsoil, mulch, and vegetation. These are planting areas installed in shallow basins in which the storm water runoff is temporarily ponded and then treated by filtering through the bed components, and through biological and biochemical reactions within the soil matrix and around the root zones of the plants.

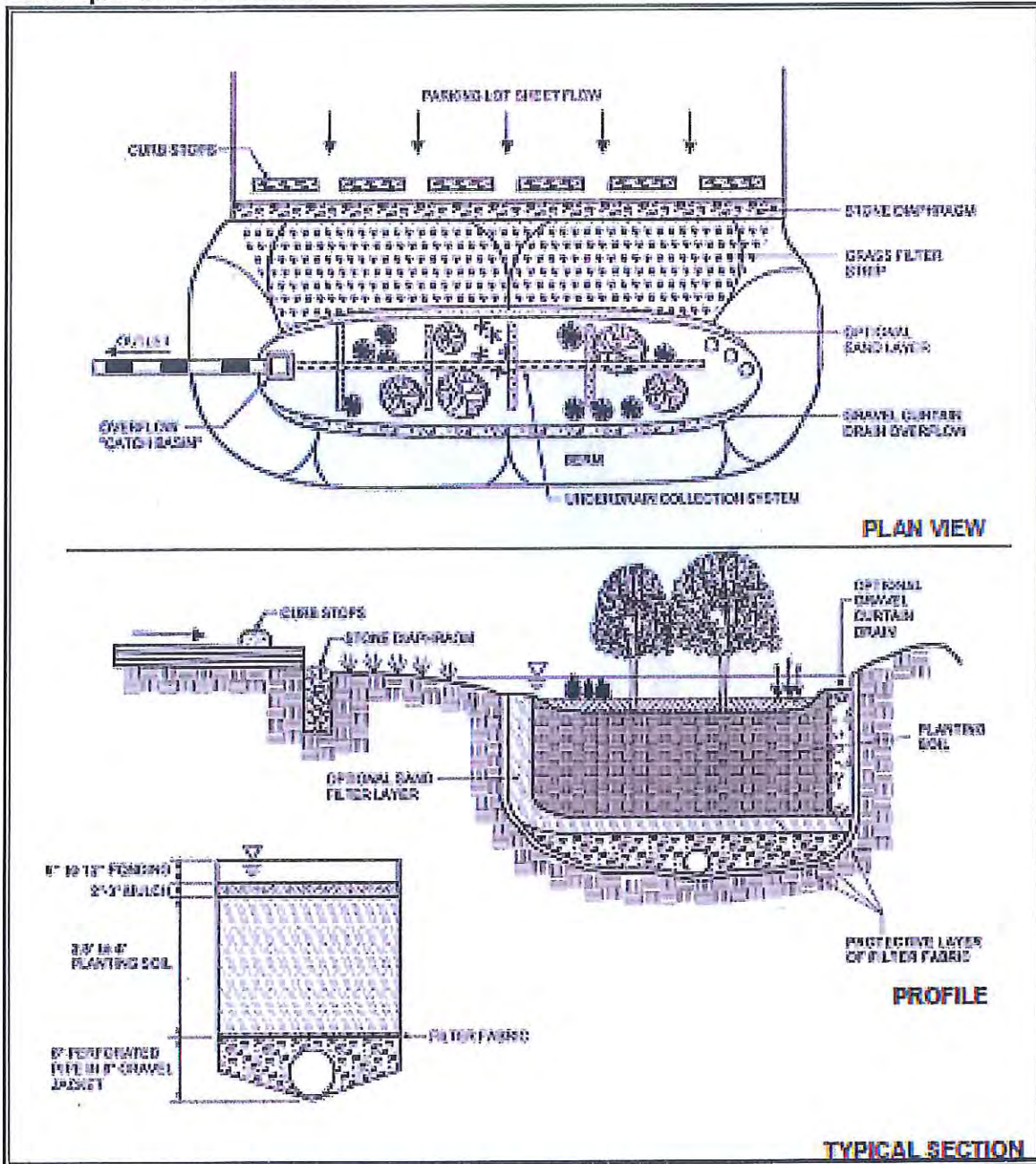
(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Patriot Federal Credit Union, Longmeadow Road, Hagerstown



# Example of Bioretention



2000 Maryland Stormwater Design Manual Volumes I & II

## DryPonds - Urban

### *Dry Detention Pond*

Dry Detention Ponds are depressions or basins created by excavation or berm construction that temporarily store runoff and release it slowly via surface flow or groundwater infiltration following storms. Hydrodynamic Structures are devices designed to improve quality of stormwater using features such as swirl concentrators, grit chambers, oil barriers, baffles, micropools, and absorbent pads that are designed to remove sediments, nutrients, metals, organic chemicals, or oil and grease from urban runoff.

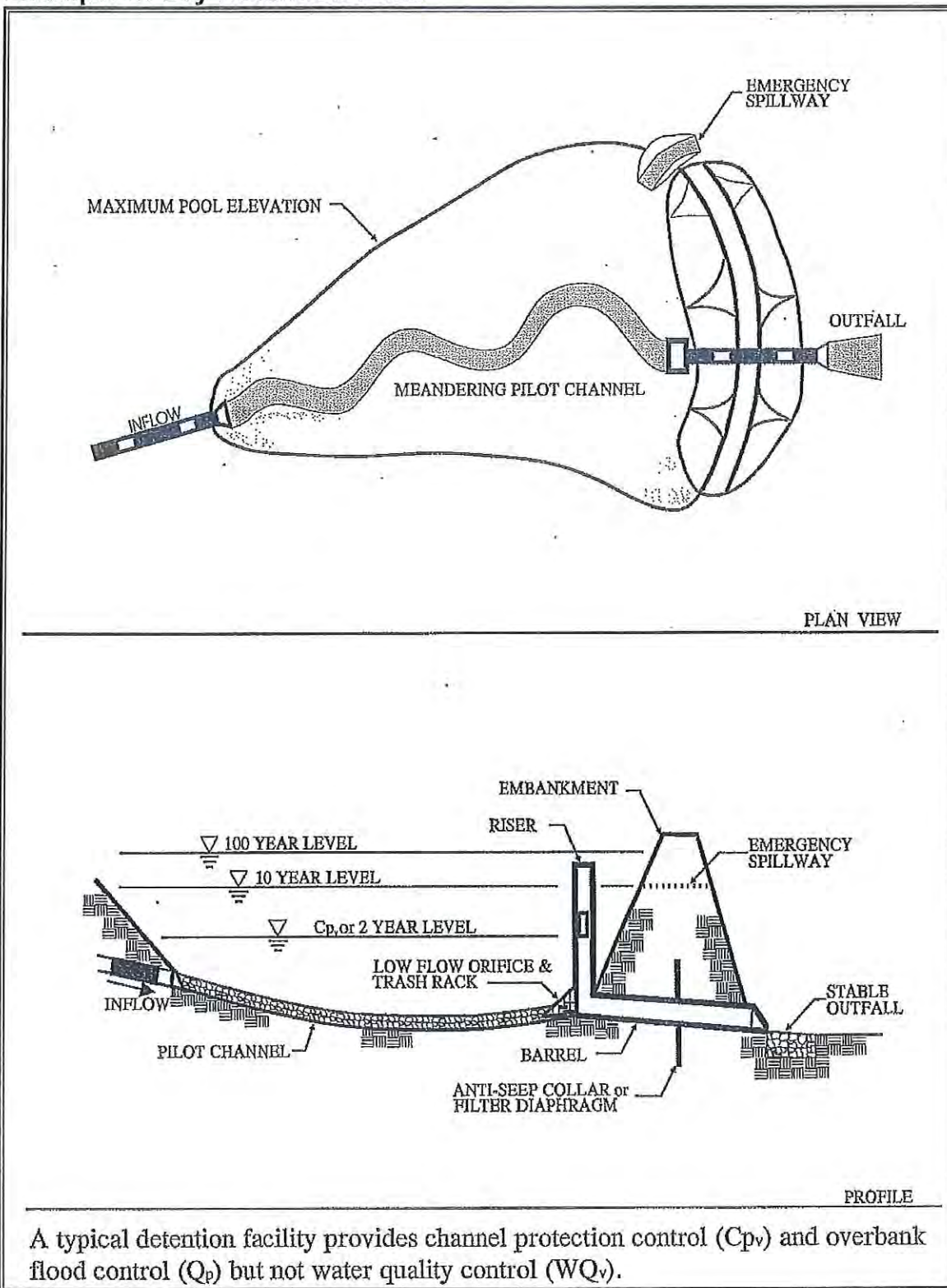
(See Chapter 2 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Hopewell Sheet Metal, Williamsport



## Example of Dry Detention Pond



2000 Maryland Stormwater Design Manual Volumes I & II

## ExtDryPonds- Urban

### *Dry Extended Detention Pond*

Dry extended detention (ED) basins are depressions created by excavation or berm construction that temporarily store runoff and release it slowly via surface flow or groundwater infiltration following storms. Dry ED basins are designed to dry out between storm events, in contrast with wet ponds, which contain standing water permanently. As such, they are similar in construction and function to dry detention basins, except that the duration of detention of stormwater is designed to be longer, theoretically improving treatment effectiveness.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Meadows Green Pond 5, Boonsboro



## ForestCon - Urban

### *Forest Conservation*

This BMP in Maryland is the implementation of the Maryland Forest Conservation Act that requires developers to maintain at least 20% of a development site in trees (forest condition). This is actually a preventative type of BMP which alters the rate of urban conversion. The acreage is calculated from the annual urban increase (population based). The 20% is specific to the Maryland Act and could be different for each jurisdiction or various locations within a jurisdiction.



Whitetail Subdivision, Smithsburg



## Filter - Urban

### *Urban Filtering Practices*

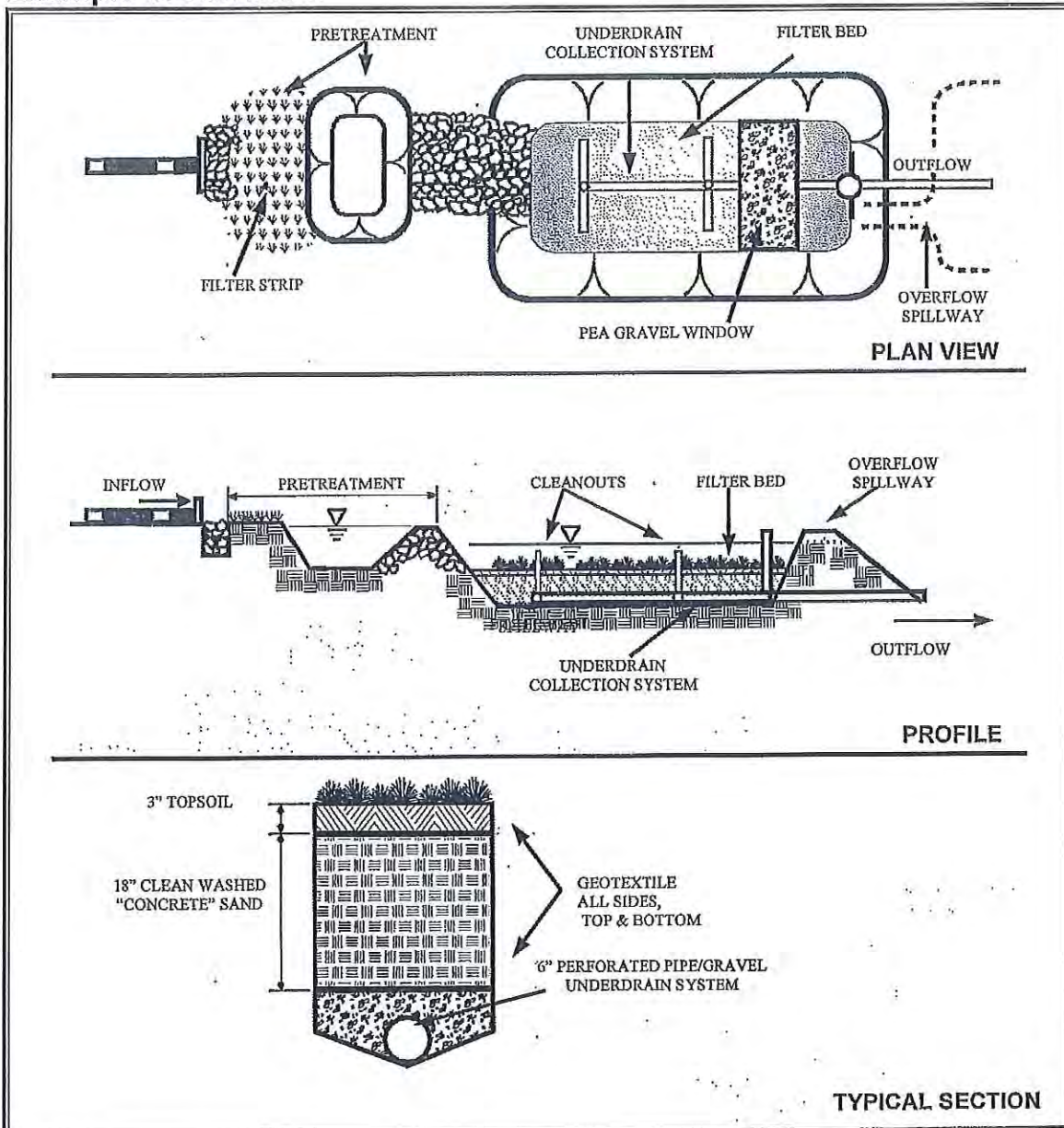
Practices that capture and temporarily store runoff and pass it through a filter bed of either sand or an organic media. There are various sand filter designs, such as above ground, below ground, perimeter, etc. An organic media filter uses another medium besides sand to enhance pollutant removal for many compounds due to the increased cation exchange capacity achieved by increasing the organic matter. These systems require yearly inspection and maintenance to receive pollutant reduction credit.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Sweetwater Crossing, Gapland

## Example of Sandfilter



The pocket sand filter is applied to small sites where sediment loads are expected to be moderate to low. The pea gravel windows allow runoff into the filter if the surface becomes clogged.



## Infiltration – Urban

### ***Urban Infiltration Practices- No Sand/Veg No Underdrain***

A depression to form an infiltration basin where sediment is trapped and water infiltrates the soil. No under drains are associated with infiltration basins and trenches, because by definition these systems provide complete infiltration.



Homewood Retirement Center, Williamsport



## InfiltrationWithSV -Urban

### *Urban Infiltration Practices – With Sand/Veg No Underdrain*

A depression to form an infiltration basin where sediment is trapped and water infiltrates the soil. No under drains are associated with infiltration basins and trenches, because by definition these systems provide complete infiltration. Design specifications require infiltration basins and trenches to be built in good soil, they are not constructed on poor soils, such as C and D soil types. Engineers are required to test the soil before approved to build is issued. To receive credit over the longer term, jurisdictions must conduct yearly inspections to determine if the basin or trench is still infiltrating runoff.



Homewood Retirement Center, Williamsport

## UrbanNutMan -Urban

### *Urban Nutrient Management Practices*

Urban nutrient management involves the reduction of fertilizer to grass lawns and other urban areas. The implementation of urban nutrient management is based on public education and awareness, targeting suburban residences and businesses, with emphasis on reducing excessive fertilizer use. This does not account for the recent laws passed to remove P from fertilizer.



Scotts Fertilizer

Proper lawn care is essential to great *water quality*. If excessive fertilizer ends up in the street and storm sewers, it can create water quality problems.

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## WetPondWetland - Urban

### *Wet Pond*

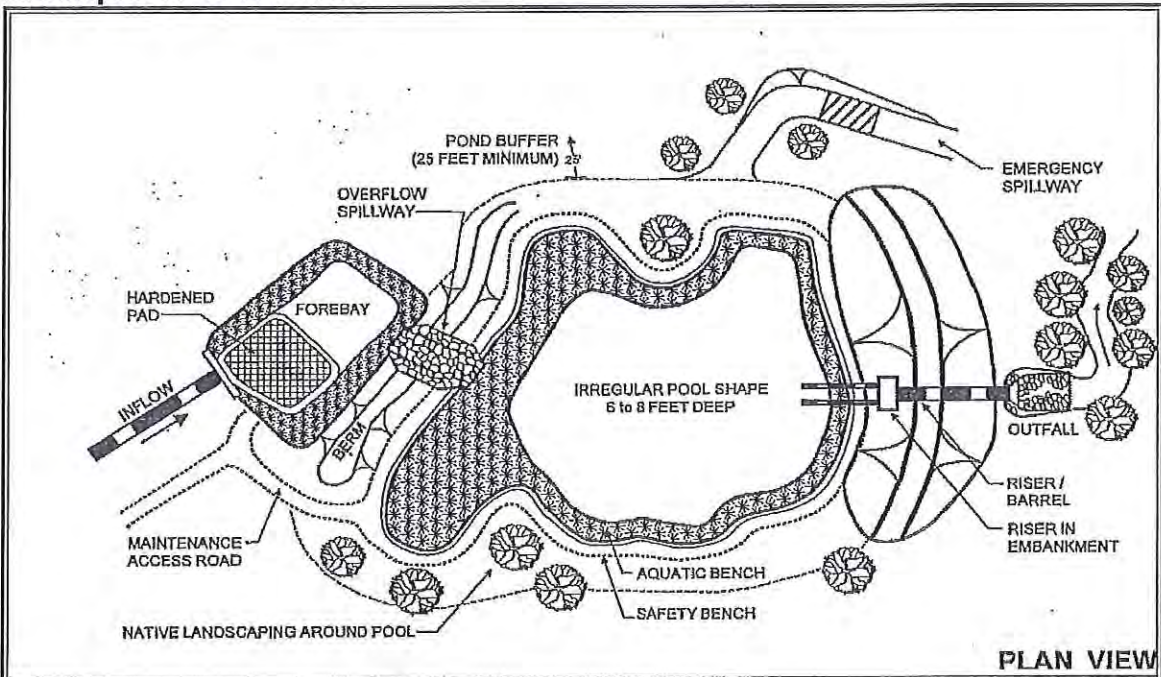
A water impoundment structure that intercepts stormwater runoff then releases it to an open water system at a specified flow rate. These structures retain a permanent pool and usually have retention times sufficient to allow settlement of some portion of the intercepted sediments and attached nutrients/toxics. Until recently, these practices were designed specifically to meet water quantity, not water quality objectives. There is little or no vegetation living within the pooled area nor are outfalls directed through vegetated areas prior to open water release. Nitrogen reduction is minimal.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)

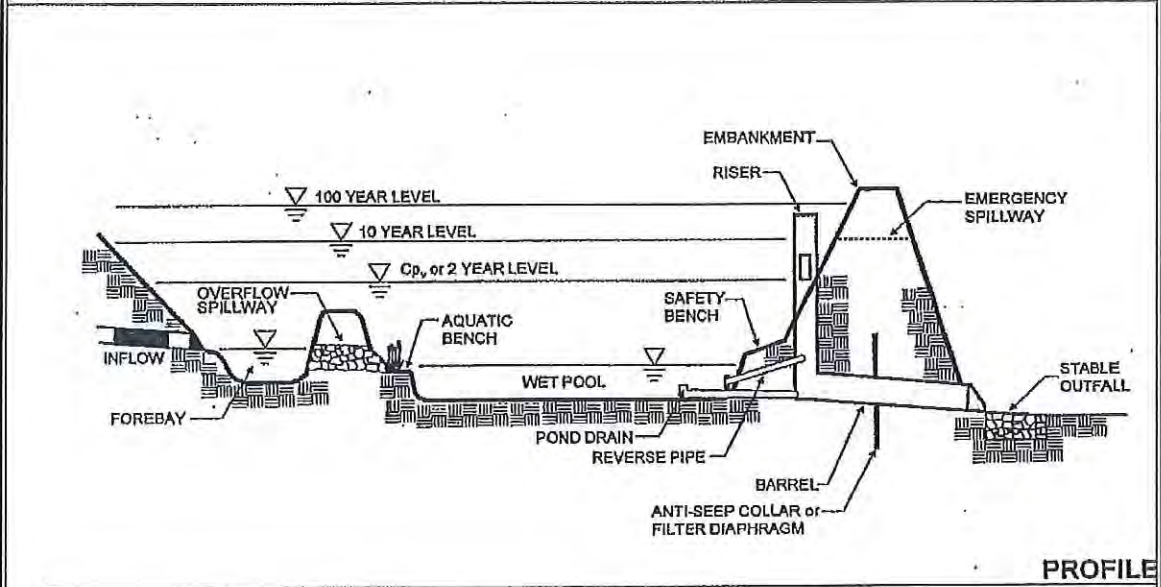


South Point Commercial Pond, Funkstown

# Example of Wet Pond



PLAN VIEW



PROFILE

A wet pond provides all of water quality volume storage in a permanent pool.



## WetPondWetland - Urban

### ***Wetland***

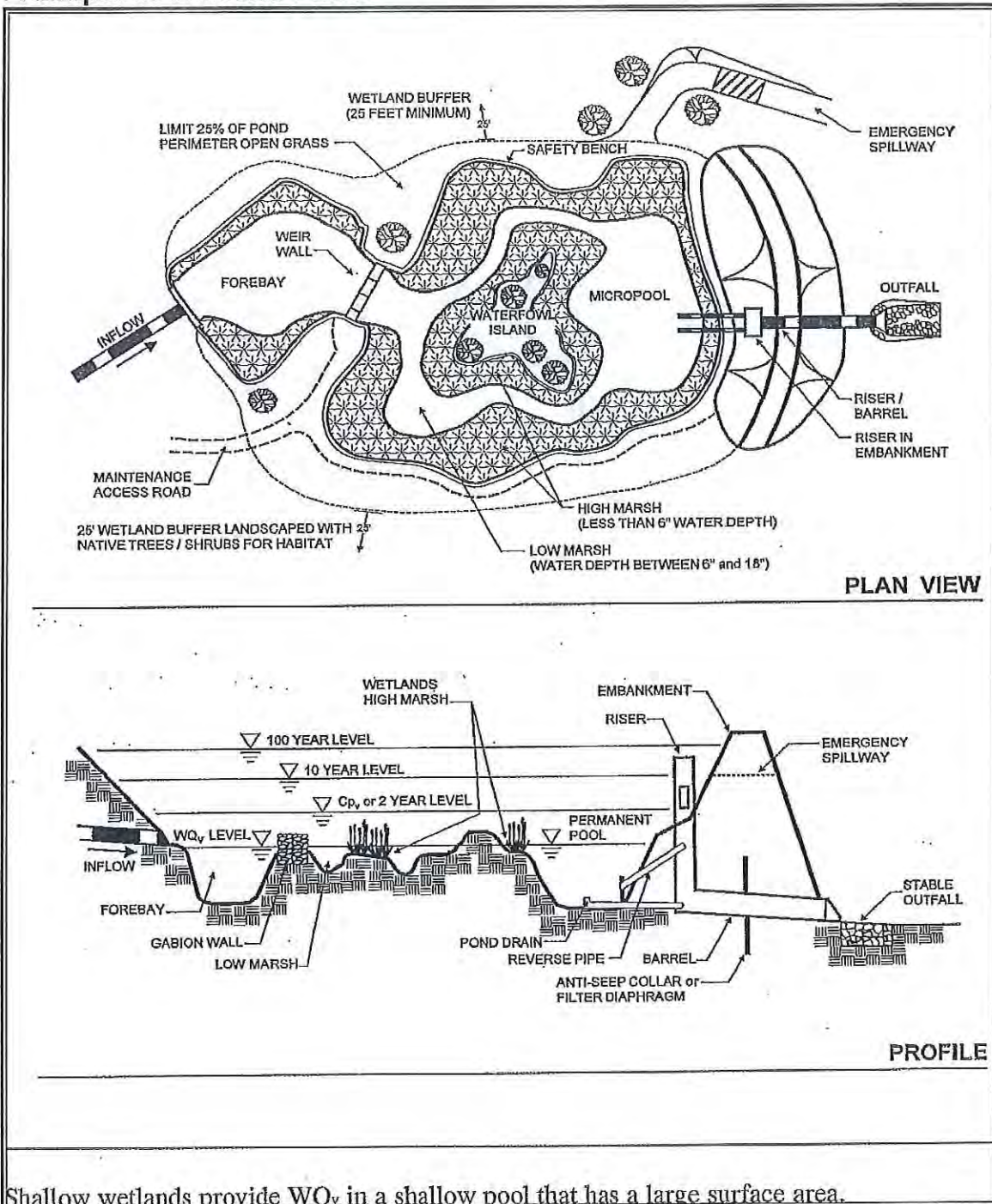
A water impoundment structure that intercepts stormwater runoff then releases it to an open water system at a specified flow rate. These structures retain a permanent pool and usually have retention times sufficient to allow settlement of some portion of the intercepted sediments and attached nutrients/toxics. Until recently, these practices were designed specifically to meet water quantity, not water quality objectives. There is little or no vegetation living within the pooled area nor are outfalls directed through vegetated areas prior to open water release. Nitrogen reduction is minimal.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Boonsboro Middle School Wetland Pond

# Example of Wetland Pond



Shallow wetlands provide  $WQ_v$  in a shallow pool that has a large surface area.

2000 Maryland Stormwater Design Manual Volumes I & II



## BioSwale - Urban

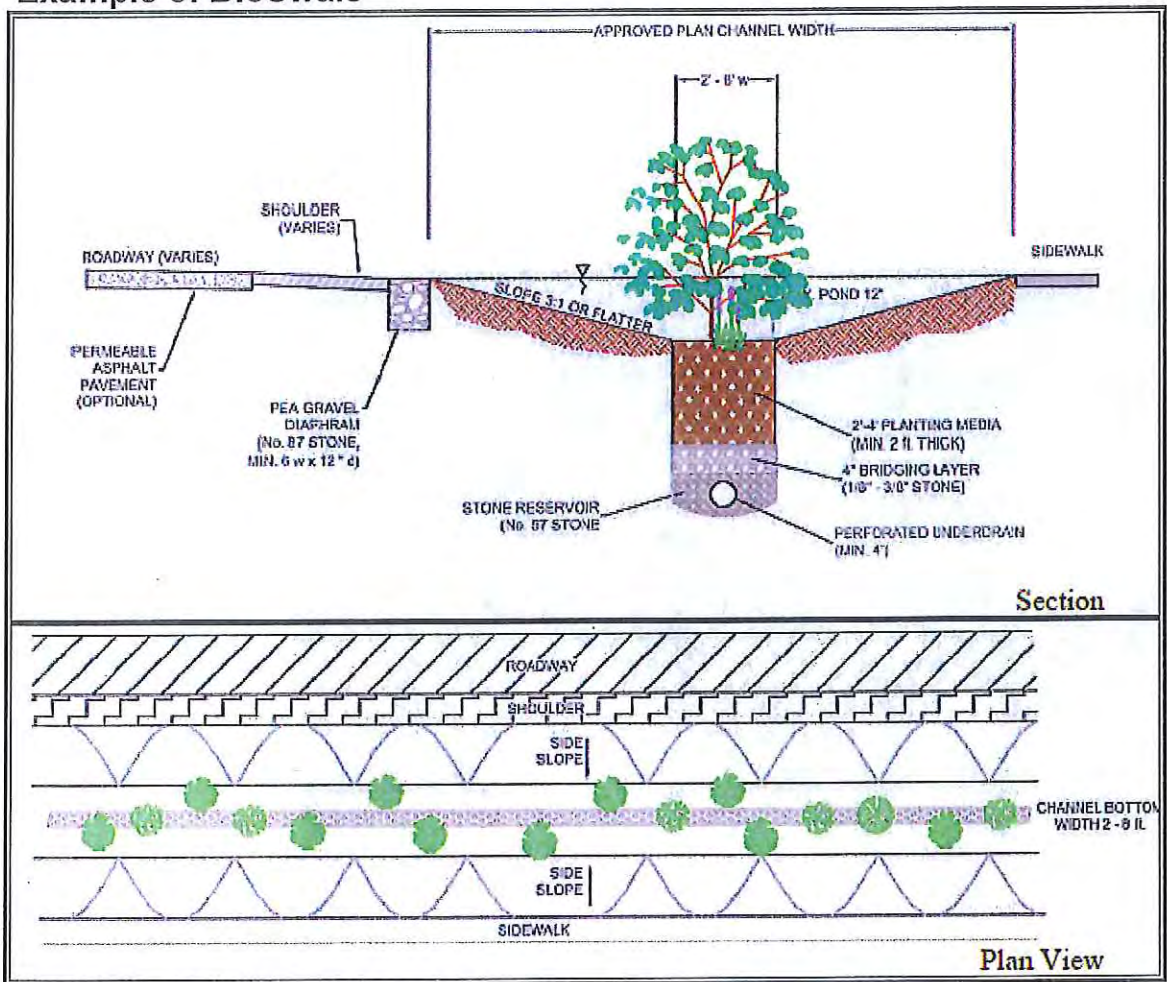
### *BioSwale*

With a bioswale, the load is reduced because, unlike other open channel designs, there is now treatment through the soil. A bioswale is designed to function as a bioretention area. (See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Patriot Federal Credit Union, Longmeadow Road, Hagerstown

# Example of BioSwale



2000 Maryland Stormwater Design Manual Volumes I & II



# ImpSurRed - Urban

## *Impervious Urban Surface Reduction*

Reducing impervious surfaces to promote infiltration and percolation of runoff storm water.



149 West Franklin Street (Before)



149 West Franklin Street (After)

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## PermPaveNoSV – Urban

### ***Permeable Pavement –No Sand/Veg With Underdrain with AB Soils***

Pavement or pavers that reduce runoff volume and treat water quality through both infiltration and filtration mechanisms. Water filters through open voids in the pavement surface to a washed gravel subsurface storage reservoir, where it is then slowly infiltrated into the underlying soils or exits via an underdrain.

(See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)

## PermPaveWSV – Urban

### ***Permeable Pavement –With Sand/Veg With Underdrain with AB Soils***

Pavement or pavers that reduce runoff volume and treat water quality through both infiltration and filtration mechanisms. Water filters through open voids in the pavement surface to a washed gravel subsurface storage reservoir, where it is then slowly infiltrated into the underlying soils or exits via an underdrain. When sand and vegetation are present, high reduction efficiencies can be achieved.

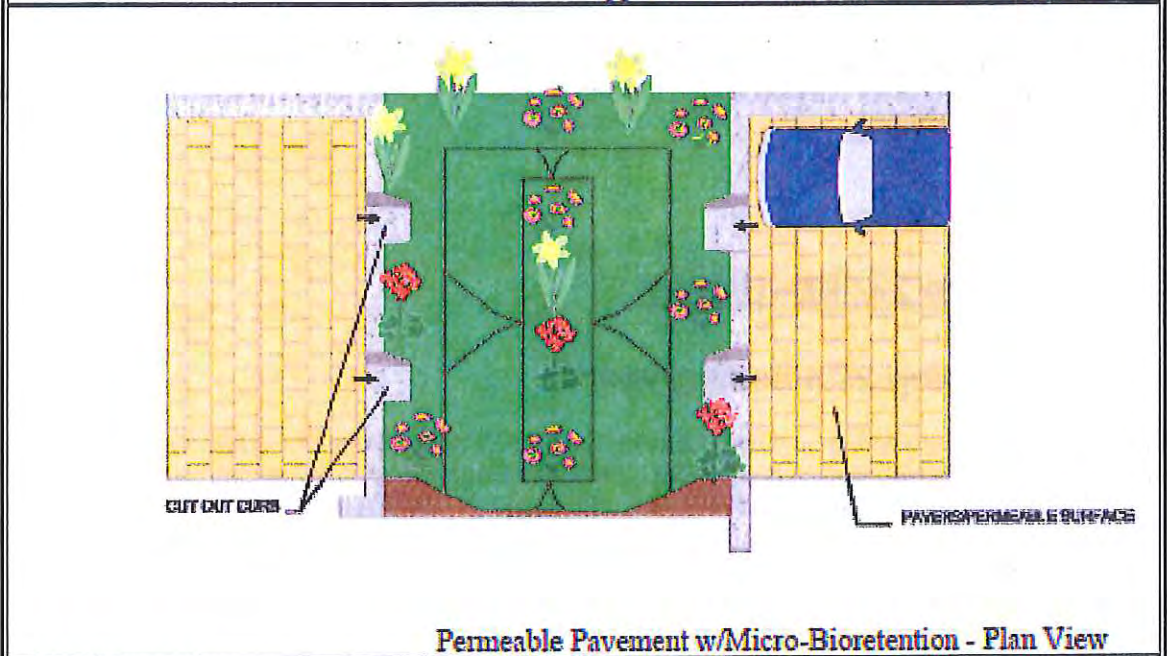
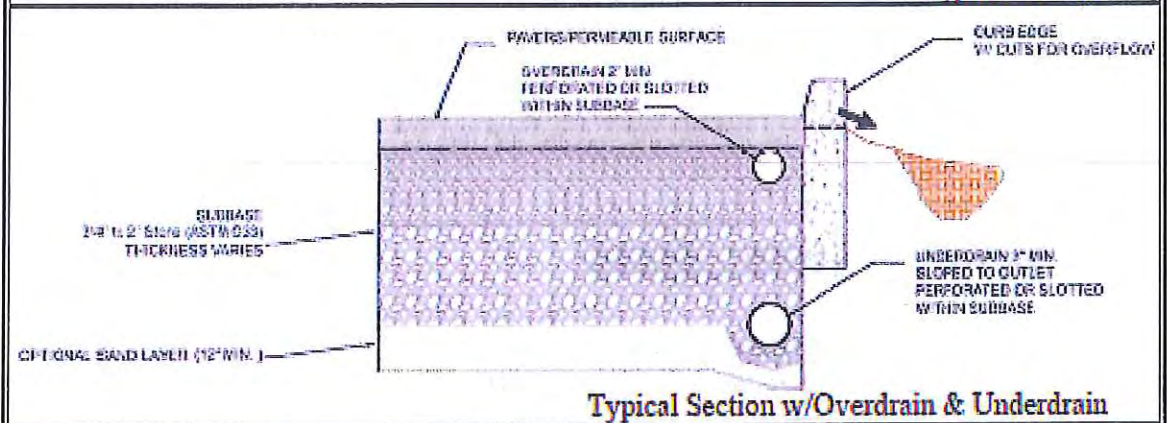
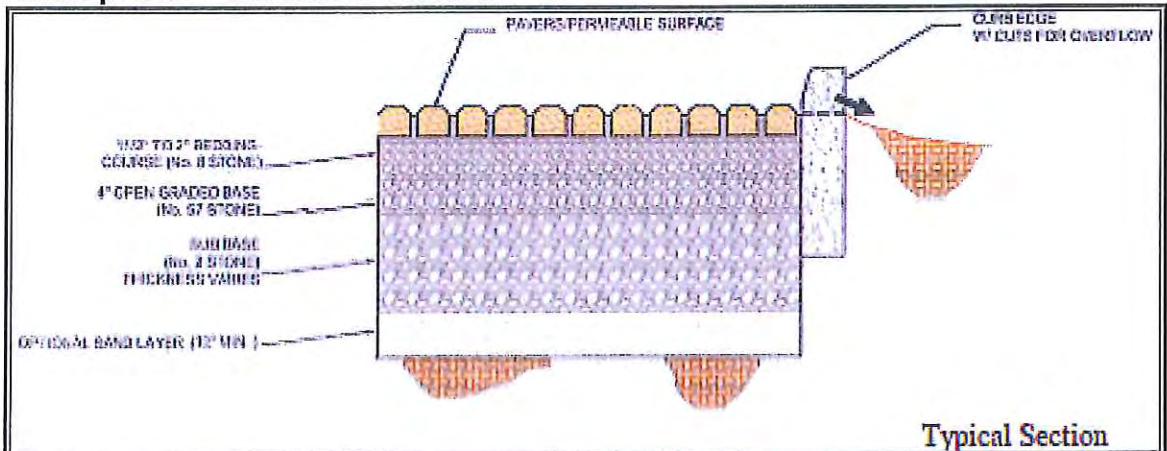
(See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Centra Bank Dual Highway, Hagerstown



**Example of Permeable Pavers**



2000 Maryland Stormwater Design Manual Volumes I & II

## **StreetSweep Lbs - Urban**

### ***Street Sweeping Pounds***

Street sweeping measured by the weight of street residue collected. Street sweeping and storm drain cleanout practices rank among the oldest practices used by communities for a variety of purposes to provide a clean and healthy environment, and more recently to comply with their National Pollutant Discharge Elimination System stormwater permits. The ability for these practices to achieve pollutant reductions is uncertain given current research findings. Only a few street sweeping studies provide sufficient data to statistically determine the impact of street sweeping and storm drain cleanouts on water quality and to quantify their improvements. The ability to quantify pollutant loading reductions from street sweeping is challenging given the range and variability of factors that impact its performance, such as the street sweeping technology, frequency and conditions of operation in addition to catchment characteristics. Fewer studies are available to evaluate the pollutant reduction capabilities due to storm drain inlet or catch basin cleanouts.

## **StreetSweep 25 acres –Urban**

### ***Street Sweeping 25 times a year-acres*** ***(Formerly Called Street Sweeping Mechanical Monthly)***

Street sweeping conducted on a twice a monthly basis. The regularity of the street sweeping reduces nitrogen, phosphorus, and sediment whereas less regular street sweeping reduces only sediment. The same street must be swept 25 times a year. The acres submitted are for the area of streets that are swept.

## **StreetSweep 25 lbs–Urban**

### ***Street Sweeping 25 times a year-lbs***

Street sweeping conducted on a twice a monthly basis. The regularity of the street sweeping reduces nitrogen, phosphorus, and sediment whereas less regular street sweeping reduces only sediment. The same street must be swept 25 times a year. The lbs submitted are for the lbs material picked up by the sweeper. The lbs of material are the lbs of TSS removed. The TN reduction is .00175 of the TSS. The TP reduction is .0007 of the TSS.



**Example of Street Sweeping**



Courtesy of City of Hagerstown, MD



## UrbStrmRest –Urban

### *Urban Forest Buffers*

An area of trees at least 35 feet wide on one side of a stream, usually accompanied by trees, shrubs and other vegetation that is adjacent to a body of water. The riparian area is managed to maintain the integrity of stream channels and shorelines, to reduce the impacts of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals. This BMP converts urban land to forest land and provides a nitrogen, phosphorus and sediment reduction benefit to urban land of one times the amount of land converted.

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## UrbStrmRest -Urban

### ***Urban Stream Restoration or Regenerative Stormwater Conveyance***

Stream restoration in urban areas is used to restore the urban stream ecosystem by restoring the natural hydrology and landscape of a stream, help improve habitat and water quality conditions in degraded streams. The reduction is 0.02 lb nitrogen per foot, 0.0025 phosphorus per foot, and 2 lbs sediment per foot.



Stream Bank Restoration (Before) Lehmans Mill Road  
Washington County Engineering & Construction



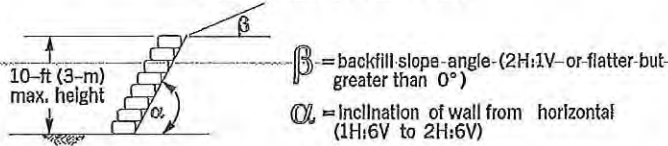
Stream Bank Restoration (After) Lehmans Mill Road  
Washington County Engineering & Construction



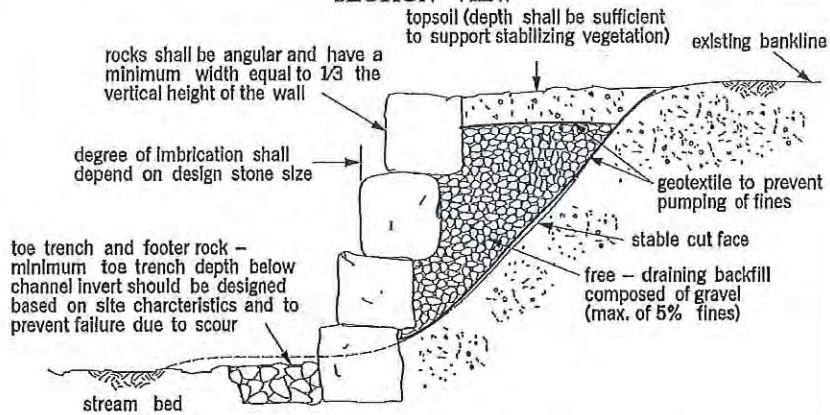
# Example of Stream Bank Restoration Method

## Maryland's Guidelines To Waterway Construction DETAIL 2.2: IMBRICATED RIPRAP

### DEFINITION SKETCH

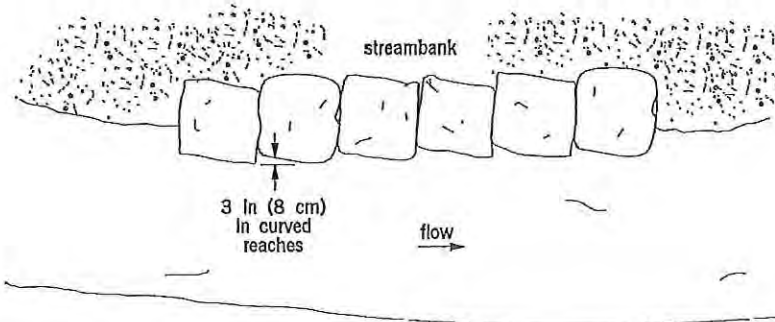


### SECTION VIEW



### PLAN VIEW

Construction Note: stone blocks shall be rotated into the bank during placement such that the upstream blocks overlap the downstream blocks by a minimum of 3 inches (8 cm)



SLOPE PROTECTION AND STABILIZATION TECHNIQUES

REVISED NOVEMBER 2000  
PAGE 2.2 - 3

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATER MANAGEMENT ADMINISTRATION



## UrbanTreePlant - Urban

### *Urban Tree Planting; Urban Tree Canopy*

Urban tree planting is planting trees on urban pervious areas at a rate that would produce a forest-like condition over time. The intent of the planting is to eventually convert the urban area to forest. If the trees are planted as part of the urban landscape, with no intention to convert the area to forest, then this would not count as urban tree planting.



Urban Tree Planting

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## VegOpChan -Urban

### *Vegetated Open Channel*

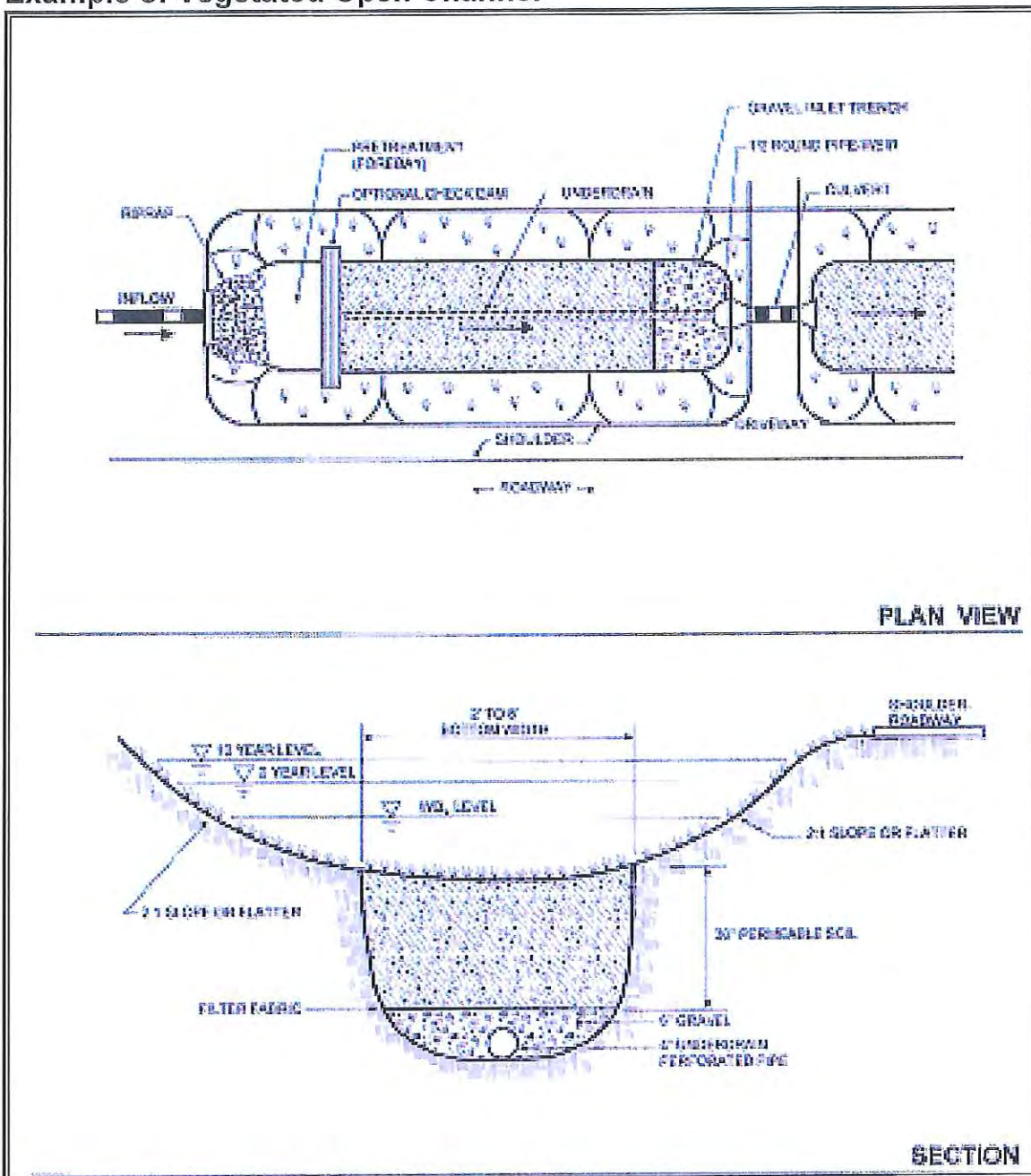
Open channels are practices that convey stormwater runoff and provide treatment as the water is conveyed, includes bioswales. Runoff passes through either vegetation in the channel, subsoil matrix, and/or is infiltrated into the underlying soils.  
(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Byers Meadows, Downsville



# Example of Vegetated Open Channel



2000 Maryland Stormwater Design Manual Volumes I & II



APPENDIX B - Target Loading Allocation Distribution Sheet

Target Loading Allocation Distribution Sheet

April 11, 2012

County MS4 Phase II		Total Nitrogen		2017 (2009 to 2017) Reduction Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025		2010 Progress		2017 Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025	
Sector	Total Acres	Percentage of County Phase II Area	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target
County Responsibility	19,917.40	89.9%	231,674.20	213,929.08	17,745.12	15,947.72	181,638.48	10,631.82	29,575.54	7,289.40	6,319.56	5,679.45	969.84	5,673.00	646.56	1,616.40	1,452.88
Funkstown Responsibility	225.00	1.0%	2,352.05	2,271.90	80.15	180.16	2,051.79	120.10	300.26	74.01	64.16	57.59	9.85	5,098.38	581.07	6.56	16.41
Williamsport Responsibility	646.00	2.9%	6,753.01	6,235.76	517.25	5,880.93	344.83	882.08	212.48	184.21	28.27	165.36	18.85	47.74	19.60	47.12	
Keedysville Responsibility	186.50	0.8%	1,949.59	1,800.26	149.33	149.33	99.55	208.88	61.34	53.18	8.16	47.74	5.44	187.50	21.37	53.42	
Boonsboro Responsibility	732.50	3.3%	7,657.24	7,070.74	586.51	6,679.73	391.01	977.54	240.93	208.87	32.05	187.50	14.17	82.89	9.45	23.62	
Hancock Responsibility	323.80	1.5%	3,384.87	3,125.60	259.26	2,952.76	172.84	432.11	106.50	92.33	14.17	82.89	9.45	13.67	1.56	3.89	
Clear Spring Responsibility	53.40	0.2%	558.22	515.46	42.76	486.96	28.50	71.26	17.56	15.23	2.34	13.67	1.56	1.56	0.00	0.00	
Sharpsburg Responsibility	77.60	0.4%	811.20	749.06	62.13	707.64	41.42	103.55	25.52	22.13	3.40	19.86	2.26	5.66	0.00	0.00	

Non-regulated Urban		Total Nitrogen		2017 (2009 to 2017) Reduction Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025		2010 Progress		2017 Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025		
Sector	Total Acres	Percentage of Nonregulated Urban Area	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	
Nonregulated	11,375.70	72.4%	115,260.0	105,763.20	9,496.8	99,432.0	6,331.2	15,828.0	14,451.8	11,451.8	2,459.1	2,932.12	2,121.4	397.7	2,621.0	311.1	777.8	
County Responsibility	8,230.50	0.0%	83,392.4	76,521.4	6,871.1	71,940.6	4,580.7	11,451.8	2,459.1	2,121.4	397.7	2,459.1	2,121.4	397.7	1,896.3	1,896.3	225.1	562.8
Funkstown Responsibility	-	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Williamsport Responsibility	-	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Keedysville Responsibility	372.50	3.3%	3,774.2	3,469.2	311.0	3,255.9	207.3	518.3	111.3	96.0	15.3	85.8	10.2	287.4	34.1	85.3		
Boonsboro Responsibility	1,247.50	11.0%	12,659.8	11,598.4	1,041.5	10,904.1	694.3	1,735.6	372.7	321.5	51.2	287.4	34.1	333.0	39.5	99.8		
Hancock Responsibility	1,445.20	12.7%	14,642.9	13,436.4	1,206.5	12,632.1	804.3	2,010.8	431.8	372.5	59.3	333.0	39.5	4.1	0.5	1.2		
Clear Spring Responsibility	17.60	0.2%	178.3	163.6	14.7	153.8	9.8	24.5	5.3	4.5	0.7	4.1	0.5	0.5	0.0	0.0		
Sharpsburg Responsibility	62.40	0.5%	632.2	580.2	52.1	545.4	34.7	86.8	18.6	16.1	2.6	14.4	1.7	4.3	0.0	0.0		

Municipal MS4 Phase II		Total Phosphorus		2017 (2009 to 2017) Reduction Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025		2010 Progress		2017 Target		2025 (2017 to 2025) Reduction Target		Total Reduction from 2009 to 2025	
Sector	Total Acres	Percentage of Municipal MS4 Area	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target	2010 Progress	2017 Target	2025 Target
Municipal MS4	8,438.80	92.3%	100,214.3	92,256.92	7,957.4	86,952.0	5,304.9	13,262.3	3,009.4	2,622.76	386.6	2,355.0	257.8	644.4	718.26	59.5	
Hagerstown Responsibility	7,792.80	7.7%	106,435.7	97,666.9	8,769.8	91,820.4	5,846.5	14,616.3	3,138.6	2,707.7	431.0	2,420.4	287.3	718.26	59.5		
Smithsburg Responsibility	646.00	7.7%	8,823.3	8,096.3	727.0	7,611.6	484.7	1,211.7	260.2	224.5	35.7	200.6	23.8	59.5			

APPENDIX D -  
OVERALL RECOMMENDATION ON THE  
WIP PHASE II DOCUMENT WITH  
OVERALL COST ESTIMATE FOR  
WASHINGTON COUNTY



## **Overall Recommendation on the WIP Phase II Document:**

The State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction. The WIP Committee based on the information in this report and as presented for the septic sector recommends that the elected bodies consider the following verbiage in response to the request from MDE. Please note that the Board of County Commissioners of Washington County, Maryland has been used in this document as an example and can be replaced with the appropriate elected body as needed.

### Committee Recommendation for elected bodies:

The Board of County Commissioners of Washington County, Maryland (the "Board") acknowledges that the Chesapeake Bay (the "Bay") has been identified as a water body which is impaired for nutrients and sediments. The Board further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State of Maryland and has requested that each of these geographical areas prepare a Watershed Implementation Plan developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater and septic sectors. The Board has addressed the major wastewater treatment plant upgrades required to meet the portion of the wastewater sector under their jurisdiction by approving these projects in the Washington County Capital Improvement Project plan. The WIP Committee has provided a report to the Board on the urban and septic sectors which documents the cost for meeting the target load reductions to exceed \$1 billion dollars. These costs were prepared utilizing historically known values for upgrades in the septic sector and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King for MDE report provided by MDE for use in preparing costs for the storm water sector. Therefore, in response to the WIP Committee reports, the Board is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by MDE under its jurisdiction and which would directly impact the citizens of Washington County. Adoption of such a plan by the Board would be fiscally irresponsible and financially unfeasible. However, the Board does acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the then elected Board. Additionally, Washington County staff should pursue grant funding as available to support projects that work towards the progress of meeting the target loads established by MDE. Therefore, the



Board is instructing County Staff and the WIP Committee to recommend a WIP Phase II report for submission to MDE which includes a plan encompassing the following:

- approved operating and CIP budget lines which work toward achieving the target loads with the caveat that full implementation is contingent upon continued funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Board and grant sources;
- County Staff to continue investigation into new and alternative methods of working towards the target load reductions
- pursue potential funding sources of implementation projects.
- development of a tracking and reporting system for BMP implementation in Washington County
- work on the offset policy for future development in Washington County
- education of the citizens on the WIP and what they can do to reduce the nutrient and sediment load in Washington County
- work with MDE staff to refine the loading reductions assigned to Washington County to reflect the true county conditions and not from a broader Bay model perspective
- general administrative functions as required to work on the WIP and do not commit Washington County to any work which is not already funded.

Washington County  
Watershed Implementation Plan Phase II  
Total Estimated Cost to Achieve  
2025 Target Allocation

Jurisdiction	Sector	Estimated Cost	Subtotal
Washington County	Urban	\$ 514,819,051.00	
	Septic	\$ 230,204,800.00	
	Wastewater	\$ 49,322,610.00	
			\$ 794,346,461.00
City of Hagerstown	Urban	\$ 210,087,831.00	
	Wastewater	\$ 10,206,107.00	
			\$ 220,293,938.00
Town of Smithsburg	Urban	\$ 16,233,028.00	
Town of Boonsboro	Urban	\$ 36,545,305.00	
Town of Clear Spring	Urban	\$ 1,297,653.00	
Town of Funkstown	Urban	\$ 4,082,626.00	
Town of Keedysville	Urban	\$ 10,329,110.00	
Town of Hancock	Urban	\$ 32,814,956.00	
Town of Sharpsburg	Urban	\$ 2,570,522.00	
Town of Williamsport	Urban	\$ 11,721,072.00	
		\$ 1,130,234,671.00	

Total Estimated Cost by Sector

Stormwater		\$ 840,501,154.00
Septic		\$ 230,204,800.00
Wastewater		\$ 59,528,717.00

11-May-12

APPENDIX E -  
POSITION DOCUMENTS  
FROM  
ELECTED BODIES



**BOARD OF COUNTY COMMISSIONERS OF  
WASHINGTON COUNTY  
Hagerstown, Maryland**

May 22, 2012

**NATIONAL PUBLIC WORKS WEEK**

The County Commissioners met at 8:00 a.m. at the Hagerstown Regional Airport Fire Station, 18434 Showalter Road, Hagerstown, to present a proclamation to Public Works employees to observe Public Works Week during the week of May 20-26.

President Terry L. Baker called the regular meeting of the Board of County Commissioners of Washington County, Maryland to order at 10:05 a.m. in the County Administration Building located at 100 West Washington Street, Hagerstown, Maryland with the following members present: Vice President John F. Barr and Commissioners Ruth Anne Callaham, Jeffrey A. Cline, and William B. McKinley.

**INVOCATION AND PLEDGE OF ALLEGIANCE**

Commissioner Barr gave the Invocation followed by the Pledge of Allegiance to the Flag by the full assemblage.

**APPROVAL OF MINUTES –MAY 15, 2012**

Commissioner McKinley, seconded by Callaham, moved to approve the minutes of May 15, 2012 as presented. The motion passed unanimously.

**COMMISSIONERS REPORTS AND COMMENTS**

Commissioner Cline recognized Public Works employees and Emergency Medical Service providers for the services they perform in the community. He attended the "Celebrating Minds at Work" event at Salem Avenue Elementary School and a meeting of the Agricultural Land Preservation Advisory Board. Mr. Cline congratulated Jersey Mike's on its one-year anniversary and thanked them for supporting charity events in the community. He participated in the Economic Development Commission's small business outreach visits to Ridge Runner Publishing and Parkway Neurological Center. Commissioner Cline attended a Chamber of Commerce mixer, Change Awareness event at Star Community, the National Pike Wagon Train event, and Smithsburg Pride Days. He also test-drove a vehicle at Hagerstown Ford in support of South Hagerstown High School's band uniform fundraiser. Mr. Cline enjoyed the "Rock 'n Roll Never Forgets" dance at North Hagerstown High School sponsored by the County's Recreation Department.

Commissioner Callaham attended Salem Avenue School's "We the People" celebration and the visits to local businesses Ridge Runner Publishing and Parkway Neurological Center. She enjoyed the Smithsburg Pride Days parade and the Ferry Hill Place dedication. Ms. Callaham welcomed a group of veterans of various wars to the County who were traveling from Wisconsin to Illinois to visit memorials. She attended the recent Maryland Municipal League (MML) meeting where Julie Pippel, Director of Environmental Management, discussed the Watershed Implementation Plan. Commissioner Callaham recognized the jobs well done by Public Works Department employees during Public Works Week.



May 22, 2012

Page 6

Commissioner Callahan moved to extend the Residential Stimulus Program by six months and allow six additional houses per developer. Commissioner McKinley recommended a twelve-month extension period and an additional twelve houses per developer. Ms. Callahan restated her motion to extend the Residential Stimulus Program by twelve months, through June 30, 2013, and allow twelve additional houses per developer, or thirty total houses per developer. Commissioner McKinley seconded the motion. The motion passed unanimously.

#### **ESTABLISHMENT OF REVOLVING LOAN FUND**

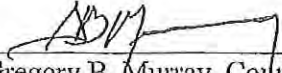
Jef Bohn, Chair of the Economic Development Commission (EDC) Board's Resource Development Committee, and Guy Winterberg, Assistant Director of the Tri-County Council for Western Maryland (TCC), presented information regarding the establishment of a Washington County Revolving Loan Fund (RLF) to assist local businesses. Jef Bohn indicated that the EDC Board has approved the recommendation to collaborate with the TCC to establish a separate County RLF using TCC's existing revolving loan structure and program. He stated that \$1 million would be needed to establish the fund and provide administrative fees to TCC. Guy Winterberg advised of the process by which the RLF would be administered and the criteria for applying for loans. The Commissioners discussed the information presented and agreed that the RLF should not compete with local initiatives such as the Hagerstown Loan Fund. It was the consensus of the Commissioners to direct the Committee to hold meetings with experts in the industry, continue to foster a working relationship with TCC, and develop details of a Revolving Loan Fund to present at a future meeting of the Commissioners.

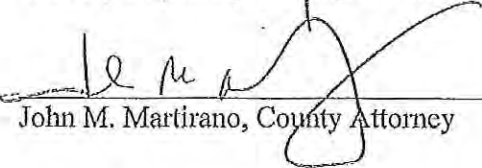
#### **WASHINGTON COUNTY WATERSHED IMPLEMENTATION PLAN**

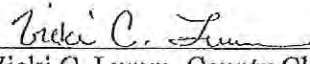
Julie Pippel, Director of Environmental Management, presented information on the process and development of the Watershed Implementation Plan (WIP) and introduced members of the County's WIP Committee in attendance. She stated that the WIP is a federally mandated plan due to a court ruling stating that counties with waters draining into the Chesapeake Bay must comply with the Federal Clean Water Act (CWA). Ms. Pippel stated that the CWA requires that any water body that does not meet the water quality standards established by regulations must have a Total Maximum Daily Load (TMDL) prepared for each of the water quality standards that it exceeds. The Committee prepared a report based on the septic and stormwater sectors. A preliminary cost estimate to meet the target load reductions for those sectors exceeded \$1 billion. Ms. Pippel read the alternatives on how to proceed that were suggested by the Committee, which include stating that the Board of County Commissioners agree that the plan would be fiscally irresponsible and financially unfeasible; but County staff would pursue grant funding as available to support projects that work toward the progress of meeting the target loads established by the Maryland Department of the Environment (MDE). Ms. Pippel indicated that the Committee is recommending a WIP Phase II report for submission to MDE that includes a plan containing methods to meet the target as a whole. The Commissioners discussed the proposal.

May 22, 2012  
Page 10

Commission President Terry L. Baker opened the hearing for public testimony. Nine individuals spoke on issues concerning the budget. After all testimony was given, Commissioner Baker adjourned the hearing at 7:50 p.m.

  
\_\_\_\_\_  
Gregory B. Murray, County Administrator

  
\_\_\_\_\_  
John M. Martirano, County Attorney

  
\_\_\_\_\_  
Vicki C. Lumm, County Clerk



**REQUIRED MOTION**

**MAYOR & CITY COUNCIL  
HAGERSTOWN, MARYLAND**

**DATE:** June 19, 2012

**TOPIC:** Motion: Watershed Implementation Plan Report & Statement  
Charter Amendment \_\_\_\_\_  
Code Amendment \_\_\_\_\_  
Ordinance \_\_\_\_\_  
Resolution \_\_\_\_\_  
Other  X

**MOTION:** I hereby move to approve the submittal of Washington County's Phase II Watershed Implementation Plan to the Maryland Department of the Environment, along with the attached Position Statement. This statement, which expresses the Council's concern over the estimated cost of the required stormwater practices, only commits the City to expenditures that are already contemplated in the Capital Improvement Project budget, or to projects that are determined to be financially feasible on a yearly basis.

DATE OF INTRODUCTION: 6/19/2012

DATE OF PASSAGE: 6/19/2012

EFFECTIVE DATE: 6/19/2012

## WIP Phase II Position Statement

The City Council for the City of Hagerstown Maryland (the "Council"), acknowledges that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Chesapeake Bay, and is requiring each of the Chesapeake Bay states to prepare for approval a Watershed Implementation Plan (a "WIP") outlining how the State will meet the loading reductions identified by EPA.

The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State, and has requested that each of these geographical areas prepare a WIP developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater, and septic sectors. The Council has addressed the wastewater treatment plant upgrades required to meet the portion of the wastewater section under their jurisdiction by approving projects in the City of Hagerstown's Capital Improvement Plan budget.

The WIP Committee has provided a report to the Council on the urban and septic sectors which documents that the overall cost to meet the target load reductions will exceed \$1 billion. These costs were prepared utilizing historically known values for upgrades in the septic sector, and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King and provided by MDE for use in estimating costs in the urban stormwater sector.

In response to the WIP Committee's reports, the Council is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet MDE's target loads which would directly impact City citizens. Adoption of such a plan by the Council would be fiscally irresponsible and financially unfeasible. However, the Council does acknowledge that even though full implementation is unacceptable, progress at an acceptable, financially feasible level as determined by operating and capital improvement budgets on an annual basis should be considered by the then elected Council. Additionally, City staff should pursue grant funding as available to support projects that work toward meeting MDE's target loads.

Therefore, the Council recommends submission of a WIP Phase II report to MDE which encompasses the following:

- previously approved operating and CIP budget lines which work toward achieving the target loads, with the caveat that full implementation is contingent upon funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Council, grant sources, and other potential funding sources;
- continued investigation by City staff into new and alternative methods to meet target load reductions;
- education of citizens on the WIP and what they can do to reduce pollutant loads in the City;
- continued work with MDE staff to refine the loading reductions assigned to the City



# TOWN OF BOONSBORO

21 NORTH MAIN STREET, BOONSBORO, MD 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5690

July 10, 2012

Julie Pippel, Director  
Wash. Co. Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

RE: Town Of Boonsboro Watershed Implementation Plan Concurrence

Ms. Pippel,

The Mayor and Council of the Town of Boonsboro discussed the Washington County Watershed Implementation Plan (WIP) at their regular meeting on July 2, 2012. The Mayor and Council of Boonsboro took the following action:

The Mayor and Council of Boonsboro acknowledge the plan and feel that it is fiscally irresponsible and financially unfeasible for the Town of Boonsboro to commit to the loading reductions and implementation actions as presented in the plan; however agree to the concept of the plan overall and will continue efforts, based upon yearly budget review and availability of funds, to work towards reducing maximum daily loads.

If you need any additional information, please feel free to contact me at 301-432-5690.

Sincerely,

Megan Clark  
Town Planner/Zoning Administrator  
Town of Boonsboro





PAUL D. HOSE, JR.  
MAYOR

STEVEN L. BLICKENSTAFF  
VICE MAYOR

PHONE 301-842-2252  
FAX 301-842-2920

## TOWN OF CLEAR SPRING

P.O. BOX 104  
CLEAR SPRING, MARYLAND 21722-0104

COUNCIL  
MEGAN L. YEAKLE  
THEODORE R. HOVERMALE  
CAROL E. HOVERMALE

WILLIAM S. BARTON  
ATTORNEY

### To Whom It May Concern:

The Clear Spring Mayor and Council acknowledge that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council also acknowledges that the United States Environmental Protection Agency has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Town staff served on a Water Implementation Committee and developed a plan. Therefore, in response to the WIP Committee reports, the Clear Spring Mayor and Council are unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by Maryland Department of the Environment under their jurisdiction and which would directly impact the Citizens of Clear Spring. Adoption of such a plan by the Mayor and Council would be fiscally irresponsible and financially unfeasible. However, the Mayor and Council do acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the elected officials.

Sincerely,

Paul D. Hose, Jr.  
Mayor



**FUNKSTOWN MAYOR & COUNCIL**

P.O. Box 235 • 30 East Baltimore St.  
Funkstown, Maryland 21734

June 29, 2012

Ms. Julie Pippel, Director  
Washington County Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Dear Julie,

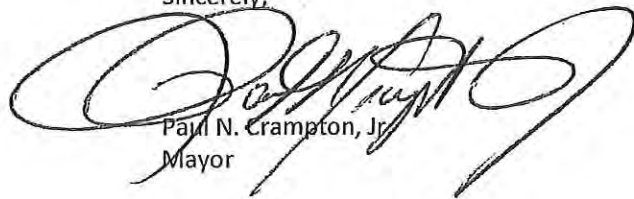
The Mayor and Council understand that the State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction.

After lengthy discussion between the Mayor and Council, and detailed clarification, we will pursue potential funding sources of implementation projects, and work with the County staff to continue investigation into new and alternative methods of working towards the target load reductions.

The Mayor and Council voted at the June 11, 2012 meeting that while they do not recognize a problem, there was a unanimous agreement to do what is possible based on the Town's budget.

If you have any questions, or I can be of further assistance please do not hesitate to contact me.

Sincerely,



Paul N. Crampton, Jr.  
Mayor

PNC

Cc: Robert Kuczynski, Town Attorney  
Funkstown Council



## *Town of Hancock*

*126 West High Street,  
Hancock, MD 21750  
301-678-5622*

July 2, 2012

Julie Pipple,  
Washington County WIP Coordinator  
16232 Elliot Parkway  
Williamsport, MD 21795

Dear Ms. Pipple

The Mayor and Council of Town of Hancock recognizes the need to address the issues raised in the Watershed Implementation Plan, however the associated costs make this impractical and fiscally irresponsible. The Town is committed to clean water and green operations, and will pursue grant funding when and where available to address targeted items, in an effort to reach goals set forth by the EPA.

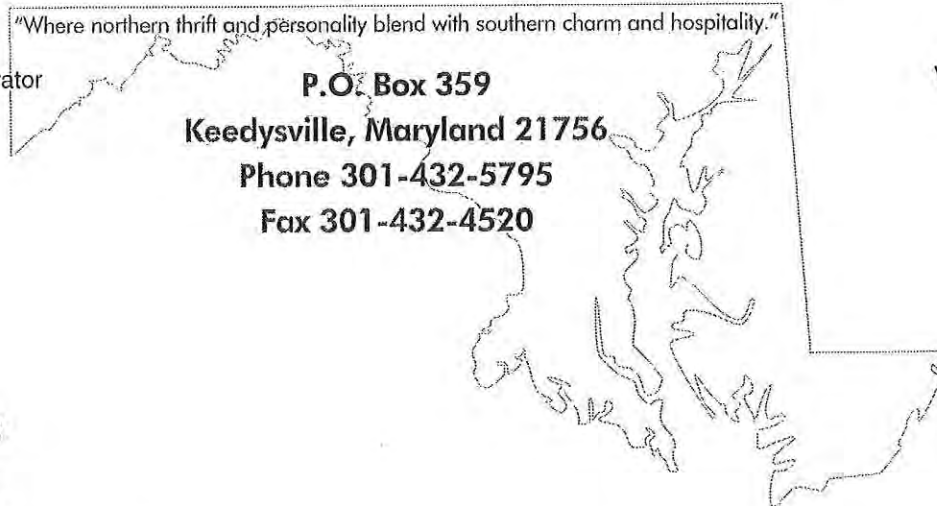
Sincerely,

David D. Smith  
Town Manager/ CFO



# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Terry Levey, Asst. Mayor  
David Bishop, Town Administrator



Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

June 6, 2012

Julie Pippel  
Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, MD 21795

Julie,

At the June 4, 2012 meeting of the Mayor & Council of Keedysville, the following statement from the Mayor & Council, regarding Phase II of the Watershed Implementation Plan for the Chesapeake Bay, was read into the minutes:

“The Mayor & Council of Keedysville acknowledge that the Chesapeake Bay has been deemed to be impaired with nitrogen, phosphorous and sediment. The Mayor & Council also acknowledge that the U.S. Environmental Protection Agency is requiring the states in the Bay watershed to prepare a plan to reduce the introduction of these elements into the Bay and that the Maryland Department of the Environment has tasked the individual counties within the state to prepare a plan to reduce the introduction of these elements by specific amounts. The town of Keedysville has been working with the Washington County Watershed Implementation Plan group formed to devise the county’s plan for these reductions. After receiving the current Total Maximum Daily Load (TMDL) estimates and the associated reductions deemed necessary by MDE, and further distributing the reductions to the stakeholders in the County, of which Keedysville is one, the best management practices (BMP’s) approved by EPA that are necessary to achieve these reductions were calculated. Applying costs obtained from “Cost of Stormwater Practices in Maryland Counties”, by Dr. King, to the BMP’s necessary to reach the reductions distributed to Keedysville resulted in a cost of over \$10 million. Therefore, the Mayor & Council find it fiscally irresponsible to commit to a full implementation of this plan. However, the Mayor & Council will continue to work with the Washington County WIP group to further refine the load reductions necessary and the best methods to obtain these reductions, will seek fiscally responsible BMP’s to reduce the loads from Keedysville, will seek to develop a tracking and recording system for BMP implementation and will seek grant funding from various sources to further implement BMP’s.”

# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Derry Levey, Asst. Mayor  
Richard Bishop, Town Administrator

"Where northern thrift and personality blend with southern charm and hospitality."

**P.O. Box 359**  
**Keedysville, Maryland 21756**  
**Phone 301-432-5795**  
**Fax 301-432-4520**

Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

The section for Keedysville's milestones for FY 2013 is being composed and will be sent to you shortly.

Sincerely,

Richard Bishop  
Administrator

**POOLE & KANE, P.A.**  
ATTORNEYS AT LAW  
29 WEST FRANKLIN STREET  
HAGERSTOWN, MARYLAND 21740  
TELEPHONE (301) 790-3600  
FAX (301) 714-0082

D. BRUCE POOLE  
BRIAN A. KANE  
JAMES W. STONE

DAVID K. POOLE  
(1926-2005)

TRAVIS W. POOLE  
ANDREW J. SERAFINI, JR.

June 21, 2012

**RECEIVED**

JUN 25 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

Julie Pippel, Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Re: Town of Sharpsburg WIP Phase II

Dear Julie:

The Mayor and Council of Sharpsburg will, on July 9, 2012, be considering a proposed resolution in response to the request from the Maryland Department of the Environment that the municipality review and adopt the WIP Phase II document. The proposed resolution takes a position along the lines of that recommended by the County's WIP Committee.

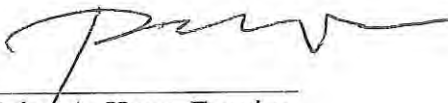
As and when a final resolution is adopted, I will forward same to you for your records.

If you have any questions, please don't hesitate to be in touch.

Very truly yours,

POOLE & KANE, P.A.

By: \_\_\_\_\_

  
Brian A. Kane, Esquire  
Town Attorney  
for Sharpsburg, Maryland

BAK/dlk

Cc: Mayor Hal Speilman





**MAYOR AND COUNCIL**  
P.O. Box 237  
SMITHSBURG, MD 21783  
(301) 824-7234  
FAX (301) 824-6219

**RECEIVED**

JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

June 27, 2012

Julie Pippel, Chairman  
Washington County WIP Team  
16232 Elliott Parkway  
Williamsport, MD 21795

Dear Ms. Pippel:

The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.

If you need any additional information concerning this matter, please do not hesitate to contact this office.

Sincerely,

Mildred L. Myers,  
Mayor

MLM/bm

Tuesday, July 3, 2012

The regular meeting of the Smithsburg Mayor and Council was held on Tuesday, July 3, 2012, with Mayor Myers and Councilmembers Abbott, Fritsch, Jernigan and Lushbaugh present. Councilmember Souders was absent.

The meeting was opened with the Pledge of Allegiance led by Betsy Martin.

Mayor Myers then conducted the swearing in ceremony for the two new Councilmembers, James Fritsch and Heath Abbott. Mayor Myers noted that she had sworn in Councilmember Souders prior to the June work session due to the fact that he was on vacation this week.

On a motion by Councilmember Jernigan, Council unanimously approved the agenda as presented.

The minutes of the Organizational Meeting held on May 22<sup>nd</sup> were approved unanimously as presented on a motion by Councilmember Lushbaugh. Councilmember Lushbaugh made a motion to approve the minutes of the June 5, 2012 meeting of the Mayor and Council as presented. Motion passed by a unanimous vote. On a motion by Councilmember Jernigan, the minutes of the Special Meeting held on June 18<sup>th</sup> were approved by Council. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained. The minutes of the June 19<sup>th</sup> Work Session were approved on a motion by Councilmember Jernigan. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained.

The Treasurer's report was unanimously approved by the Council on a motion by Councilmember Jernigan.

## **MAYOR'S REPORT**

Mayor Myers reported on the following: (1) Met with structural engineer and Public Works Director to review E. Water Street bridge. (2) Extended a thank you to the County Commissioners for bringing their regular meeting out to the Town. (3) Welcomed the incoming Council and looking forward to a new year of service to our citizens. (4) Extended her thanks and much appreciation to the outgoing Councilmembers Shirley Aurand and Jerome Martin for their dedicated service to their town.

## **REPORTS -- DEPARTMENT HEADS**

Betsy Martin, Clerk/Treasurer/ Manager reported the following: (1) Attended meeting of the County Commissioners held in Council Chambers. Extended a thank you from the Town for all the Commissioners have done for Smithsburg. (2) Reviewed water billing. Prepared and sent out quarterly water bills. (3) Assisted Public Works Director in tracking maintenance expenses on Town Trucks for report to Council. (4) Mailed out tax bills. (5) Continued preparatory work on town audit. (6) Nancy Walzl worked on preparing the Falls Sports schedules for usage of parks. (7) Attended Pride Days meeting. The next meeting of the Pride Days Committee will be held on Thursday, September 20<sup>th</sup> at 7 PM. Everyone is invited to attend to help plan for the Pride Days event which will include the town's 200<sup>th</sup> Birthday Celebration. (8) Thanked Shirley Aurand for her years of service to the Town as a Council person. (9) Extended a welcome to the two new Councilmembers.

Chief George Knight presented the following report: (1) There were 107 calls for service during the month of June with 1 juvenile arrest. (2) The department patrolled a total of 2,995 miles this month and did 17 hours and 20 minutes of foot patrol. (3) A total of 11 premise checks were conducted during the month. (4) The Department worked a total of 91 hours at the Firemen's Carnival which included 5 hours overtime. (5) Chief Knight, Corporal Witmer and OFC 1<sup>st</sup> Class Hudson attended firearms qualification. (6) Corporal Witmer attended training for school incidents. (7) The Department worked a

total of 10 hours for the Smooth Operator Grant and 9 hours for the Health Department Alcohol Grant. (8) Reported that all went well at the Firemen's Carnival. Chief Knight listed the following goals for his department: Upgrade Computers, Additional Incident Training for School Incidents, Additional Community Policing, School Speed Zones and Cameras. He also stated that he would like to partner with the Boys and Girls Clubs to have activities in the town.

Jeff Long, Public Works Director, submitted the following report: (1) Ongoing waste water infrastructure repairs. Mr. ReHab is in Town completing all priority 2 repairs. (2) Completed 2<sup>nd</sup> quarter water meter readings and re-reads. (3) Maryland Rural Water Association class was held on June 14<sup>th</sup> at Town Hall. (4) Repaired an 8 inch water main break on June 5<sup>th</sup>. (5) Painted the rest room floors at the Lions Community Park. (6) Installed wire in ceiling at the large pavilion at Lions Community Park. (7) Trimmed trees for visibility at the intersection of Geiser Way and N. Main Street. (8) Began second week spraying of the season. (9) Trimmed trees and shrubs at Veterans Park. (10) Repaired the roof at the Historical Society Building. (11) Cut and removed several broken and down limbs from storms throughout the month. Upcoming events and projects are: Continue sewer infrastructure work and smoke testing. Average daily water consumption for the month was 242,813 gallons.

On a motion by Councilmember Jernigan, Council unanimously voted to spend up to \$3,200 for safety surface at Lions Community Park. This money will be taken from the new park budget - \$1,000 – miscellaneous expenses and \$2,200 for roadway improvement at Veterans Park.

#### **REPORTS -- COMMISSIONS, COMMITTEES**

Appeals Board – Randy Dick reported that the Appeals Board will be meeting on July 26<sup>th</sup> to hear an appeal by Michele Cline of 100 Byron Drive for a variance from the required ten feet side and rear yard setback to five feet for the construction of a detached garage.

Smithsburg Community Activities Commission – No report.

Parks and Improvement Commission – Betsy Martin, in the absence of the Park Commission Chairperson, reported the following: (1) Will be checking with Jeff Long, Public Works Director, for a list of improvements made since last month at Lions Community Park. (2) Moving forward with checking on the electrical upgrades for Veterans Park. (3) Next meeting will be held on July 9<sup>th</sup> at 7 PM at the Lions Community Park.

Planning Commission – Randy Dick reported that the Planning Commission will be meeting on July 19<sup>th</sup>. On the agenda will review of the subdivision on Clopper Ave., Zoning Ordinance and Land Subdivision Ordinance.

On a motion by Councilmember Lushbaugh, Council unanimously voted to accept all reports as presented.

#### **COMMUNITY ORGANIZATION REPORTS**

Chief James Ulrich of SEMS reported that they participated in the procession and memorial service for Bridgette Heller. He reported that they did standbys at the fire works for both the Smithsburg Carnival and the Mountain Heritage Days. He also announced that SEMS fund drive is currently underway.

#### **OLD BUSINESS**

On a motion by Councilmember Lushbaugh, Council unanimously approved the letter to Julie Pipple, regarding Council's action on the Watershed Implementation Plan. In the letter it is stated that: "The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town



acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.”

On a motion by Councilmember Jernigan, Council unanimously voted to table discussion of the Charter Changes until more comments have been received by Council and members of the Charter Ad Hoc Committee.

#### **NEW BUSINESS**

Councilmember Fritsch made a motion to approve Mayor Myers’ appointment of Victor Lawrence James to the Smithsburg Community Activities Commission. Motion passed a unanimous vote of Council.

Betsy Martin reported that, to date, there is no need to make any line item transfers in the budget that ended June 30<sup>th</sup>. If needed, the auditors can recommend transfers prior to the completion of the audit.

On the agenda for the July 24<sup>th</sup> work session will be: (1) Speed Camera Presentation – Chief Knight. (2) Lutheran Work Camp. (3) Review of Resolution for Commission, Board and Committees Qualification. (4) Review Municipal Infraction Ordinance. (5) Charter Changes. (6) Smoke Testing Update.

#### **COUNCILMEMBER REMARKS**

Councilmember Lushbaugh welcomed Jim Fritsch and Heath Abbott to the Council. He thanked Jerome Martin and Shirley Aurand for their years of service to the town. He thanked everyone who was involved with helping with the Carnival. He wished everyone a great holiday.

Councilmember Abbott thanked everyone for welcoming him to the Council. He hopes to do as much work for the town as he can. He is looking forward to the challenge. Councilmember Abbott invited everyone to come to the Little Sluggers Field to watch the games during their tournaments starting Friday night and continuing through the next three weekends.

Councilmember Jernigan also thanked Jerome Martin and Shirley Aurand for their service on the Council. He welcomed Jim Fritsch and Heath Abbott to the Council and welcomed their different backgrounds.

Councilmember Fritsch thanked the Town for putting their confidence and trust in him. He stated that he had big shoes to follow with Jerome Martin and Shirley Aurand. Councilmember Fritsch also said that in the next 30 days he would be meeting with the Mayor and Town Staff.

Mayor Myers noted that she and the department heads would be more than willing to meet with the new councilmembers.

The meeting was adjourned at 8:20 PM.

Respectfully submitted,

Betsy Martin,  
Clerk/Treasurer/Manager



# The Town of Williamsport

2 NORTH CONOCOCHIEGUE STREET  
P.O. BOX 307  
WILLIAMSPORT, MARYLAND 21795

OFFICE OF  
MAYOR AND COUNCIL

TELEPHONE (301) 223-7711  
FAX (301) 223-5303

Julie Pippel, Director  
Washington County  
Division of Environmental Management

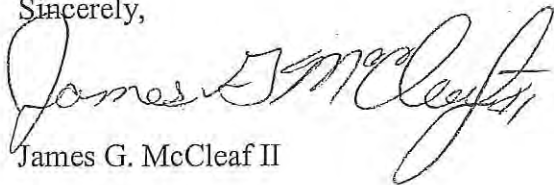
June 28, 2012

Dear Julie,

The Mayor & Council of The Town of Williamsport will on July 9, 2012 be considering the proposed resolution in response to the request from Maryland Department of the Environment that the town review and adopt the WIP Phase II document The propose Resolution takes a position of along the lines of that recommended by the County's WIP Team Committee.

When the final Resolution is adopted I will forward to you for your records. If you have any questions concerning this matter please feel free to contact me town hall at 301-223-7711.

Sincerely,



James G. McCleaf II

**RECEIVED**

JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

APPENDIX F -  
MILESTONES  
FOR  
FY12/13



**Washington County**  
**Watershed Implementation Plan Phase II**  
**WIP Report -**  
**Appendix F - Milestones for FY12/13**  
**(July 1, 2011 to June 30, 2013)**  
**JULY 15, 2012**

**Urban Sector**

**County Phase II MS4:**

Washington County Government

1. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
2. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.
3. Analyze the potential of placing County owned property under an Urban Nutrient Management Plan.
4. Completion of the Black Rock Creek Stream Restoration project in FY12.
5. Completion of stream restoration in the Devil's Backbone Dam project.
6. Addition of storm water management infrastructure on Robinwood Drive Project to address an area with no prior storm water management.
7. Addition of storm water management infrastructure on Marsh Pike/Longmeadow Road project.
8. Replacement of storm water pipe on Brookfield Road with grass swale.
9. Analyze potential of replacement of impervious paving with pervious paving for load reduction credit and financial feasibility.
10. Increasing FTE by one position in the Division of Environmental Management for a Watershed Specialist which will manage the County's local watershed and WIP efforts.
11. Analyze potential changes to the County Phase II MS4 permit which could become effective in 2012.
12. Review the level of implementation projects required to meet the WIP loading reduction numbers and prepare a presentation to the BoCC for their direction and

approval. This report will address funding requirements and will provide funding alternatives which may include, but are limited to, state and/or local fees.

13. Define the County Phase II MS4 regulated area and work with MDE for approval. This area will exclude any areas which fall in an incorporated municipal area or are under a storm water system that is owned or operated by a separate entity.
14. Development of a project list which can be utilized in development of yearly funding requests from the Board and various grant sources.
15. Investigate new and alternative methods of working towards the target load reductions.
16. Pursue various grant funding sources for implementation projects.
17. Education of citizens on the WIP and how they can reduce the nutrient and sediment load in Washington County.
18. Continue to work with MDE staff on refining the load reductions assigned to Washington County.

### **Urban Sector applicability still under review and/or agency serves multi-sectors**

#### **Town of Boonsboro**

1. Annual clean-up of stream in Shafer Park with various organizations, including Boonsboro Recycling Task Force and Boy Scout Troops.
2. Begin a televising study of the sewage collection system to identify I&I problem areas in FY12.
3. FY12, begin planning of stream buffer areas and conservation easements on Town Farm Property and Shafer Park. Implementation contingent on funding availability and Mayor and Council approval.
4. FY12, begin planning with King Road Association on potential stream buffer project on property. Implementation contingent on funding availability and Mayor and Council approval.
5. Work with local WIP Implementation Team on development of educational outreach on WIP related issues.
6. FY12/13 - Implement reforestation plantings in Shafer Park for Fletcher's Grove. Implementation contingent on funding availability and Mayor and Council approval.
7. FY12 – continue working with property owners to address broken cleanout caps in an effort to reduce inflow and infiltration in the sewage collection system.
8. Mechanical Street Sweeping of all streets in the Town on a bi-monthly basis. 13.39 miles. Evaluate the potential reduction and financial feasibility of expanding the program for load reduction. Implementation contingent on funding availability and Mayor and Council approval. Implementation of program changes contingent on financial feasibility and approval of Mayor and Council.
9. Annual Green Fest event to promote, educate and encourage environmentally friendly actions.

### Town of Clear Spring

1. Annual cleaning of storm drains and culverts.
2. Analyze potential of mechanical street sweeping for load reduction in Town. 1.97 miles. Implementation is contingent on financial feasibility and approval of the Mayor and Council.

### Town of Funkstown

1. Mechanical street sweeping completed on an as needed basis. Typically at least once per year. 3.92 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
2. Cleaning of storm drains and culverts on a minimum of an annual basis.
3. Pursue grant funding from POS for tree planning.

### Town of Hancock

1. Investigate the potential of mutual projects with C&O Canal to address storm water in Town. Implementation contingent upon National Park Service and Mayor and Council approval and additional on financial feasibility.
2. Mechanical street sweeping completed twice per year on 11.25 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
3. Storm drains and culverts cleaning a minimum of twice per year.
4. FY12, cleaning of the stream through Woodmyer Park completed.

### Town of Keedysville

1. Mechanical street sweeping will be increased to 5 times yearly (from the present level of 2 times yearly) on 5.75 miles of roadway in town.
2. An educational program of communication with town residents through email and the town newsletter is being implemented advising residents of what individual actions they can take to support the WIP, such as tree planting and installations of rain barrels.
3. Town Management (Mayor and Council) is exploring ways of interim reporting, milestones and actions taken.
4. Town Management (Mayor and Council) will research the ideas developed by County staff during a site visit to review what the town can do in support of the WIP. It should be emphasized that no action can be taken on those ideas until full information



becomes available on their financial feasibility and approval of the Mayor and Council.

#### Town of Sharpsburg

1. No mechanical street sweeping completed in Town. Investigate potential reduction of street sweeping for load reduction. Implementation is contingent upon financial feasibility and Mayor and Council approval.

#### Town of Williamsport

1. Mechanical street sweeping completed once per week on 9.87 miles.
2. Continue ongoing work on sewage collection I&I correction. Level of effort dependent upon budgetary restraints and Mayor and Council approval.
3. Completed application for Urban Greening Grant which includes 700 tree plantings.
4. Received grant for greening of the main street which includes rain barrel installation, replacement of sidewalk with pervious concrete and planting of trees.
5. Cleaning of storm drains on a monthly basis.
6. Semi-annual cleanup of the stream in the Town Park.
7. Hold a benefit concert at River Bottom Park with proceeds being divided between participating WIP stakeholders and utilized for educational and implementation projects for the WIP. Exact projects will be dependant upon amount of funds raised.

#### Soil Conservation District

1. Planning FY12/13 stream restoration project with Crest View HOA. Implementation of project contingent upon approval by all parties and funding.
2. Planning FY12/13 stream restoration project with Washington County Division of Environmental Management for Smithsburg WwTP. Implementation of project contingent upon approval by all parties and funding.
3. Planning FY12/13 stream restoration project with Town of Hancock for Kirkwood Park. Implementation of project contingent upon approval by all parties and funding.
4. Work with Washington County staff on the review of County properties for potential projects. Implementation of project contingent upon approval by all parties and funding.
5. Evaluate the potential of painting of storm drain inlets (curb) to signify "Chesapeake Bay" drainage area. Implementation is contingent upon financial feasibility and elected body approvals.

6. Evaluate the potential of installing rain barrels and/or rain gardens on school properties for educational/outreach initiatives. Implementation contingent upon approval and Board of Education approval.
7. Tree planting at the Williamsport School Complex (1.0 + acres). (66 trees and shrubs)
8. Tree planting at the Black Rock Run Stream Restoration. (300 trees)
9. Tree planting at Kirkwood Park in Hancock. (191 trees and shrubs)
10. Tree planting at Fountaindale Elementary. (150 trees and shrubs)
11. Continue current outreach events at the Home Builder's Show; Green Fest; Urban Conference; Green Card Class; Sharpsburg Heritage Festival; and tree sale.
12. Evaluate potential locations for rain barrel and/or rain garden projects at Washington County Agricultural and Education Center complex as educational outreach. Implementation is contingent upon funding and approval by appropriate parties.

Washington County Board of Education

1. Implementation of 2.85 acres of Forest Conservation for the Ruth Ann Monroe Primary School.
2. Implementation of 1.73 acres of Forest Conservation for the Antietam Academy.
3. Implementation of 1.9 acres of Forest Conservation for the Bester Elementary School.
4. Continue to offer students a variety of education programs including environmental science courses, watershed field trips to the Potomac River, and the Envirothon competition that focuses on environmental resources management. Students have incorporated rain barrels and rain gardens into several school water management plans as an application of their lessons.
5. Continue students' participation in additional environmental themed programs at the following specialized facilities: Claude Kitchens Outdoor School at Fairview, Agricultural / Environmental Academy at Clear Spring High School, and the Math Science STEM magnet schools at Springfield Middle School and Williamsport Elementary School.
6. Installation of rain barrels at Clear Spring Elementary School.
7. Stream Bank erosion repair completed at Northern Middle School.

**Municipal Phase II MS4:**

City of Hagerstown

1. Continue the City's current street sweeping program, and possibly expand the scope of the program (i.e. hit more streets more frequently) if the City Council approves additional funding, and if the pollutant reduction benefits are significant.
2. Continue (and possibly expand) the City's program to plant street trees throughout the City to increase the overall forest canopy coverage; this program would be contingent upon continued grant funding from DNR and other agencies, and on continued budget support from the City Council.
3. Develop plans for the reconstruction/reconfiguration of the lake at Pangborn Park, which will include replacement of existing hardscape surfaces with a more natural lake shoreline, and the restoration of approximately 400 linear feet of the existing Hamilton Run stream channel adjacent to the park. Planning, design, and ultimate construction are contingent upon anticipated grant funding, and General Fund expenditures approved by the City Council.
4. Under direction from the City Council, study additional sections of Hamilton Run, Marsh Run, and Antietam Creek within the City's corporate limits to identify sites for future stream restoration projects.
5. Study, and possibly implement (based upon City Council approval), an Urban Nutrient Management Plan for City-owned facilities with significant amounts of maintained turf area (e.g. Fairgrounds Park, Hagerstown Greens golf course, other parks and playgrounds, etc.).
6. Study the feasibility of an expanded Urban Nutrient Management program to reduce pollutant loads from non-City owned facilities and properties. Facilities that would be investigated include Board of Education Facilities within the City's corporate limits (e.g. North High, South High, and other school facilities), Rose Hill cemetery, and possibly larger commercial sites. This effort would require the support of the City Council, as well as the cooperation of the affected private property owners and agencies. Ultimately, the study could be expanded to look at a City-wide Nutrient Management program for all properties within City limits.
7. In anticipation of load reduction requirements likely to result from WIP and NPDES regulations, begin initial studies to identify existing storm water management facilities that could be retrofitted to improve water quality, and studies to identify potential sites for the construction of new storm water management facilities to provide "treatment" for pre-1985 impervious areas.
8. If so directed by the City Council, begin preliminary studies on the feasibility of potential funding mechanisms to pay for anticipated storm water improvements. Mechanisms could include a future Storm Water Utility Fee, or other programs to develop a revenue stream to pay for the required improvements.

#### Town of Smithsburg

1. Annual Mechanical Street Sweeping of all Town streets. 12.17 miles.



2. Evaluate potential of expanding the street sweeping program; planting of additional trees and education outreach on rain gardens and barrels for load reduction potential in meeting the loading allocation. The implementation of these practices is dependent on adoption of the Mayor and Council and funding availability.
3. Continue investigation of sewage collection system I&I problem areas and schedule repairs based on financial capabilities.

### **Non-regulated Urban**

1. Review potential of Urban Nutrient Management Plan for load reduction potential and financial feasibility.
2. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
3. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.

### **Septic Tanks**

1. Based on current BRF funding levels from MDE approximately 20 systems are upgraded each Fiscal Year. Contingent upon funding from the BRF, approximately 40 BAT systems will be installed in FY12/13.
2. Review current septic tank repair policies for 1 acre lot sizes and sensitive areas for potential changes to incorporate the requirement of BAT. Implementation of new policies proposed in FY 14 contingent upon approval from overseeing authority.

#### **Proposed actions from Health Department**

- Effective July 1, 2013 (FY14) all repairs on 1 acre lot size or smaller will be BAT technology.
- Effective July 1, 2013 (FY14) all new septic tanks and all repairs in sensitive areas will be BAT. (Note only repairs can be counted in BAT)

### **Wastewater Treatment Plants**

#### **Washington County Division of Environmental Management**

1. FY12/FY13 – Receive approval of the Preliminary Design Report for the Conococheague WwTP ENR Upgrade project from MDE and begin design.

2. FY12/FY13 – Receive approval of the Preliminary Design Report for the Winebrenner WwTP ENR Upgrade project from MDE and begin design.

**Actions under review of the Washington County Watershed Implementation Team with implementation contingent upon approval from overseeing authorities and receipt of funding.**

1. Analysis of Urban Nutrient Management Plan program in Washington County.
2. Review and establish a County reporting and tracking system for WIP implementation.
3. Review potential septic connections to public sewer systems.
4. Development of educational outreach programs.
5. Review of alternatives to achieve the reductions required in the septic sector including funding requirements and potential sources for presentation to the BoCC to obtain directions and approvals.
6. Review current tracking, verification and reporting methods of all agencies involved in WIP activities for development of a central consolidation of this information to enhance WIP and local watershed management.

APPENDIX D -  
OVERALL RECOMMENDATION ON THE  
WIP PHASE II DOCUMENT WITH  
OVERALL COST ESTIMATE FOR  
WASHINGTON COUNTY



## **Overall Recommendation on the WIP Phase II Document:**

The State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction. The WIP Committee based on the information in this report and as presented for the septic sector recommends that the elected bodies consider the following verbiage in response to the request from MDE. Please note that the Board of County Commissioners of Washington County, Maryland has been used in this document as an example and can be replaced with the appropriate elected body as needed.

### Committee Recommendation for elected bodies:

The Board of County Commissioners of Washington County, Maryland (the "Board") acknowledges that the Chesapeake Bay (the "Bay") has been identified as a water body which is impaired for nutrients and sediments. The Board further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State of Maryland and has requested that each of these geographical areas prepare a Watershed Implementation Plan developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater and septic sectors. The Board has addressed the major wastewater treatment plant upgrades required to meet the portion of the wastewater sector under their jurisdiction by approving these projects in the Washington County Capital Improvement Project plan. The WIP Committee has provided a report to the Board on the urban and septic sectors which documents the cost for meeting the target load reductions to exceed \$1 billion dollars. These costs were prepared utilizing historically known values for upgrades in the septic sector and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King for MDE report provided by MDE for use in preparing costs for the storm water sector. Therefore, in response to the WIP Committee reports, the Board is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by MDE under its jurisdiction and which would directly impact the citizens of Washington County. Adoption of such a plan by the Board would be fiscally irresponsible and financially unfeasible. However, the Board does acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the then elected Board. Additionally, Washington County staff should pursue grant funding as available to support projects that work towards the progress of meeting the target loads established by MDE. Therefore, the

Board is instructing County Staff and the WIP Committee to recommend a WIP Phase II report for submission to MDE which includes a plan encompassing the following:

- approved operating and CIP budget lines which work toward achieving the target loads with the caveat that full implementation is contingent upon continued funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Board and grant sources;
- County Staff to continue investigation into new and alternative methods of working towards the target load reductions
- pursue potential funding sources of implementation projects.
- development of a tracking and reporting system for BMP implementation in Washington County
- work on the offset policy for future development in Washington County
- education of the citizens on the WIP and what they can do to reduce the nutrient and sediment load in Washington County
- work with MDE staff to refine the loading reductions assigned to Washington County to reflect the true county conditions and not from a broader Bay model perspective
- general administrative functions as required to work on the WIP and do not commit Washington County to any work which is not already funded.

Washington County  
Watershed Implementation Plan Phase II  
Total Estimated Cost to Achieve  
2025 Target Allocation

Jurisdiction	Sector	Estimated Cost	Subtotal
Washington County	Urban	\$ 514,819,051.00	
	Septic	\$ 230,204,800.00	
	Wastewater	\$ 49,322,610.00	
			\$ 794,346,461.00
City of Hagerstown	Urban	\$ 210,087,831.00	
	Wastewater	\$ 10,206,107.00	
			\$ 220,293,938.00
Town of Smithsburg	Urban	\$ 16,233,028.00	
Town of Boonsboro	Urban	\$ 36,545,305.00	
Town of Clear Spring	Urban	\$ 1,297,653.00	
Town of Funkstown	Urban	\$ 4,082,626.00	
Town of Keedysville	Urban	\$ 10,329,110.00	
Town of Hancock	Urban	\$ 32,814,956.00	
Town of Sharpsburg	Urban	\$ 2,570,522.00	
Town of Williamsport	Urban	\$ 11,721,072.00	
		\$ 1,130,234,671.00	

Total Estimated Cost by Sector

Stormwater		\$ 840,501,154.00
Septic		\$ 230,204,800.00
Wastewater		\$ 59,528,717.00

11-May-12



APPENDIX C -  
URBAN REPORT

## Washington County Watershed Implementation Plan Urban Report

April 12, 2012

The State of Maryland has issued a loading allocation target for the Urban Sector in Washington County. The report, as follows, provides background information on the loading target, the initiatives in place regarding loading target reductions in the urban sector, and information for use by the elected bodies to provide direction to staff on future policies that address the loading target reductions needed to meet the urban loading target.

The urban sector is further broken down into several categories which directly impact different stakeholders in the County. Any of these categories which fall under State or Federal government control either through land ownership or permitting are not the responsibility of Washington County. These subsectors have an \* and are included here for informational purposes only and therefore will not be discussed or included in any detail in this report. The urban sector categories are as follows:

**Municipal Phase II MS4** – land area which is under Municipal Separate Storm Sewer System (MS4) Phase II permits which include the City of Hagerstown and the Town of Smithsburg.

**County Phase II MS4** – this subsector is not easily defined as the County MS4 permit area which is what would be expected. This subsector does contain the area in the County was defined by EPA to be under a MS4 Phase II permit. However, a map provided by MDE shows the areas within the municipalities which are currently not covered under a Municipal MS4 Phase II permit and areas in the County outside the EPA defined area. This is discussed in further detail below.

**State Phase II MS4 \*** – land in the County which is owned by the State of Maryland and under a State Stormwater Permit issued to the applicable State agency.

**SHA Phase I/II MS4 \*** – land in the County under Maryland State Highway Administration control and which falls under their State Stormwater Permit.

**Regulated Industrial Facilities \*** – private land in the County which is operated in a fashion which requires the land to be permitted under a State Stormwater Permit.

**Construction** – MDE has designated a set amount of land acres which they will allow to be under construction at any one time and maintain compliance with the target loading allocation for this sector.

**Extractive** – land in the County which is utilized for extractive activities both active and inactive.

**Non-regulated** – developed areas in the County such as municipalities and dense population areas that do not fall under the Phase II Stormwater Permit jurisdiction.

**Federal Developed** \* – this is lands that are owned and under the control of the Federal Government for example the C&O Canal, Antietam Battlefield and Post Offices. The federal lands have been assigned a separate target load and will be submitting a separate WIP Phase II document.

The Watershed Implementation Plan (WIP) Committee and its urban subcommittees evaluated each of the subsectors affecting Washington County stakeholders and political subdivisions and have developed the following information for review and direction:

Construction: Maryland Department of the Environment (MDE) has completed a calculation for each geographical jurisdiction in the State on the amount of land acres that had been and can be under construction at any one time to meet the urban loading target allocation. For the geographical area of Washington County this is 1,727 acres. MDE has indicated that in order to expand the number of acres, loading will need to be generated to offset the additional acres. In reviewing past records of acres permitted for construction in the County, the amount of acres has ranged from 2,120 acres in 2004 to 530.9 acres in 2009. However, the permitted acres do not necessarily reflect the amount of acres under construction because a permit can be issued and not be under construction for up to two years after issuance, or potentially not constructed at all. Currently, the amount of acres which has been allotted for construction is adequate; however, this could become restrictive in the future and will have to be monitored for impact. It is recommended that the WIP Committee continue to monitor this sector; develop mechanisms to determine how many acres are actually under construction versus permitted for construction at any one time, and continue its conversation with MDE on the calculation methodology used to develop the acreage. In addition, the WIP Committee will work on mechanisms which will allow for the amount of acres under construction to be expanded if necessary in the future.

Extractive: Areas in Washington County that are designated as extractive which are active or inactive fall under the sediment and erosion control regulations in the County. In reviewing the Maryland Assessment Scenario Tool (MAST), it was determined that no sediment and erosion controls practices were applied to these lands. By applying the sediment and erosion control best management practices to these lands, the 2025 target loading allocation is achieved with 1,343.8 lbs. total nitrogen and 236.2 lbs. of total phosphorus in excess. It is recommended that the WIP Committee continues to monitor this subsector and to verify that it continues to meet the target allocation assigned to this subsector. After full review and verification of the land areas which MDE has designated for this subsector are completed, the Committee can prepare a recommendation on use of the excess allocation.

Extractive Target Loading Allocation Table

	Total Nitrogen lbs. delivered	Total Phosphorus lbs. delivered
2010 Baseline	10,140.2	1103.0
2025 Target Loading Allocation	8,949	898
Loading after BMP application	7,605.2	661.8
Excess Loading reductions	1,343.8	236.2



County Phase II MS4; Municipal Phase II MS4 and non-regulated areas: All these subsectors relate to urban stormwater and utilize the same set of best management practices (BMPs) for loading reductions; therefore they have been grouped together for the purpose of the report. The BMPs which are applicable to these subsectors are described in Appendix A of this report as well as items which require consideration when determining which BMPs to apply to a jurisdiction.

The Urban subcommittee has spent a significant amount of time working with MDE staff to define the areas which were used to determine the make-up of each of these subsectors. Initially, it was defined that the County Phase II MS4 area was the County Stormwater permit area; the Municipal Phase II MS4 was the Municipal stormwater permit area and the non-regulated areas included the municipalities not under a MS4 permit and developed areas in the County not under the MS4 permit. Further discussions with MDE staff and receipt of a map have clarified what areas the State has included in these categories as discussed in the following.

Under the Municipal MS4 subsector area, the City of Hagerstown and the Town of Smithsburg have been included, however, when comparing local GIS data on the acreage of the municipality and the amount of impervious surface area acres within the City of Hagerstown, it was determined that the State numbers are higher than the local numbers. It is recommended that the Committee continue to work with MDE to determine the difference in the numbers and reconcile the numbers with refinement to the target loading allocations as applicable.

Under the County Phase II MS4 subsector area, it was determined that the State has designated the entire Town of Williamsport and Funkstown as being included in this category. The Towns of Boonsboro, Clear Spring, Hancock, Keedysville and Sharpsburg also have a portion of their towns included in this subsector area. The remaining acres defined by MDE maps are within the County. After review of this area it has been determined that while a significant amount of the County area falls into the area recognized as the County MS4 permit area which was based on the EPA data designating the 2000 census urbanized area, there is approximately 445 acres which are outside this area and upon closer review appear not to fall under a stormwater permit definition. While the Town of Williamsport and Funkstown are located within the area defined by EPA in 2000 as urbanized and were required to be evaluated for a MS4 permit at that time, the remaining Towns did not. However, review of the Federal Stormwater regulations does provide language which allows MDE to define these areas as MS4 stormwater areas and require permits in the future. It is recommended that the Committee continue to work with MDE to define these areas in accordance with local data and reconcile the numbers with refinement to the target loading allocations as applicable.

Under the non-regulated area, the remaining areas within the Towns not under a MS4 permit are included under this subsector along with developed areas in the County which are not under the MS4 permit. The County has requested a map of these areas. It is recommended that the Committee continue reviewing these areas and continue to work with MDE to define these areas in accordance with local data and reconcile the numbers with refinement to the target loading allocations as applicable.

Based on the above data the Committee has divided the target allocation to all participants in these subsectors based on acreage so that preliminary cost estimates could be prepared and direction could be received from the elected bodies for submission of the WIP

report in June 2012. The spreadsheets which show the total nitrogen and total phosphorus target loading allocation calculated for each jurisdiction are included in Appendix B.

For these subsectors the target load reduction is significant and the combinations of BMPs available to address the subsector are numerous. Therefore, preparing multiple scenarios is not a time effective or financially responsible method of providing a cost estimate to the elected bodies. In response to this, the Committee utilized the “Cost of Stormwater Practices in Maryland Counties” report prepared by Dr. King for MDE that includes the cost of each BMP and developed a weighted approach to the applicable BMPs for Washington County based on field knowledge and the BMP restrictions, to calculate the estimated cost of achieving the 2025 target allocations for each jurisdiction. These costs are as follows:

Jurisdiction	Estimated cost to achieve 2025 target allocation	Estimate to achieve 20% reduction proposed in MS4 Phase II permit
Washington County Government	\$514,819,051	\$43,744,256
City of Hagerstown	\$210,087,831	\$27,345,615
Town of Smithsburg	\$16,233,028	\$2,280,540
Town of Boonsboro	\$36,545,305	No permit
Town of Clear Spring	\$1,297,653	No permit
Town of Funkstown	\$4,082,626	No permit
Town of Keedysville	\$10,329,110	No permit
Town of Hancock	\$32,814,956	No permit
Town of Sharpsburg	\$2,570,522	No permit
Town of Williamsport	\$11,721,072	No permit

#### **Regulations affecting the WIP and Implementation:**

As discussed above, the urban sector contains areas which are under State MS4 Phase II permits. Currently Phase II permits do not require any retrofits of stormwater infrastructure or other parameters which result in capital improvement projects. However, the Phase II MS4 permits are due for reissuance in 2012 and it has been indicated by MDE staff that the Phase II permits will begin including parameters similar to the recently reissued Phase I MS4 permits. Therefore, it is anticipated that the Phase II permit will be modified to include language which will require that 20% of the acreage in the permitted area be required to retrofit the stormwater structures to meet current design standards. Achievement of this requirement will be limited to the permit cycle which is 5 years. The fiscal impact of this permit requirement for the areas with MS4 Phase II permits is included in the table above. If this parameter becomes part of the Phase II MS4 permit, the permitted jurisdiction will be obligated under State and Federal law to comply.

***Appendix A***  
***Best Management Practices***  
***(BMPs)***

*Note: This document is intended as a general information guide indicating some of the many types of Best Management Practices available for use in the reduction of TMDL Loads.*



## **BioRet - Urban**

### ***Bioretention/Raingardens***

An excavated pit backfilled with engineered media, topsoil, mulch, and vegetation. These are planting areas installed in shallow basins in which the storm water runoff is temporarily ponded and then treated by filtering through the bed components, and through biological and biochemical reactions within the soil matrix and around the root zones of the plants.

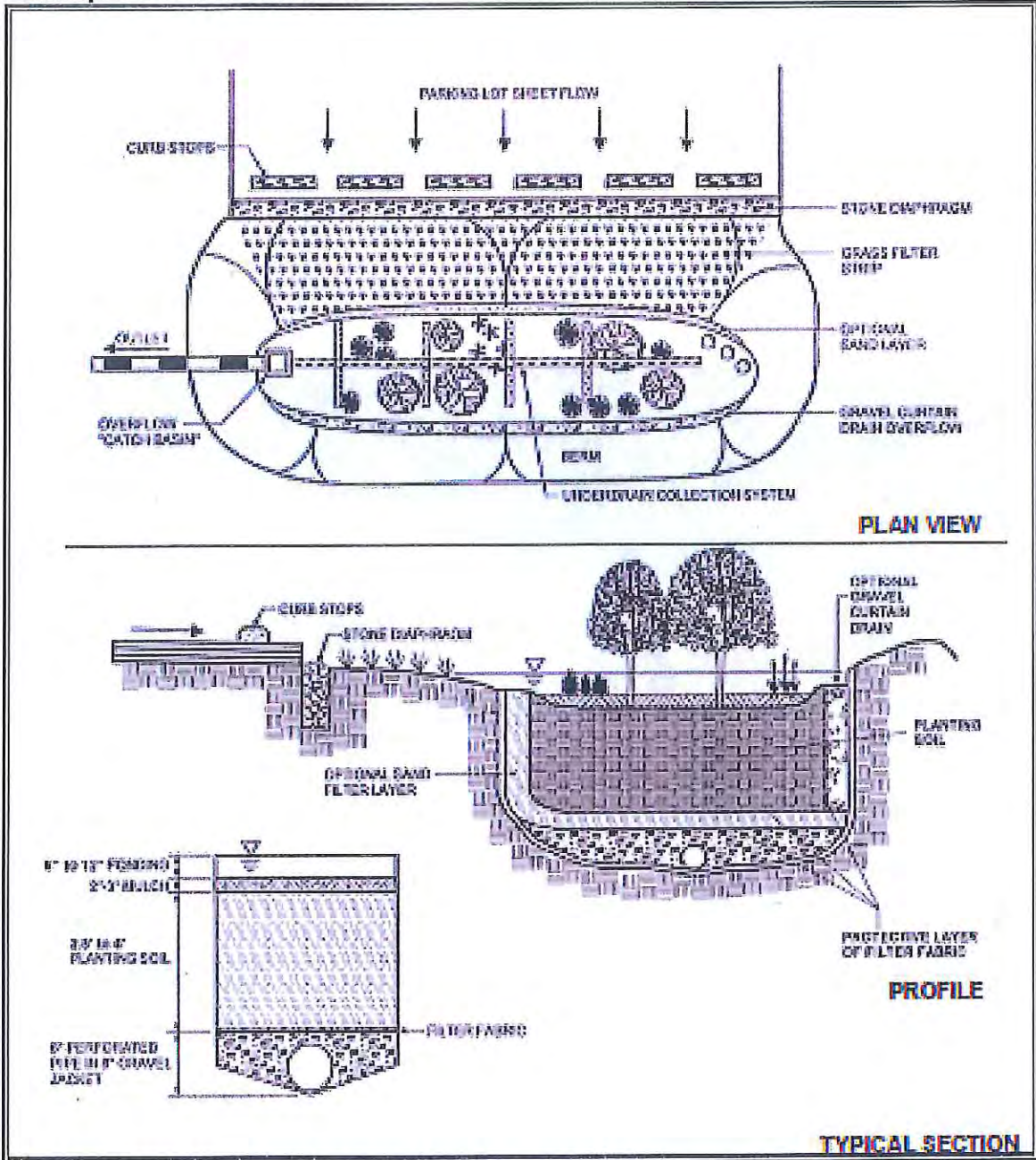
(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Patriot Federal Credit Union, Longmeadow Road, Hagerstown



# Example of Bioretention



2000 Maryland Stormwater Design Manual Volumes I & II

## DryPonds - Urban

### *Dry Detention Pond*

Dry Detention Ponds are depressions or basins created by excavation or berm construction that temporarily store runoff and release it slowly via surface flow or groundwater infiltration following storms. Hydrodynamic Structures are devices designed to improve quality of stormwater using features such as swirl concentrators, grit chambers, oil barriers, baffles, micropools, and absorbent pads that are designed to remove sediments, nutrients, metals, organic chemicals, or oil and grease from urban runoff.

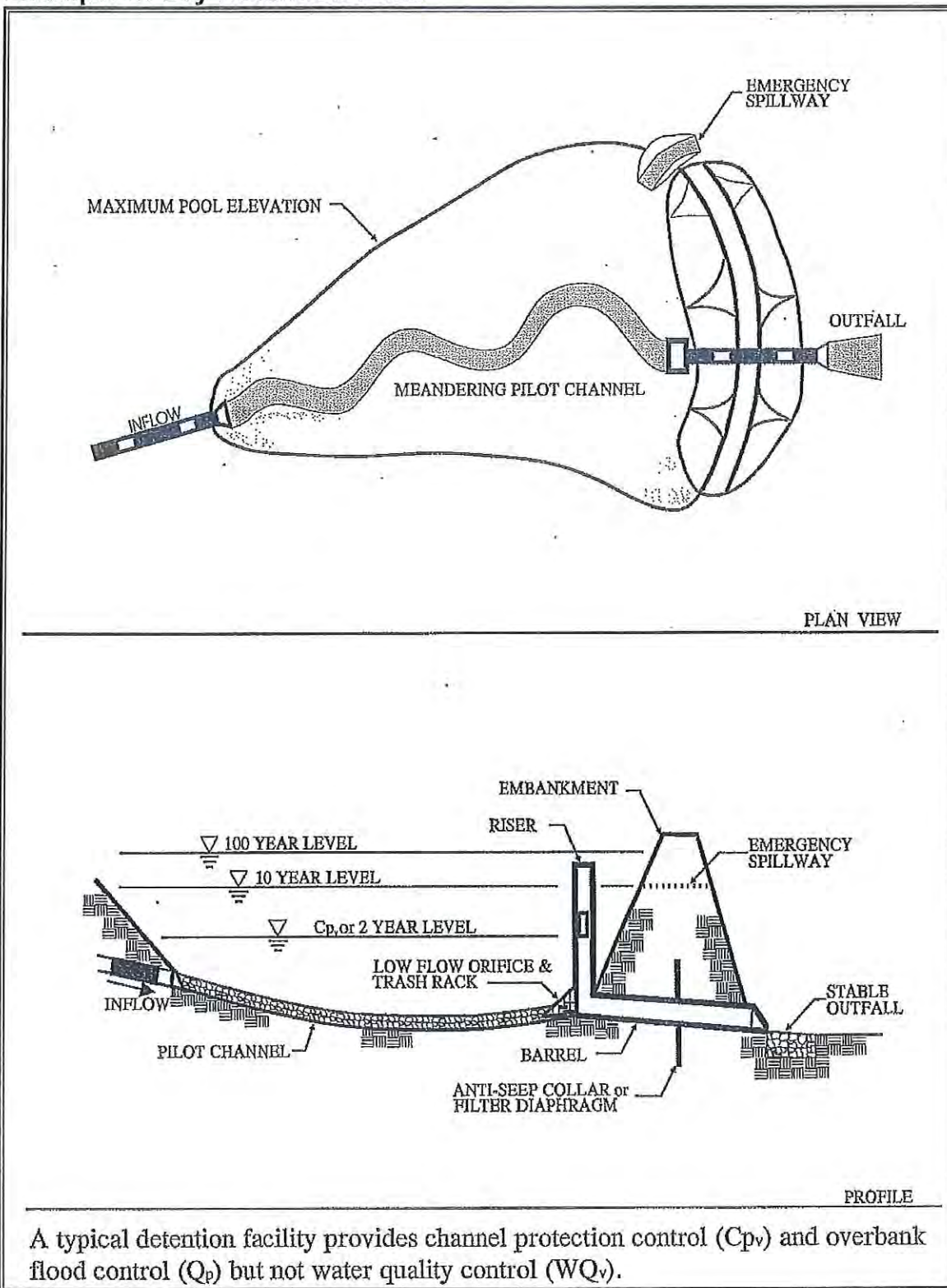
(See Chapter 2 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Hopewell Sheet Metal, Williamsport



## Example of Dry Detention Pond



2000 Maryland Stormwater Design Manual Volumes I & II

## ExtDryPonds- Urban

### *Dry Extended Detention Pond*

Dry extended detention (ED) basins are depressions created by excavation or berm construction that temporarily store runoff and release it slowly via surface flow or groundwater infiltration following storms. Dry ED basins are designed to dry out between storm events, in contrast with wet ponds, which contain standing water permanently. As such, they are similar in construction and function to dry detention basins, except that the duration of detention of stormwater is designed to be longer, theoretically improving treatment effectiveness.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Meadows Green Pond 5, Boonsboro



## ForestCon - Urban

### *Forest Conservation*

This BMP in Maryland is the implementation of the Maryland Forest Conservation Act that requires developers to maintain at least 20% of a development site in trees (forest condition). This is actually a preventative type of BMP which alters the rate of urban conversion. The acreage is calculated from the annual urban increase (population based). The 20% is specific to the Maryland Act and could be different for each jurisdiction or various locations within a jurisdiction.



Whitetail Subdivision, Smithsburg



## Filter - Urban

### *Urban Filtering Practices*

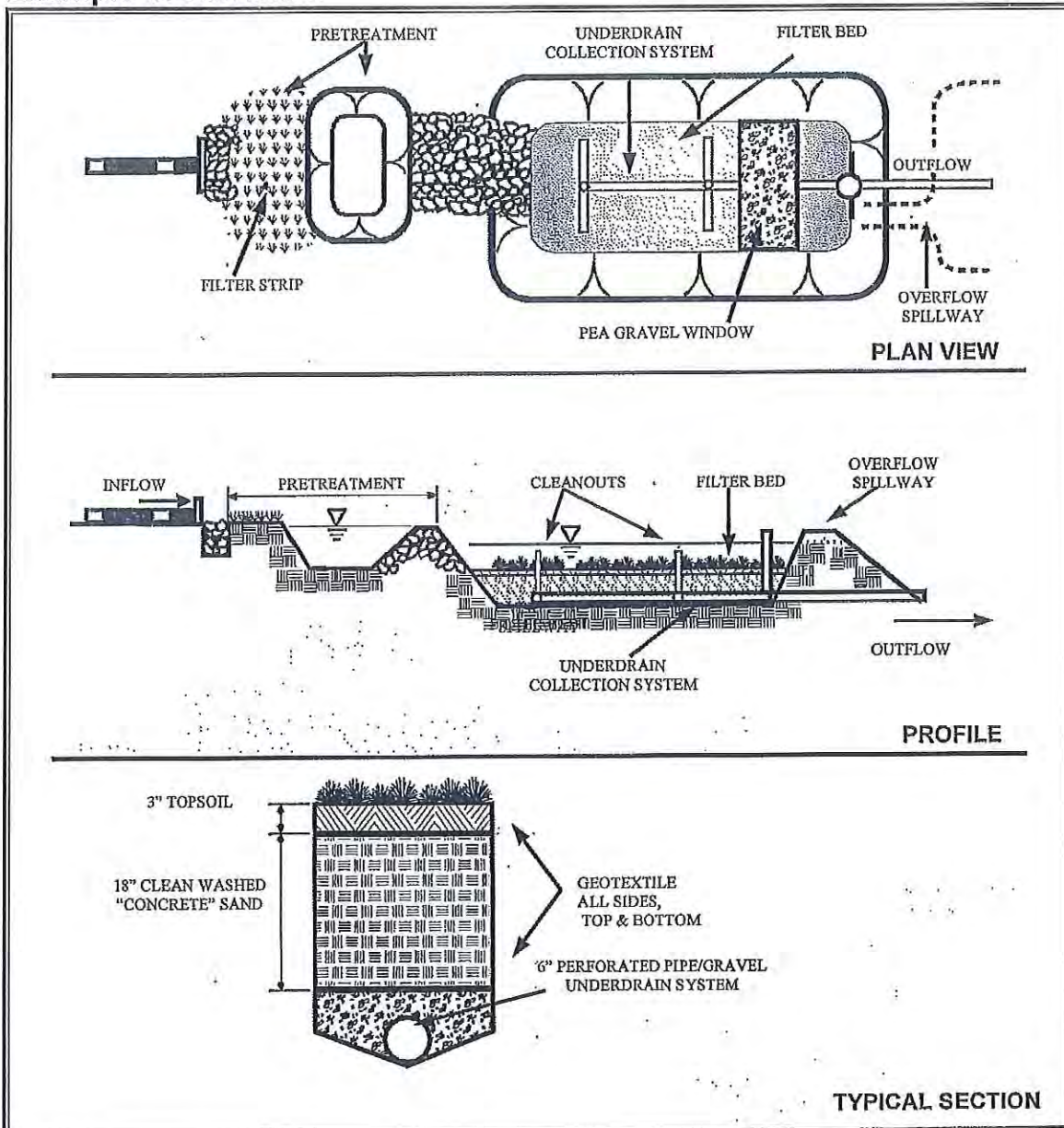
Practices that capture and temporarily store runoff and pass it through a filter bed of either sand or an organic media. There are various sand filter designs, such as above ground, below ground, perimeter, etc. An organic media filter uses another medium besides sand to enhance pollutant removal for many compounds due to the increased cation exchange capacity achieved by increasing the organic matter. These systems require yearly inspection and maintenance to receive pollutant reduction credit.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Sweetwater Crossing, Gapland

## Example of Sandfilter



The pocket sand filter is applied to small sites where sediment loads are expected to be moderate to low. The pea gravel windows allow runoff into the filter if the surface becomes clogged.



## Infiltration – Urban

### ***Urban Infiltration Practices- No Sand/Veg No Underdrain***

A depression to form an infiltration basin where sediment is trapped and water infiltrates the soil. No under drains are associated with infiltration basins and trenches, because by definition these systems provide complete infiltration.



Homewood Retirement Center, Williamsport



## InfiltrationWithSV -Urban

### *Urban Infiltration Practices – With Sand/Veg No Underdrain*

A depression to form an infiltration basin where sediment is trapped and water infiltrates the soil. No under drains are associated with infiltration basins and trenches, because by definition these systems provide complete infiltration. Design specifications require infiltration basins and trenches to be built in good soil, they are not constructed on poor soils, such as C and D soil types. Engineers are required to test the soil before approved to build is issued. To receive credit over the longer term, jurisdictions must conduct yearly inspections to determine if the basin or trench is still infiltrating runoff.



Homewood Retirement Center, Williamsport

## UrbanNutMan -Urban

### *Urban Nutrient Management Practices*

Urban nutrient management involves the reduction of fertilizer to grass lawns and other urban areas. The implementation of urban nutrient management is based on public education and awareness, targeting suburban residences and businesses, with emphasis on reducing excessive fertilizer use. This does not account for the recent laws passed to remove P from fertilizer.



Scotts Fertilizer

Proper lawn care is essential to great *water quality*. If excessive fertilizer ends up in the street and storm sewers, it can create water quality problems.

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## WetPondWetland - Urban

### *Wet Pond*

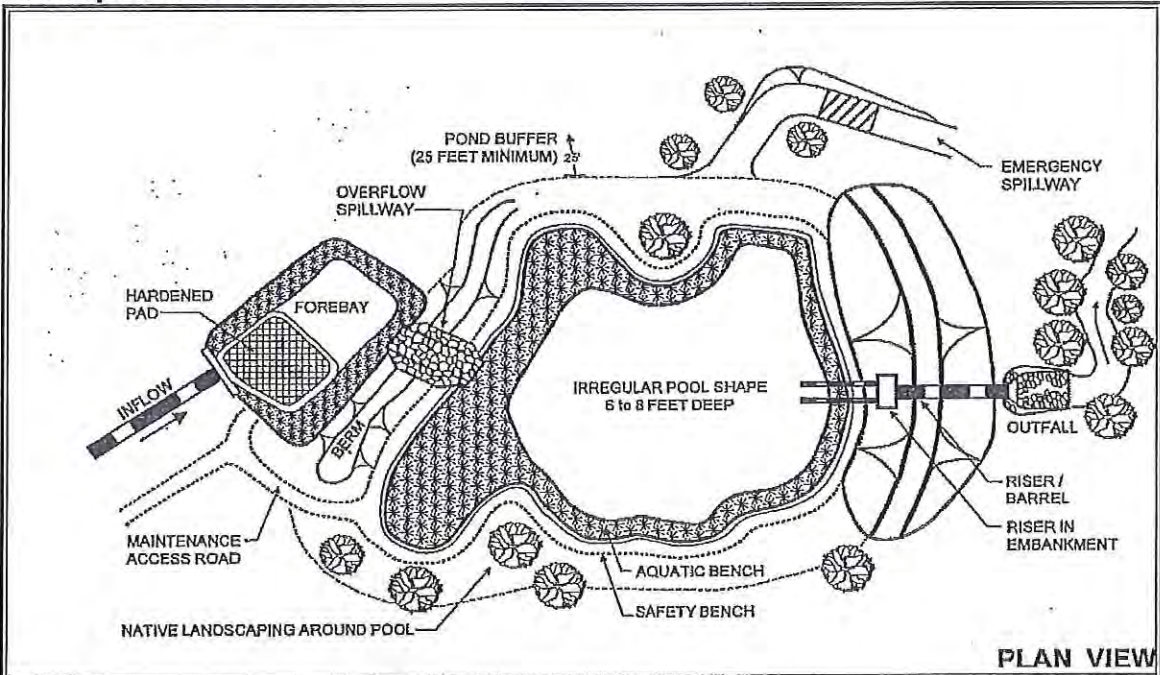
A water impoundment structure that intercepts stormwater runoff then releases it to an open water system at a specified flow rate. These structures retain a permanent pool and usually have retention times sufficient to allow settlement of some portion of the intercepted sediments and attached nutrients/toxics. Until recently, these practices were designed specifically to meet water quantity, not water quality objectives. There is little or no vegetation living within the pooled area nor are outfalls directed through vegetated areas prior to open water release. Nitrogen reduction is minimal.

(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)

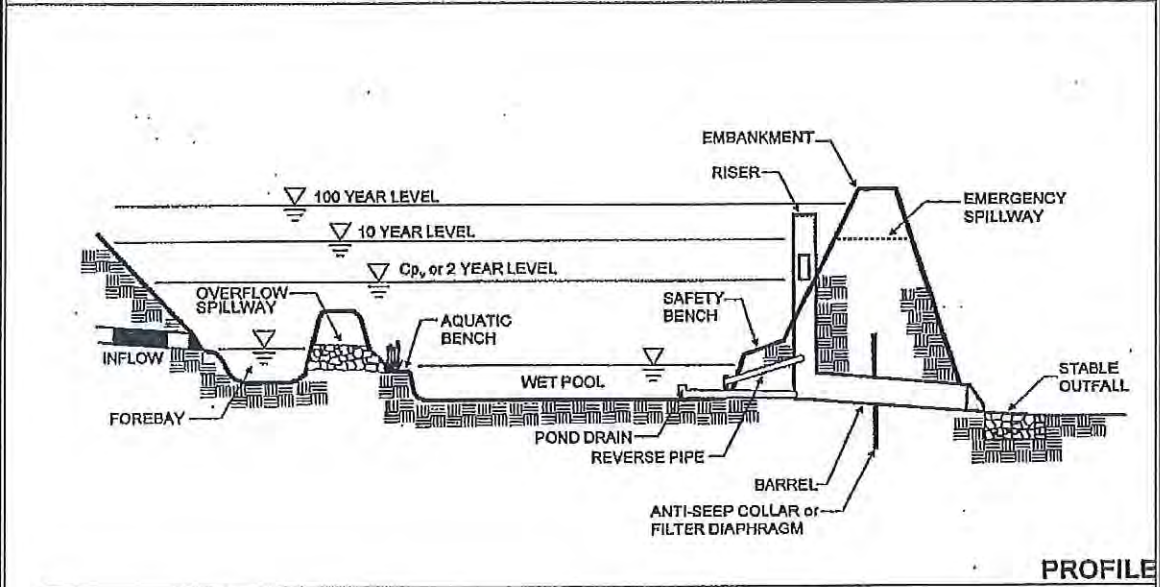


South Point Commercial Pond, Funkstown

# Example of Wet Pond



PLAN VIEW



PROFILE

A wet pond provides all of water quality volume storage in a permanent pool.



## WetPondWetland - Urban

### *Wetland*

A water impoundment structure that intercepts stormwater runoff then releases it to an open water system at a specified flow rate. These structures retain a permanent pool and usually have retention times sufficient to allow settlement of some portion of the intercepted sediments and attached nutrients/toxics. Until recently, these practices were designed specifically to meet water quantity, not water quality objectives. There is little or no vegetation living within the pooled area nor are outfalls directed through vegetated areas prior to open water release. Nitrogen reduction is minimal.

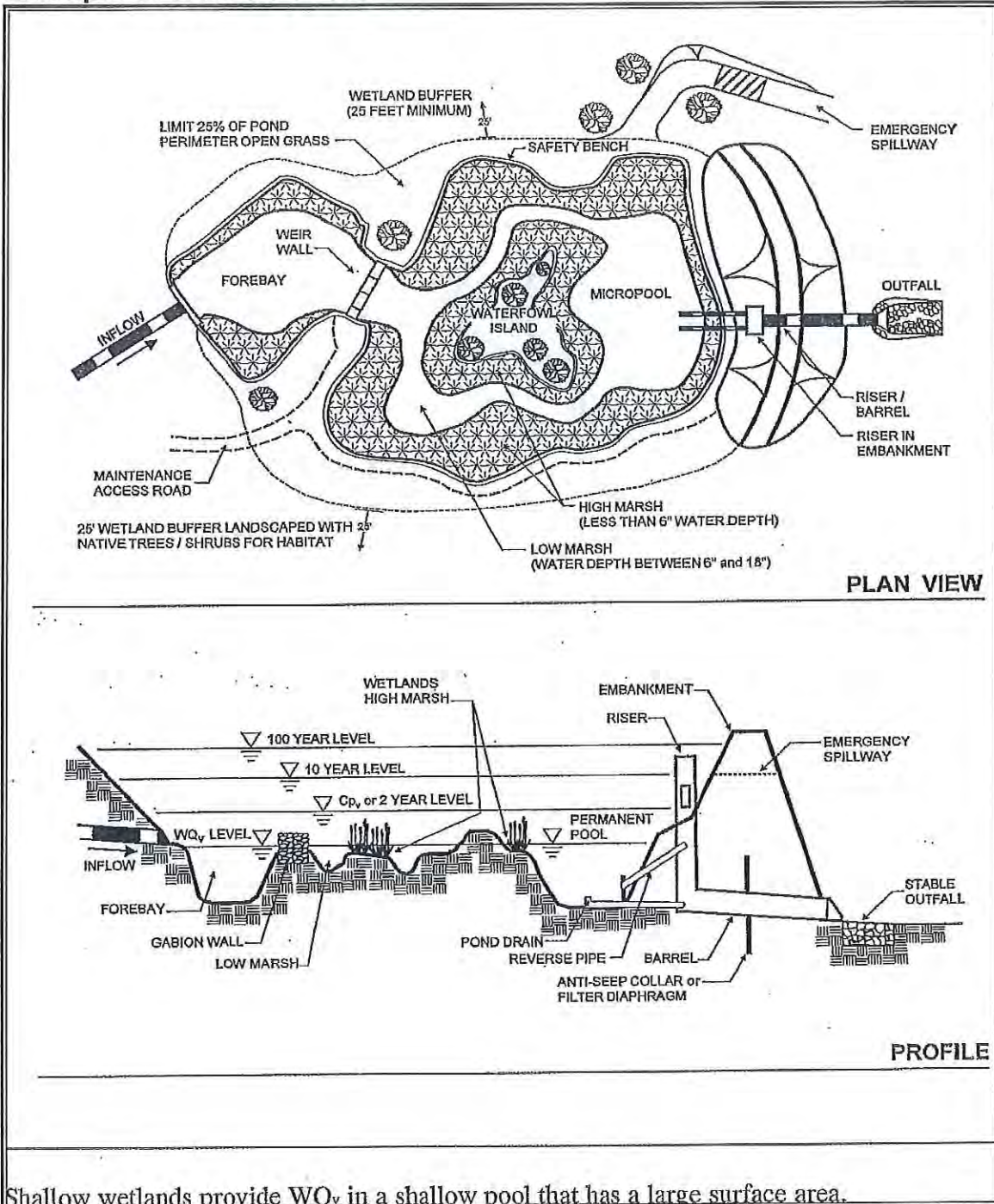
(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Boonsboro Middle School Wetland Pond



# Example of Wetland Pond



Shallow wetlands provide  $WQ_v$  in a shallow pool that has a large surface area.

2000 Maryland Stormwater Design Manual Volumes I & II

## BioSwale - Urban

### *BioSwale*

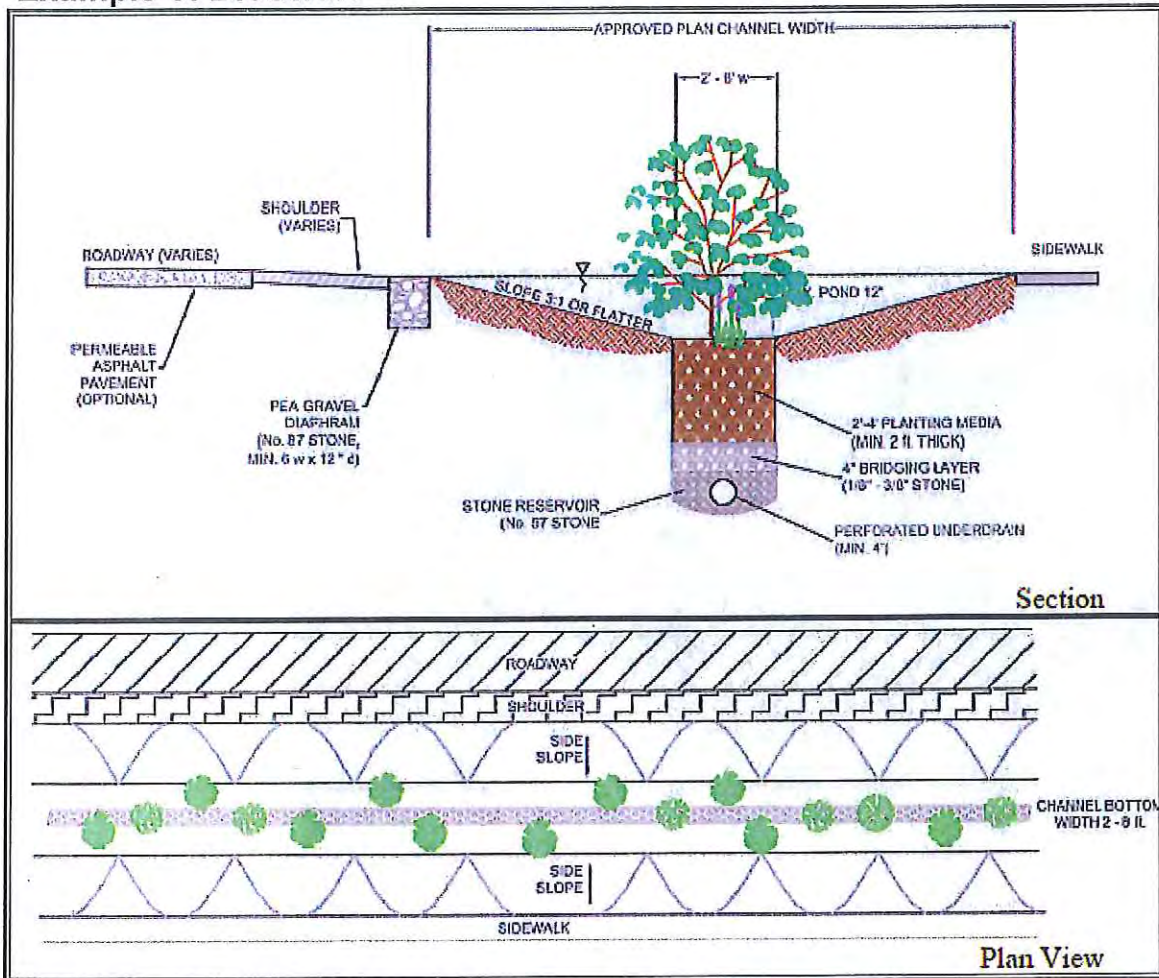
With a bioswale, the load is reduced because, unlike other open channel designs, there is now treatment through the soil. A bioswale is designed to function as a bioretention area. (See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Patriot Federal Credit Union, Longmeadow Road, Hagerstown



# Example of BioSwale



2000 Maryland Stormwater Design Manual Volumes I & II



# ImpSurRed - Urban

## *Impervious Urban Surface Reduction*

Reducing impervious surfaces to promote infiltration and percolation of runoff storm water.



149 West Franklin Street (Before)



149 West Franklin Street (After)

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## PermPaveNoSV – Urban

### ***Permeable Pavement –No Sand/Veg With Underdrain with AB Soils***

Pavement or pavers that reduce runoff volume and treat water quality through both infiltration and filtration mechanisms. Water filters through open voids in the pavement surface to a washed gravel subsurface storage reservoir, where it is then slowly infiltrated into the underlying soils or exits via an underdrain.

(See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)

## PermPaveWSV – Urban

### ***Permeable Pavement –With Sand/Veg With Underdrain with AB Soils***

Pavement or pavers that reduce runoff volume and treat water quality through both infiltration and filtration mechanisms. Water filters through open voids in the pavement surface to a washed gravel subsurface storage reservoir, where it is then slowly infiltrated into the underlying soils or exits via an underdrain. When sand and vegetation are present, high reduction efficiencies can be achieved.

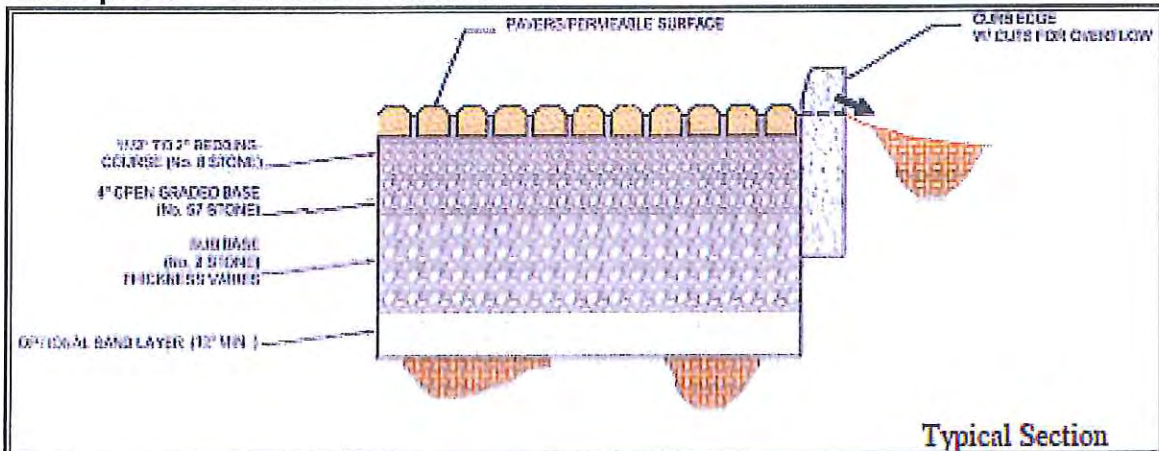
(See Chapter 5 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



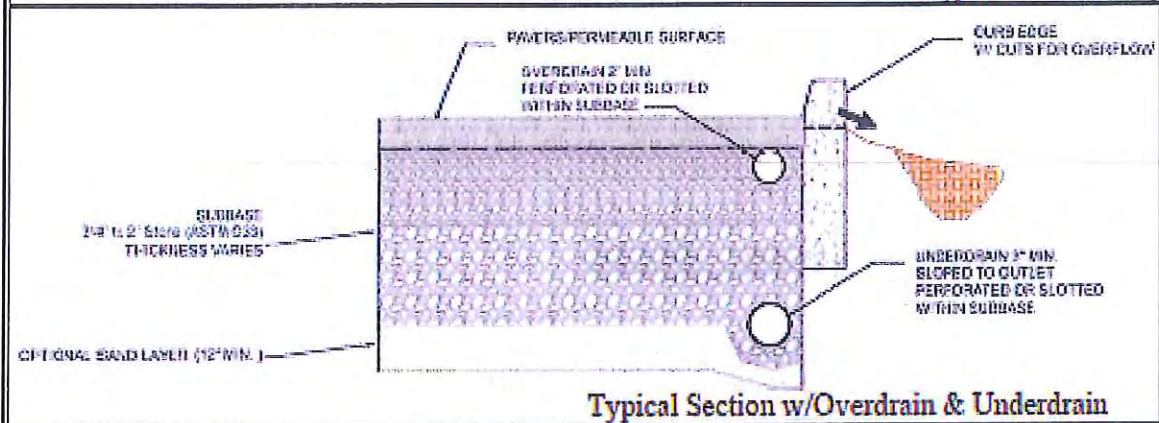
Centra Bank Dual Highway, Hagerstown



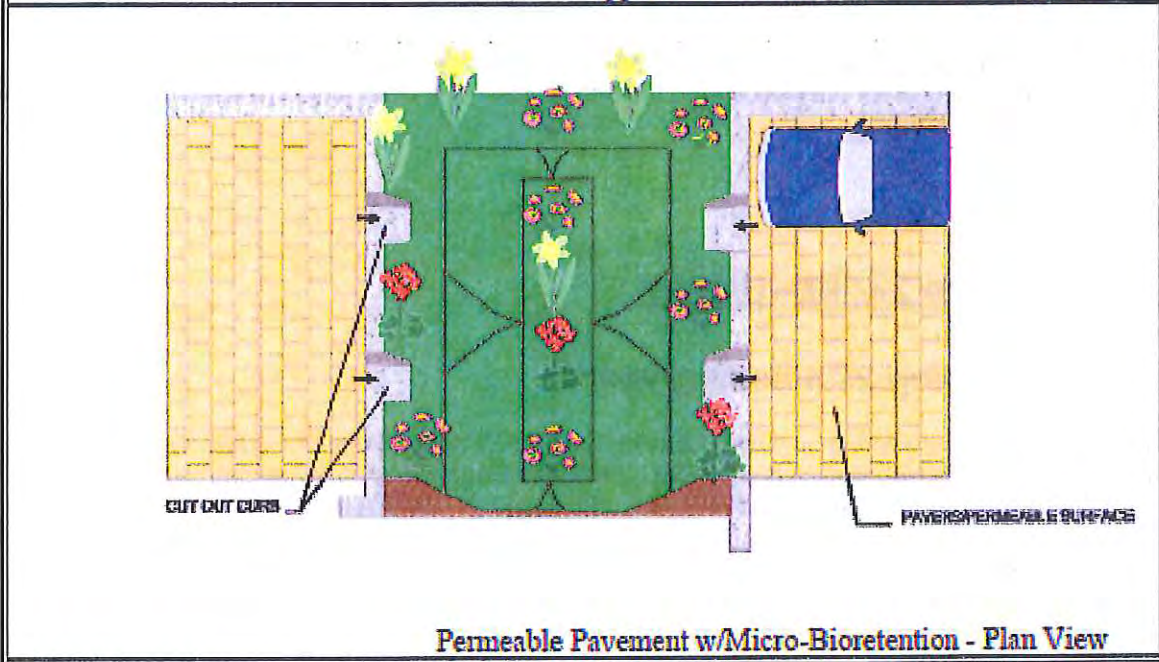
**Example of Permeable Pavers**



**Typical Section**



**Typical Section w/Overdrain & Underdrain**



**Permeable Pavement w/Micro-Bioretention - Plan View**

2000 Maryland Stormwater Design Manual Volumes I & II

## **StreetSweep Lbs - Urban**

### ***Street Sweeping Pounds***

Street sweeping measured by the weight of street residue collected. Street sweeping and storm drain cleanout practices rank among the oldest practices used by communities for a variety of purposes to provide a clean and healthy environment, and more recently to comply with their National Pollutant Discharge Elimination System stormwater permits. The ability for these practices to achieve pollutant reductions is uncertain given current research findings. Only a few street sweeping studies provide sufficient data to statistically determine the impact of street sweeping and storm drain cleanouts on water quality and to quantify their improvements. The ability to quantify pollutant loading reductions from street sweeping is challenging given the range and variability of factors that impact its performance, such as the street sweeping technology, frequency and conditions of operation in addition to catchment characteristics. Fewer studies are available to evaluate the pollutant reduction capabilities due to storm drain inlet or catch basin cleanouts.

## **StreetSweep 25 acres –Urban**

### ***Street Sweeping 25 times a year-acres*** ***(Formerly Called Street Sweeping Mechanical Monthly)***

Street sweeping conducted on a twice a monthly basis. The regularity of the street sweeping reduces nitrogen, phosphorus, and sediment whereas less regular street sweeping reduces only sediment. The same street must be swept 25 times a year. The acres submitted are for the area of streets that are swept.

## **StreetSweep 25 lbs–Urban**

### ***Street Sweeping 25 times a year-lbs***

Street sweeping conducted on a twice a monthly basis. The regularity of the street sweeping reduces nitrogen, phosphorus, and sediment whereas less regular street sweeping reduces only sediment. The same street must be swept 25 times a year. The lbs submitted are for the lbs material picked up by the sweeper. The lbs of material are the lbs of TSS removed. The TN reduction is .00175 of the TSS. The TP reduction is .0007 of the TSS.



**Example of Street Sweeping**



Courtesy of City of Hagerstown, MD



## UrbStrmRest –Urban

### *Urban Forest Buffers*

An area of trees at least 35 feet wide on one side of a stream, usually accompanied by trees, shrubs and other vegetation that is adjacent to a body of water. The riparian area is managed to maintain the integrity of stream channels and shorelines, to reduce the impacts of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals. This BMP converts urban land to forest land and provides a nitrogen, phosphorus and sediment reduction benefit to urban land of one times the amount of land converted.

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## UrbStrmRest -Urban

### ***Urban Stream Restoration or Regenerative Stormwater Conveyance***

Stream restoration in urban areas is used to restore the urban stream ecosystem by restoring the natural hydrology and landscape of a stream, help improve habitat and water quality conditions in degraded streams. The reduction is 0.02 lb nitrogen per foot, 0.0025 phosphorus per foot, and 2 lbs sediment per foot.



Stream Bank Restoration (Before) Lehmans Mill Road  
Washington County Engineering & Construction



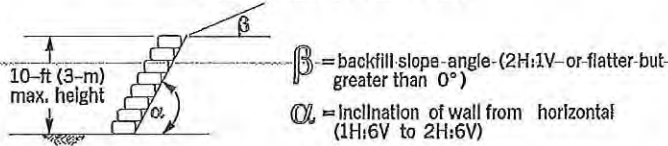
Stream Bank Restoration (After) Lehmans Mill Road  
Washington County Engineering & Construction



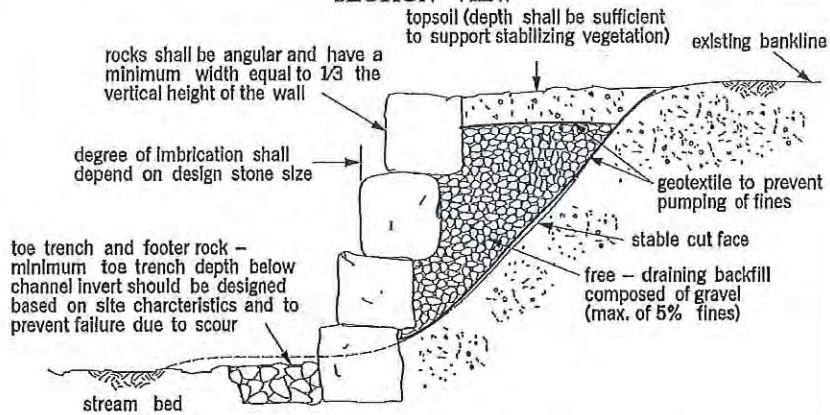
# Example of Stream Bank Restoration Method

## Maryland's Guidelines To Waterway Construction DETAIL 2.2: IMBRICATED RIPRAP

### DEFINITION SKETCH

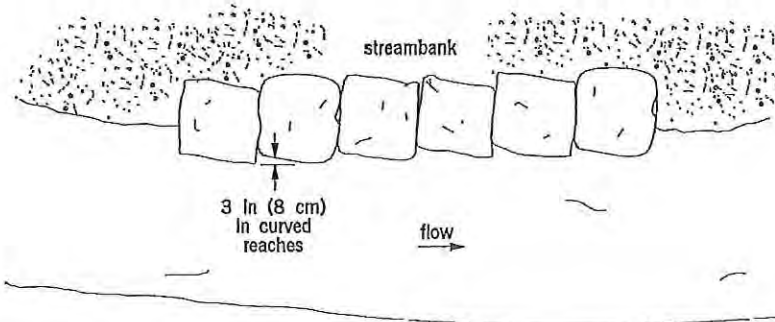


### SECTION VIEW



### PLAN VIEW

Construction Note: stone blocks shall be rotated into the bank during placement such that the upstream blocks overlap the downstream blocks by a minimum of 3 inches (8 cm)



SLOPE PROTECTION AND  
STABILIZATION TECHNIQUES

REVISED NOVEMBER 2000  
PAGE 2.2 - 3

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATER MANAGEMENT ADMINISTRATION

## UrbanTreePlant - Urban

### *Urban Tree Planting; Urban Tree Canopy*

Urban tree planting is planting trees on urban pervious areas at a rate that would produce a forest-like condition over time. The intent of the planting is to eventually convert the urban area to forest. If the trees are planted as part of the urban landscape, with no intention to convert the area to forest, then this would not count as urban tree planting.



Urban Tree Planting

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## VegOpChan -Urban

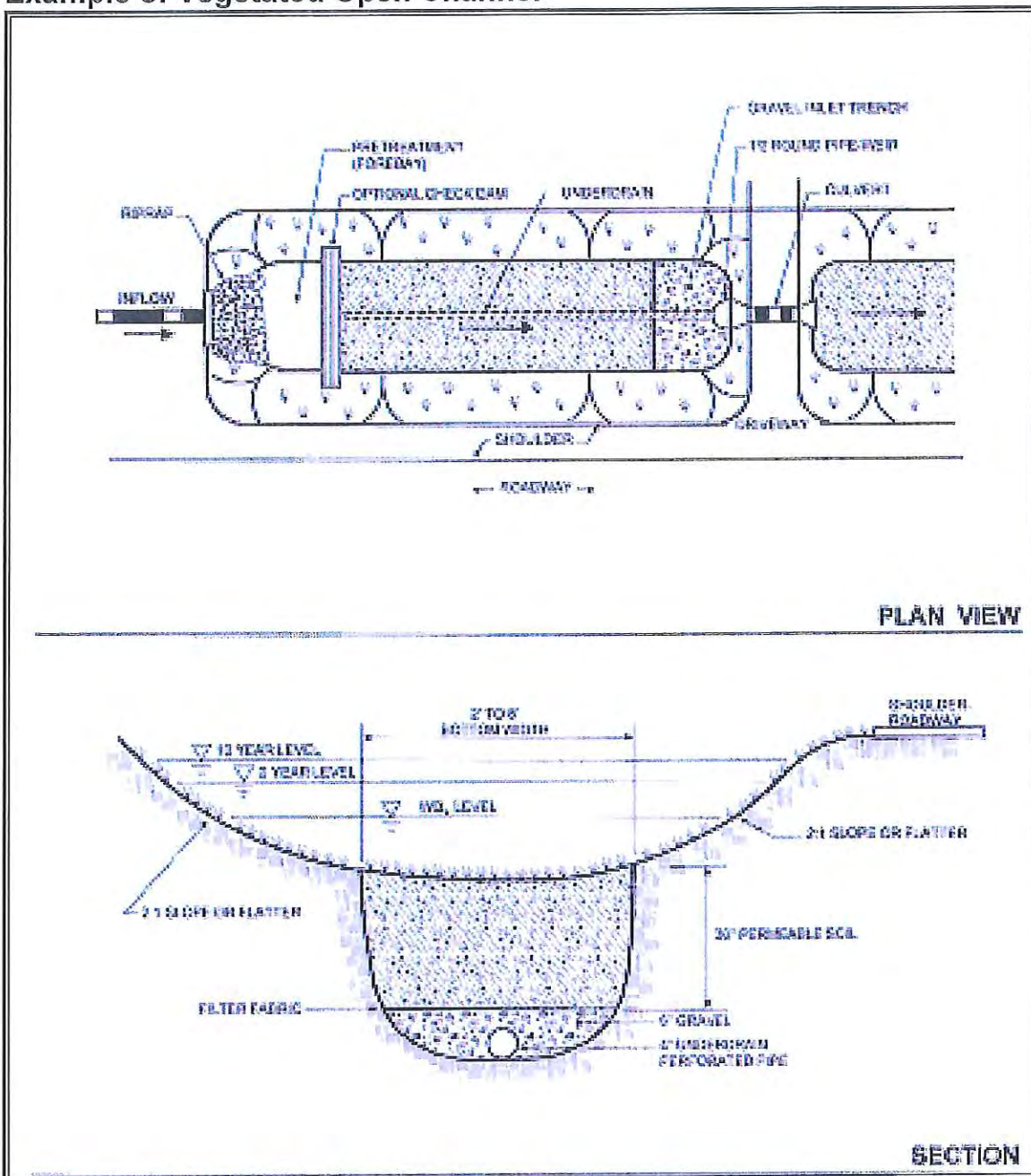
### *Vegetated Open Channel*

Open channels are practices that convey stormwater runoff and provide treatment as the water is conveyed, includes bioswales. Runoff passes through either vegetation in the channel, subsoil matrix, and/or is infiltrated into the underlying soils.  
(See Chapter 3 of the 2000 Maryland Stormwater Design Manual Volumes I & II for design criteria.)



Byers Meadows, Downsville

# Example of Vegetated Open Channel



2000 Maryland Stormwater Design Manual Volumes I & II



APPENDIX B - Target Loading Allocation Distribution Sheet

Target Loading Allocation Distribution Sheet

April 11, 2012

County MS4 Phase II		Total Nitrogen		Total Phosphorus	
Sector	Percentage of County Phase II Area	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target
<b>Total Acres</b>	<b>22,162.20</b>	<b>17,745.12</b>	<b>11,830.08</b>	<b>29,575.20</b>	<b>1,616.40</b>
County Responsibility	19,917.40	15,947.72	10,631.82	26,579.54	1,452.68
County Phase II	2,244.80	1,797.40	1,198.26	2,995.66	163.72
Funkstown Responsibility	2,250.00	1,801.10	1,201.79	3,002.26	164.41
Williamsport Responsibility	646.00	517.25	344.83	882.08	47.12
Keedysville Responsibility	186.50	149.33	99.55	248.88	13.60
Boonsboro Responsibility	732.50	586.51	391.01	977.54	53.42
Hancock Responsibility	323.80	259.26	172.84	432.11	23.62
Clear Spring Responsibility	53.40	42.76	28.50	71.26	3.89
Sharpsburg Responsibility	77.60	62.13	41.42	103.55	5.66

Non-regulated Urban		Total Nitrogen		Total Phosphorus	
Sector	Percentage of Nonregulated Urban Area	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target
<b>Total Acres</b>	<b>11,375.70</b>	<b>9,496.8</b>	<b>6,331.2</b>	<b>15,628.0</b>	<b>777.8</b>
Nonregulated	11,375.70	9,496.8	6,331.2	15,628.0	777.8
County Responsibility	8,230.50	6,871.1	4,580.7	11,451.8	562.8
Funkstown Responsibility	-	-	-	-	-
Williamsport Responsibility	-	-	-	-	-
Keedysville Responsibility	372.50	311.0	207.3	518.3	25.5
Boonsboro Responsibility	1,247.50	1,041.5	694.3	1,735.6	85.3
Hancock Responsibility	1,445.20	1,206.5	804.3	2,010.8	99.8
Clear Spring Responsibility	17.60	14.7	9.8	24.5	1.2
Sharpsburg Responsibility	62.40	52.1	34.7	86.8	4.3

Municipal MS4 Phase II		Total Nitrogen		Total Phosphorus	
Sector	Percentage of Municipal MS4 Area	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target	2017 (2009 to 2017) Reduction Target	2025 (2017 to 2025) Reduction Target
<b>Total Acres</b>	<b>8,438.80</b>	<b>7,957.4</b>	<b>5,304.9</b>	<b>13,262.3</b>	<b>644.4</b>
Municipal MS4	8,438.80	7,957.4	5,304.9	13,262.3	644.4
Hagerstown Responsibility	7,792.80	92,256.92	86,952.0	3,138.6	287.8
Smithsburg Responsibility	646.00	8,096.3	7,611.6	1,211.7	56.6



APPENDIX D -  
OVERALL RECOMMENDATION ON THE  
WIP PHASE II DOCUMENT WITH  
OVERALL COST ESTIMATE FOR  
WASHINGTON COUNTY

## **Overall Recommendation on the WIP Phase II Document:**

The State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction. The WIP Committee based on the information in this report and as presented for the septic sector recommends that the elected bodies consider the following verbiage in response to the request from MDE. Please note that the Board of County Commissioners of Washington County, Maryland has been used in this document as an example and can be replaced with the appropriate elected body as needed.

### Committee Recommendation for elected bodies:

The Board of County Commissioners of Washington County, Maryland (the "Board") acknowledges that the Chesapeake Bay (the "Bay") has been identified as a water body which is impaired for nutrients and sediments. The Board further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State of Maryland and has requested that each of these geographical areas prepare a Watershed Implementation Plan developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater and septic sectors. The Board has addressed the major wastewater treatment plant upgrades required to meet the portion of the wastewater sector under their jurisdiction by approving these projects in the Washington County Capital Improvement Project plan. The WIP Committee has provided a report to the Board on the urban and septic sectors which documents the cost for meeting the target load reductions to exceed \$1 billion dollars. These costs were prepared utilizing historically known values for upgrades in the septic sector and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King for MDE report provided by MDE for use in preparing costs for the storm water sector. Therefore, in response to the WIP Committee reports, the Board is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by MDE under its jurisdiction and which would directly impact the citizens of Washington County. Adoption of such a plan by the Board would be fiscally irresponsible and financially unfeasible. However, the Board does acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the then elected Board. Additionally, Washington County staff should pursue grant funding as available to support projects that work towards the progress of meeting the target loads established by MDE. Therefore, the

Board is instructing County Staff and the WIP Committee to recommend a WIP Phase II report for submission to MDE which includes a plan encompassing the following:

- approved operating and CIP budget lines which work toward achieving the target loads with the caveat that full implementation is contingent upon continued funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Board and grant sources;
- County Staff to continue investigation into new and alternative methods of working towards the target load reductions
- pursue potential funding sources of implementation projects.
- development of a tracking and reporting system for BMP implementation in Washington County
- work on the offset policy for future development in Washington County
- education of the citizens on the WIP and what they can do to reduce the nutrient and sediment load in Washington County
- work with MDE staff to refine the loading reductions assigned to Washington County to reflect the true county conditions and not from a broader Bay model perspective
- general administrative functions as required to work on the WIP and do not commit Washington County to any work which is not already funded.



Washington County  
Watershed Implementation Plan Phase II  
Total Estimated Cost to Achieve  
2025 Target Allocation

Jurisdiction	Sector	Estimated Cost	Subtotal
Washington County	Urban	\$ 514,819,051.00	
	Septic	\$ 230,204,800.00	
	Wastewater	\$ 49,322,610.00	
			\$ 794,346,461.00
City of Hagerstown	Urban	\$ 210,087,831.00	
	Wastewater	\$ 10,206,107.00	
			\$ 220,293,938.00
Town of Smithsburg	Urban	\$ 16,233,028.00	
Town of Boonsboro	Urban	\$ 36,545,305.00	
Town of Clear Spring	Urban	\$ 1,297,653.00	
Town of Funkstown	Urban	\$ 4,082,626.00	
Town of Keedysville	Urban	\$ 10,329,110.00	
Town of Hancock	Urban	\$ 32,814,956.00	
Town of Sharpsburg	Urban	\$ 2,570,522.00	
Town of Williamsport	Urban	\$ 11,721,072.00	
		\$ 1,130,234,671.00	

Total Estimated Cost by Sector

Stormwater		\$ 840,501,154.00
Septic		\$ 230,204,800.00
Wastewater		\$ 59,528,717.00

11-May-12

APPENDIX E -  
POSITION DOCUMENTS  
FROM  
ELECTED BODIES

**BOARD OF COUNTY COMMISSIONERS OF  
WASHINGTON COUNTY  
Hagerstown, Maryland**

May 22, 2012

**NATIONAL PUBLIC WORKS WEEK**

The County Commissioners met at 8:00 a.m. at the Hagerstown Regional Airport Fire Station, 18434 Showalter Road, Hagerstown, to present a proclamation to Public Works employees to observe Public Works Week during the week of May 20-26.

President Terry L. Baker called the regular meeting of the Board of County Commissioners of Washington County, Maryland to order at 10:05 a.m. in the County Administration Building located at 100 West Washington Street, Hagerstown, Maryland with the following members present: Vice President John F. Barr and Commissioners Ruth Anne Callaham, Jeffrey A. Cline, and William B. McKinley.

**INVOCATION AND PLEDGE OF ALLEGIANCE**

Commissioner Barr gave the Invocation followed by the Pledge of Allegiance to the Flag by the full assemblage.

**APPROVAL OF MINUTES –MAY 15, 2012**

Commissioner McKinley, seconded by Callaham, moved to approve the minutes of May 15, 2012 as presented. The motion passed unanimously.

**COMMISSIONERS REPORTS AND COMMENTS**

Commissioner Cline recognized Public Works employees and Emergency Medical Service providers for the services they perform in the community. He attended the "Celebrating Minds at Work" event at Salem Avenue Elementary School and a meeting of the Agricultural Land Preservation Advisory Board. Mr. Cline congratulated Jersey Mike's on its one-year anniversary and thanked them for supporting charity events in the community. He participated in the Economic Development Commission's small business outreach visits to Ridge Runner Publishing and Parkway Neurological Center. Commissioner Cline attended a Chamber of Commerce mixer, Change Awareness event at Star Community, the National Pike Wagon Train event, and Smithsburg Pride Days. He also test-drove a vehicle at Hagerstown Ford in support of South Hagerstown High School's band uniform fundraiser. Mr. Cline enjoyed the "Rock 'n Roll Never Forgets" dance at North Hagerstown High School sponsored by the County's Recreation Department.

Commissioner Callaham attended Salem Avenue School's "We the People" celebration and the visits to local businesses Ridge Runner Publishing and Parkway Neurological Center. She enjoyed the Smithsburg Pride Days parade and the Ferry Hill Place dedication. Ms. Callaham welcomed a group of veterans of various wars to the County who were traveling from Wisconsin to Illinois to visit memorials. She attended the recent Maryland Municipal League (MML) meeting where Julie Pippel, Director of Environmental Management, discussed the Watershed Implementation Plan. Commissioner Callaham recognized the jobs well done by Public Works Department employees during Public Works Week.



Commissioner Callahan moved to extend the Residential Stimulus Program by six months and allow six additional houses per developer. Commissioner McKinley recommended a twelve-month extension period and an additional twelve houses per developer. Ms. Callahan restated her motion to extend the Residential Stimulus Program by twelve months, through June 30, 2013, and allow twelve additional houses per developer, or thirty total houses per developer. Commissioner McKinley seconded the motion. The motion passed unanimously.

#### **ESTABLISHMENT OF REVOLVING LOAN FUND**

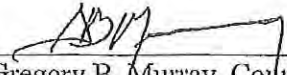
Jef Bohn, Chair of the Economic Development Commission (EDC) Board's Resource Development Committee, and Guy Winterberg, Assistant Director of the Tri-County Council for Western Maryland (TCC), presented information regarding the establishment of a Washington County Revolving Loan Fund (RLF) to assist local businesses. Jef Bohn indicated that the EDC Board has approved the recommendation to collaborate with the TCC to establish a separate County RLF using TCC's existing revolving loan structure and program. He stated that \$1 million would be needed to establish the fund and provide administrative fees to TCC. Guy Winterberg advised of the process by which the RLF would be administered and the criteria for applying for loans. The Commissioners discussed the information presented and agreed that the RLF should not compete with local initiatives such as the Hagerstown Loan Fund. It was the consensus of the Commissioners to direct the Committee to hold meetings with experts in the industry, continue to foster a working relationship with TCC, and develop details of a Revolving Loan Fund to present at a future meeting of the Commissioners.

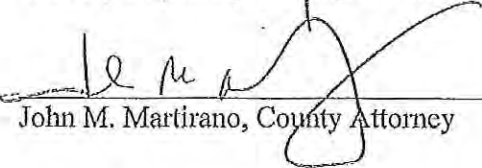
#### **WASHINGTON COUNTY WATERSHED IMPLEMENTATION PLAN**

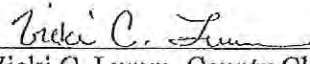
Julie Pippel, Director of Environmental Management, presented information on the process and development of the Watershed Implementation Plan (WIP) and introduced members of the County's WIP Committee in attendance. She stated that the WIP is a federally mandated plan due to a court ruling stating that counties with waters draining into the Chesapeake Bay must comply with the Federal Clean Water Act (CWA). Ms. Pippel stated that the CWA requires that any water body that does not meet the water quality standards established by regulations must have a Total Maximum Daily Load (TMDL) prepared for each of the water quality standards that it exceeds. The Committee prepared a report based on the septic and stormwater sectors. A preliminary cost estimate to meet the target load reductions for those sectors exceeded \$1 billion. Ms. Pippel read the alternatives on how to proceed that were suggested by the Committee, which include stating that the Board of County Commissioners agree that the plan would be fiscally irresponsible and financially unfeasible; but County staff would pursue grant funding as available to support projects that work toward the progress of meeting the target loads established by the Maryland Department of the Environment (MDE). Ms. Pippel indicated that the Committee is recommending a WIP Phase II report for submission to MDE that includes a plan containing methods to meet the target as a whole. The Commissioners discussed the proposal.

May 22, 2012  
Page 10

Commission President Terry L. Baker opened the hearing for public testimony. Nine individuals spoke on issues concerning the budget. After all testimony was given, Commissioner Baker adjourned the hearing at 7:50 p.m.

  
\_\_\_\_\_  
Gregory B. Murray, County Administrator

  
\_\_\_\_\_  
John M. Martirano, County Attorney

  
\_\_\_\_\_  
Vicki C. Lumm, County Clerk

**REQUIRED MOTION**

**MAYOR & CITY COUNCIL  
HAGERSTOWN, MARYLAND**

**DATE:** June 19, 2012

**TOPIC:** Motion: Watershed Implementation Plan Report & Statement  
Charter Amendment \_\_\_\_\_  
Code Amendment \_\_\_\_\_  
Ordinance \_\_\_\_\_  
Resolution \_\_\_\_\_  
Other  X

**MOTION:** I hereby move to approve the submittal of Washington County's Phase II Watershed Implementation Plan to the Maryland Department of the Environment, along with the attached Position Statement. This statement, which expresses the Council's concern over the estimated cost of the required stormwater practices, only commits the City to expenditures that are already contemplated in the Capital Improvement Project budget, or to projects that are determined to be financially feasible on a yearly basis.

DATE OF INTRODUCTION: 6/19/2012

DATE OF PASSAGE: 6/19/2012

EFFECTIVE DATE: 6/19/2012



## WIP Phase II Position Statement

The City Council for the City of Hagerstown Maryland (the "Council"), acknowledges that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Chesapeake Bay, and is requiring each of the Chesapeake Bay states to prepare for approval a Watershed Implementation Plan (a "WIP") outlining how the State will meet the loading reductions identified by EPA.

The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State, and has requested that each of these geographical areas prepare a WIP developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater, and septic sectors. The Council has addressed the wastewater treatment plant upgrades required to meet the portion of the wastewater section under their jurisdiction by approving projects in the City of Hagerstown's Capital Improvement Plan budget.

The WIP Committee has provided a report to the Council on the urban and septic sectors which documents that the overall cost to meet the target load reductions will exceed \$1 billion. These costs were prepared utilizing historically known values for upgrades in the septic sector, and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King and provided by MDE for use in estimating costs in the urban stormwater sector.

In response to the WIP Committee's reports, the Council is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet MDE's target loads which would directly impact City citizens. Adoption of such a plan by the Council would be fiscally irresponsible and financially unfeasible. However, the Council does acknowledge that even though full implementation is unacceptable, progress at an acceptable, financially feasible level as determined by operating and capital improvement budgets on an annual basis should be considered by the then elected Council. Additionally, City staff should pursue grant funding as available to support projects that work toward meeting MDE's target loads.

Therefore, the Council recommends submission of a WIP Phase II report to MDE which encompasses the following:

- previously approved operating and CIP budget lines which work toward achieving the target loads, with the caveat that full implementation is contingent upon funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Council, grant sources, and other potential funding sources;
- continued investigation by City staff into new and alternative methods to meet target load reductions;
- education of citizens on the WIP and what they can do to reduce pollutant loads in the City;
- continued work with MDE staff to refine the loading reductions assigned to the City



# TOWN OF BOONSBORO

21 NORTH MAIN STREET, BOONSBORO, MD 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5690

July 10, 2012

Julie Pippel, Director  
Wash. Co. Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

RE: Town Of Boonsboro Watershed Implementation Plan Concurrence

Ms. Pippel,

The Mayor and Council of the Town of Boonsboro discussed the Washington County Watershed Implementation Plan (WIP) at their regular meeting on July 2, 2012. The Mayor and Council of Boonsboro took the following action:

The Mayor and Council of Boonsboro acknowledge the plan and feel that it is fiscally irresponsible and financially unfeasible for the Town of Boonsboro to commit to the loading reductions and implementation actions as presented in the plan; however agree to the concept of the plan overall and will continue efforts, based upon yearly budget review and availability of funds, to work towards reducing maximum daily loads.

If you need any additional information, please feel free to contact me at 301-432-5690.

Sincerely,

Megan Clark  
Town Planner/Zoning Administrator  
Town of Boonsboro



PAUL D. HOSE, JR.  
MAYOR

STEVEN L. BLICKENSTAFF  
VICE MAYOR

PHONE 301-842-2252  
FAX 301-842-2920

## TOWN OF CLEAR SPRING

P.O. BOX 104  
CLEAR SPRING, MARYLAND 21722-0104

COUNCIL  
MEGAN L. YEAKLE  
THEODORE R. HOVERMALE  
CAROL E. HOVERMALE

WILLIAM S. BARTON  
ATTORNEY

To Whom It May Concern:

The Clear Spring Mayor and Council acknowledge that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council also acknowledges that the United States Environmental Protection Agency has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Town staff served on a Water Implementation Committee and developed a plan. Therefore, in response to the WIP Committee reports, the Clear Spring Mayor and Council are unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by Maryland Department of the Environment under their jurisdiction and which would directly impact the Citizens of Clear Spring. Adoption of such a plan by the Mayor and Council would be fiscally irresponsible and financially unfeasible. However, the Mayor and Council do acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the elected officials.

Sincerely,

Paul D. Hose, Jr.  
Mayor





**FUNKSTOWN MAYOR & COUNCIL**

P.O. Box 235 • 30 East Baltimore St.  
Funkstown, Maryland 21734

June 29, 2012

Ms. Julie Pippel, Director  
Washington County Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Dear Julie,

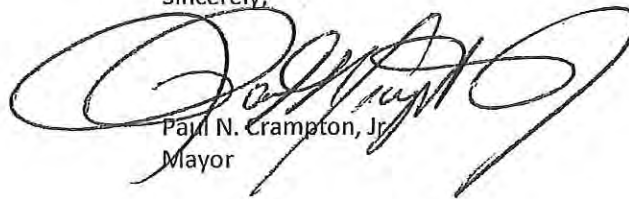
The Mayor and Council understand that the State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction.

After lengthy discussion between the Mayor and Council, and detailed clarification, we will pursue potential funding sources of implementation projects, and work with the County staff to continue investigation into new and alternative methods of working towards the target load reductions.

The Mayor and Council voted at the June 11, 2012 meeting that while they do not recognize a problem, there was a unanimous agreement to do what is possible based on the Town's budget.

If you have any questions, or I can be of further assistance please do not hesitate to contact me.

Sincerely,



Paul N. Crampton, Jr.  
Mayor

PNC

Cc: Robert Kuczynski, Town Attorney  
Funkstown Council



## *Town of Hancock*

*126 West High Street,  
Hancock, MD 21750  
301-678-5622*

July 2, 2012

Julie Pipple,  
Washington County WIP Coordinator  
16232 Elliot Parkway  
Williamsport, MD 21795

Dear Ms. Pipple

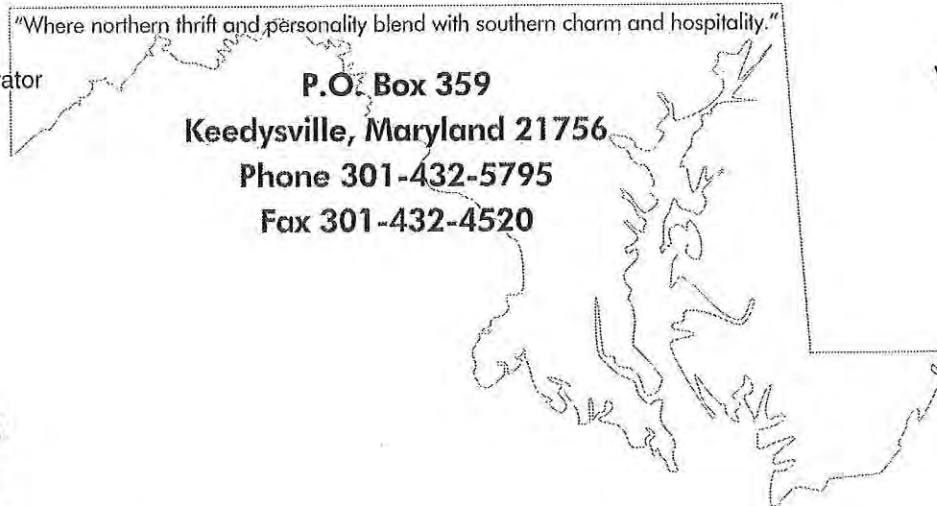
The Mayor and Council of Town of Hancock recognizes the need to address the issues raised in the Watershed Implementation Plan, however the associated costs make this impractical and fiscally irresponsible. The Town is committed to clean water and green operations, and will pursue grant funding when and where available to address targeted items, in an effort to reach goals set forth by the EPA.

Sincerely,

David D. Smith  
Town Manager/ CFO

# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Terry Levey, Asst. Mayor  
David Bishop, Town Administrator



Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

June 6, 2012

Julie Pippel  
Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, MD 21795

Julie,

At the June 4, 2012 meeting of the Mayor & Council of Keedysville, the following statement from the Mayor & Council, regarding Phase II of the Watershed Implementation Plan for the Chesapeake Bay, was read into the minutes:

“The Mayor & Council of Keedysville acknowledge that the Chesapeake Bay has been deemed to be impaired with nitrogen, phosphorous and sediment. The Mayor & Council also acknowledge that the U.S. Environmental Protection Agency is requiring the states in the Bay watershed to prepare a plan to reduce the introduction of these elements into the Bay and that the Maryland Department of the Environment has tasked the individual counties within the state to prepare a plan to reduce the introduction of these elements by specific amounts. The town of Keedysville has been working with the Washington County Watershed Implementation Plan group formed to devise the county’s plan for these reductions. After receiving the current Total Maximum Daily Load (TMDL) estimates and the associated reductions deemed necessary by MDE, and further distributing the reductions to the stakeholders in the County, of which Keedysville is one, the best management practices (BMP’s) approved by EPA that are necessary to achieve these reductions were calculated. Applying costs obtained from “Cost of Stormwater Practices in Maryland Counties”, by Dr. King, to the BMP’s necessary to reach the reductions distributed to Keedysville resulted in a cost of over \$10 million. Therefore, the Mayor & Council find it fiscally irresponsible to commit to a full implementation of this plan. However, the Mayor & Council will continue to work with the Washington County WIP group to further refine the load reductions necessary and the best methods to obtain these reductions, will seek fiscally responsible BMP’s to reduce the loads from Keedysville, will seek to develop a tracking and recording system for BMP implementation and will seek grant funding from various sources to further implement BMP’s.”



# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Derry Levey, Asst. Mayor  
Richard Bishop, Town Administrator

"Where northern thrift and personality blend with southern charm and hospitality."

**P.O. Box 359**  
**Keedysville, Maryland 21756**  
**Phone 301-432-5795**  
**Fax 301-432-4520**

Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

The section for Keedysville's milestones for FY 2013 is being composed and will be sent to you shortly.

Sincerely,

Richard Bishop  
Administrator

**POOLE & KANE, P.A.**  
ATTORNEYS AT LAW  
29 WEST FRANKLIN STREET  
HAGERSTOWN, MARYLAND 21740  
TELEPHONE (301) 790-3600  
FAX (301) 714-0082

D. BRUCE POOLE  
BRIAN A. KANE  
JAMES W. STONE

DAVID K. POOLE  
(1926-2005)

TRAVIS W. POOLE  
ANDREW J. SERAFINI, JR.

June 21, 2012

**RECEIVED**

JUN 25 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

Julie Pippel, Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Re: Town of Sharpsburg WIP Phase II

Dear Julie:

The Mayor and Council of Sharpsburg will, on July 9, 2012, be considering a proposed resolution in response to the request from the Maryland Department of the Environment that the municipality review and adopt the WIP Phase II document. The proposed resolution takes a position along the lines of that recommended by the County's WIP Committee.

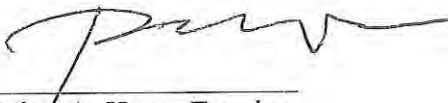
As and when a final resolution is adopted, I will forward same to you for your records.

If you have any questions, please don't hesitate to be in touch.

Very truly yours,

POOLE & KANE, P.A.

By: \_\_\_\_\_

  
Brian A. Kane, Esquire  
Town Attorney  
for Sharpsburg, Maryland

BAK/dlk

Cc: Mayor Hal Speilman



**MAYOR AND COUNCIL**  
P.O. Box 237  
SMITHSBURG, MD 21783  
(301) 824-7234  
FAX (301) 824-6219

**RECEIVED**

JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

June 27, 2012

Julie Pippel, Chairman  
Washington County WIP Team  
16232 Elliott Parkway  
Williamsport, MD 21795

Dear Ms. Pippel:

The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.

If you need any additional information concerning this matter, please do not hesitate to contact this office.

Sincerely,

Mildred L. Myers,  
Mayor

MLM/bm



Tuesday, July 3, 2012

The regular meeting of the Smithsburg Mayor and Council was held on Tuesday, July 3, 2012, with Mayor Myers and Councilmembers Abbott, Fritsch, Jernigan and Lushbaugh present. Councilmember Souders was absent.

The meeting was opened with the Pledge of Allegiance led by Betsy Martin.

Mayor Myers then conducted the swearing in ceremony for the two new Councilmembers, James Fritsch and Heath Abbott. Mayor Myers noted that she had sworn in Councilmember Souders prior to the June work session due to the fact that he was on vacation this week.

On a motion by Councilmember Jernigan, Council unanimously approved the agenda as presented.

The minutes of the Organizational Meeting held on May 22<sup>nd</sup> were approved unanimously as presented on a motion by Councilmember Lushbaugh. Councilmember Lushbaugh made a motion to approve the minutes of the June 5, 2012 meeting of the Mayor and Council as presented. Motion passed by a unanimous vote. On a motion by Councilmember Jernigan, the minutes of the Special Meeting held on June 18<sup>th</sup> were approved by Council. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained. The minutes of the June 19<sup>th</sup> Work Session were approved on a motion by Councilmember Jernigan. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained.

The Treasurer's report was unanimously approved by the Council on a motion by Councilmember Jernigan.

## **MAYOR'S REPORT**

Mayor Myers reported on the following: (1) Met with structural engineer and Public Works Director to review E. Water Street bridge. (2) Extended a thank you to the County Commissioners for bringing their regular meeting out to the Town. (3) Welcomed the incoming Council and looking forward to a new year of service to our citizens. (4) Extended her thanks and much appreciation to the outgoing Councilmembers Shirley Aurand and Jerome Martin for their dedicated service to their town.

## **REPORTS -- DEPARTMENT HEADS**

Betsy Martin, Clerk/Treasurer/ Manager reported the following: (1) Attended meeting of the County Commissioners held in Council Chambers. Extended a thank you from the Town for all the Commissioners have done for Smithsburg. (2) Reviewed water billing. Prepared and sent out quarterly water bills. (3) Assisted Public Works Director in tracking maintenance expenses on Town Trucks for report to Council. (4) Mailed out tax bills. (5) Continued preparatory work on town audit. (6) Nancy Walzl worked on preparing the Falls Sports schedules for usage of parks. (7) Attended Pride Days meeting. The next meeting of the Pride Days Committee will be held on Thursday, September 20<sup>th</sup> at 7 PM. Everyone is invited to attend to help plan for the Pride Days event which will include the town's 200<sup>th</sup> Birthday Celebration. (8) Thanked Shirley Aurand for her years of service to the Town as a Council person. (9) Extended a welcome to the two new Councilmembers.

Chief George Knight presented the following report: (1) There were 107 calls for service during the month of June with 1 juvenile arrest. (2) The department patrolled a total of 2,995 miles this month and did 17 hours and 20 minutes of foot patrol. (3) A total of 11 premise checks were conducted during the month. (4) The Department worked a total of 91 hours at the Firemen's Carnival which included 5 hours overtime. (5) Chief Knight, Corporal Witmer and OFC 1<sup>st</sup> Class Hudson attended firearms qualification. (6) Corporal Witmer attended training for school incidents. (7) The Department worked a

total of 10 hours for the Smooth Operator Grant and 9 hours for the Health Department Alcohol Grant. (8) Reported that all went well at the Firemen's Carnival. Chief Knight listed the following goals for his department: Upgrade Computers, Additional Incident Training for School Incidents, Additional Community Policing, School Speed Zones and Cameras. He also stated that he would like to partner with the Boys and Girls Clubs to have activities in the town.

Jeff Long, Public Works Director, submitted the following report: (1) Ongoing waste water infrastructure repairs. Mr. ReHab is in Town completing all priority 2 repairs. (2) Completed 2<sup>nd</sup> quarter water meter readings and re-reads. (3) Maryland Rural Water Association class was held on June 14<sup>th</sup> at Town Hall. (4) Repaired an 8 inch water main break on June 5<sup>th</sup>. (5) Painted the rest room floors at the Lions Community Park. (6) Installed wire in ceiling at the large pavilion at Lions Community Park. (7) Trimmed trees for visibility at the intersection of Geiser Way and N. Main Street. (8) Began second week spraying of the season. (9) Trimmed trees and shrubs at Veterans Park. (10) Repaired the roof at the Historical Society Building. (11) Cut and removed several broken and down limbs from storms throughout the month. Upcoming events and projects are: Continue sewer infrastructure work and smoke testing. Average daily water consumption for the month was 242,813 gallons.

On a motion by Councilmember Jernigan, Council unanimously voted to spend up to \$3,200 for safety surface at Lions Community Park. This money will be taken from the new park budget - \$1,000 – miscellaneous expenses and \$2,200 for roadway improvement at Veterans Park.

#### **REPORTS -- COMMISSIONS, COMMITTEES**

Appeals Board – Randy Dick reported that the Appeals Board will be meeting on July 26<sup>th</sup> to hear an appeal by Michele Cline of 100 Byron Drive for a variance from the required ten feet side and rear yard setback to five feet for the construction of a detached garage.

Smithsburg Community Activities Commission – No report.

Parks and Improvement Commission – Betsy Martin, in the absence of the Park Commission Chairperson, reported the following: (1) Will be checking with Jeff Long, Public Works Director, for a list of improvements made since last month at Lions Community Park. (2) Moving forward with checking on the electrical upgrades for Veterans Park. (3) Next meeting will be held on July 9<sup>th</sup> at 7 PM at the Lions Community Park.

Planning Commission – Randy Dick reported that the Planning Commission will be meeting on July 19<sup>th</sup>. On the agenda will review of the subdivision on Clopper Ave., Zoning Ordinance and Land Subdivision Ordinance.

On a motion by Councilmember Lushbaugh, Council unanimously voted to accept all reports as presented.

#### **COMMUNITY ORGANIZATION REPORTS**

Chief James Ulrich of SEMS reported that they participated in the procession and memorial service for Bridgette Heller. He reported that they did standbys at the fire works for both the Smithsburg Carnival and the Mountain Heritage Days. He also announced that SEMS fund drive is currently underway.

#### **OLD BUSINESS**

On a motion by Councilmember Lushbaugh, Council unanimously approved the letter to Julie Pipple, regarding Council's action on the Watershed Implementation Plan. In the letter it is stated that: "The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town

acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.”

On a motion by Councilmember Jernigan, Council unanimously voted to table discussion of the Charter Changes until more comments have been received by Council and members of the Charter Ad Hoc Committee.

#### **NEW BUSINESS**

Councilmember Fritsch made a motion to approve Mayor Myers’ appointment of Victor Lawrence James to the Smithsburg Community Activities Commission. Motion passed a unanimous vote of Council.

Betsy Martin reported that, to date, there is no need to make any line item transfers in the budget that ended June 30<sup>th</sup>. If needed, the auditors can recommend transfers prior to the completion of the audit.

On the agenda for the July 24<sup>th</sup> work session will be: (1) Speed Camera Presentation – Chief Knight. (2) Lutheran Work Camp. (3) Review of Resolution for Commission, Board and Committees Qualification. (4) Review Municipal Infraction Ordinance. (5) Charter Changes. (6) Smoke Testing Update.

#### **COUNCILMEMBER REMARKS**

Councilmember Lushbaugh welcomed Jim Fritsch and Heath Abbott to the Council. He thanked Jerome Martin and Shirley Aurand for their years of service to the town. He thanked everyone who was involved with helping with the Carnival. He wished everyone a great holiday.

Councilmember Abbott thanked everyone for welcoming him to the Council. He hopes to do as much work for the town as he can. He is looking forward to the challenge. Councilmember Abbott invited everyone to come to the Little Sluggers Field to watch the games during their tournaments starting Friday night and continuing through the next three weekends.

Councilmember Jernigan also thanked Jerome Martin and Shirley Aurand for their service on the Council. He welcomed Jim Fritsch and Heath Abbott to the Council and welcomed their different backgrounds.

Councilmember Fritsch thanked the Town for putting their confidence and trust in him. He stated that he had big shoes to follow with Jerome Martin and Shirley Aurand. Councilmember Fritsch also said that in the next 30 days he would be meeting with the Mayor and Town Staff.

Mayor Myers noted that she and the department heads would be more than willing to meet with the new councilmembers.

The meeting was adjourned at 8:20 PM.

Respectfully submitted,

Betsy Martin,  
Clerk/Treasurer/Manager





# The Town of Williamsport

2 NORTH CONOCOCHIEGUE STREET  
P.O. BOX 307  
WILLIAMSPORT, MARYLAND 21795

OFFICE OF  
MAYOR AND COUNCIL

TELEPHONE (301) 223-7711  
FAX (301) 223-5303

Julie Pippel, Director  
Washington County  
Division of Environmental Management

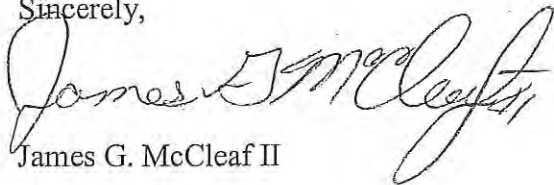
June 28, 2012

Dear Julie,

The Mayor & Council of The Town of Williamsport will on July 9, 2012 be considering the proposed resolution in response to the request from Maryland Department of the Environment that the town review and adopt the WIP Phase II document The propose Resolution takes a position of along the lines of that recommended by the County's WIP Team Committee.

When the final Resolution is adopted I will forward to you for your records. If you have any questions concerning this matter please feel free to contact me town hall at 301-223-7711.

Sincerely,



James G. McCleaf II

**RECEIVED**

JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

APPENDIX F -  
MILESTONES  
FOR  
FY12/13

**Washington County**  
**Watershed Implementation Plan Phase II**  
**WIP Report -**  
**Appendix F - Milestones for FY12/13**  
**(July 1, 2011 to June 30, 2013)**  
**JULY 15, 2012**

**Urban Sector**

**County Phase II MS4:**

Washington County Government

1. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
2. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.
3. Analyze the potential of placing County owned property under an Urban Nutrient Management Plan.
4. Completion of the Black Rock Creek Stream Restoration project in FY12.
5. Completion of stream restoration in the Devil's Backbone Dam project.
6. Addition of storm water management infrastructure on Robinwood Drive Project to address an area with no prior storm water management.
7. Addition of storm water management infrastructure on Marsh Pike/Longmeadow Road project.
8. Replacement of storm water pipe on Brookfield Road with grass swale.
9. Analyze potential of replacement of impervious paving with pervious paving for load reduction credit and financial feasibility.
10. Increasing FTE by one position in the Division of Environmental Management for a Watershed Specialist which will manage the County's local watershed and WIP efforts.
11. Analyze potential changes to the County Phase II MS4 permit which could become effective in 2012.
12. Review the level of implementation projects required to meet the WIP loading reduction numbers and prepare a presentation to the BoCC for their direction and



approval. This report will address funding requirements and will provide funding alternatives which may include, but are limited to, state and/or local fees.

13. Define the County Phase II MS4 regulated area and work with MDE for approval. This area will exclude any areas which fall in an incorporated municipal area or are under a storm water system that is owned or operated by a separate entity.
14. Development of a project list which can be utilized in development of yearly funding requests from the Board and various grant sources.
15. Investigate new and alternative methods of working towards the target load reductions.
16. Pursue various grant funding sources for implementation projects.
17. Education of citizens on the WIP and how they can reduce the nutrient and sediment load in Washington County.
18. Continue to work with MDE staff on refining the load reductions assigned to Washington County.

### **Urban Sector applicability still under review and/or agency serves multi-sectors**

#### **Town of Boonsboro**

1. Annual clean-up of stream in Shafer Park with various organizations, including Boonsboro Recycling Task Force and Boy Scout Troops.
2. Begin a televising study of the sewage collection system to identify I&I problem areas in FY12.
3. FY12, begin planning of stream buffer areas and conservation easements on Town Farm Property and Shafer Park. Implementation contingent on funding availability and Mayor and Council approval.
4. FY12, begin planning with King Road Association on potential stream buffer project on property. Implementation contingent on funding availability and Mayor and Council approval.
5. Work with local WIP Implementation Team on development of educational outreach on WIP related issues.
6. FY12/13 - Implement reforestation plantings in Shafer Park for Fletcher's Grove. Implementation contingent on funding availability and Mayor and Council approval.
7. FY12 – continue working with property owners to address broken cleanout caps in an effort to reduce inflow and infiltration in the sewage collection system.
8. Mechanical Street Sweeping of all streets in the Town on a bi-monthly basis. 13.39 miles. Evaluate the potential reduction and financial feasibility of expanding the program for load reduction. Implementation contingent on funding availability and Mayor and Council approval. Implementation of program changes contingent on financial feasibility and approval of Mayor and Council.
9. Annual Green Fest event to promote, educate and encourage environmentally friendly actions.

### Town of Clear Spring

1. Annual cleaning of storm drains and culverts.
2. Analyze potential of mechanical street sweeping for load reduction in Town. 1.97 miles. Implementation is contingent on financial feasibility and approval of the Mayor and Council.

### Town of Funkstown

1. Mechanical street sweeping completed on an as needed basis. Typically at least once per year. 3.92 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
2. Cleaning of storm drains and culverts on a minimum of an annual basis.
3. Pursue grant funding from POS for tree planning.

### Town of Hancock

1. Investigate the potential of mutual projects with C&O Canal to address storm water in Town. Implementation contingent upon National Park Service and Mayor and Council approval and additional on financial feasibility.
2. Mechanical street sweeping completed twice per year on 11.25 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
3. Storm drains and culverts cleaning a minimum of twice per year.
4. FY12, cleaning of the stream through Woodmyer Park completed.

### Town of Keedysville

1. Mechanical street sweeping will be increased to 5 times yearly (from the present level of 2 times yearly) on 5.75 miles of roadway in town.
2. An educational program of communication with town residents through email and the town newsletter is being implemented advising residents of what individual actions they can take to support the WIP, such as tree planting and installations of rain barrels.
3. Town Management (Mayor and Council) is exploring ways of interim reporting, milestones and actions taken.
4. Town Management (Mayor and Council) will research the ideas developed by County staff during a site visit to review what the town can do in support of the WIP. It should be emphasized that no action can be taken on those ideas until full information

becomes available on their financial feasibility and approval of the Mayor and Council.

#### Town of Sharpsburg

1. No mechanical street sweeping completed in Town. Investigate potential reduction of street sweeping for load reduction. Implementation is contingent upon financial feasibility and Mayor and Council approval.

#### Town of Williamsport

1. Mechanical street sweeping completed once per week on 9.87 miles.
2. Continue ongoing work on sewage collection I&I correction. Level of effort dependent upon budgetary restraints and Mayor and Council approval.
3. Completed application for Urban Greening Grant which includes 700 tree plantings.
4. Received grant for greening of the main street which includes rain barrel installation, replacement of sidewalk with pervious concrete and planting of trees.
5. Cleaning of storm drains on a monthly basis.
6. Semi-annual cleanup of the stream in the Town Park.
7. Hold a benefit concert at River Bottom Park with proceeds being divided between participating WIP stakeholders and utilized for educational and implementation projects for the WIP. Exact projects will be dependant upon amount of funds raised.

#### Soil Conservation District

1. Planning FY12/13 stream restoration project with Crest View HOA. Implementation of project contingent upon approval by all parties and funding.
2. Planning FY12/13 stream restoration project with Washington County Division of Environmental Management for Smithsburg WwTP. Implementation of project contingent upon approval by all parties and funding.
3. Planning FY12/13 stream restoration project with Town of Hancock for Kirkwood Park. Implementation of project contingent upon approval by all parties and funding.
4. Work with Washington County staff on the review of County properties for potential projects. Implementation of project contingent upon approval by all parties and funding.
5. Evaluate the potential of painting of storm drain inlets (curb) to signify "Chesapeake Bay" drainage area. Implementation is contingent upon financial feasibility and elected body approvals.



6. Evaluate the potential of installing rain barrels and/or rain gardens on school properties for educational/outreach initiatives. Implementation contingent upon approval and Board of Education approval.
7. Tree planting at the Williamsport School Complex (1.0 + acres). (66 trees and shrubs)
8. Tree planting at the Black Rock Run Stream Restoration. (300 trees)
9. Tree planting at Kirkwood Park in Hancock. (191 trees and shrubs)
10. Tree planting at Fountaindale Elementary. (150 trees and shrubs)
11. Continue current outreach events at the Home Builder's Show; Green Fest; Urban Conference; Green Card Class; Sharpsburg Heritage Festival; and tree sale.
12. Evaluate potential locations for rain barrel and/or rain garden projects at Washington County Agricultural and Education Center complex as educational outreach. Implementation is contingent upon funding and approval by appropriate parties.

Washington County Board of Education

1. Implementation of 2.85 acres of Forest Conservation for the Ruth Ann Monroe Primary School.
2. Implementation of 1.73 acres of Forest Conservation for the Antietam Academy.
3. Implementation of 1.9 acres of Forest Conservation for the Bester Elementary School.
4. Continue to offer students a variety of education programs including environmental science courses, watershed field trips to the Potomac River, and the Envirothon competition that focuses on environmental resources management. Students have incorporated rain barrels and rain gardens into several school water management plans as an application of their lessons.
5. Continue students' participation in additional environmental themed programs at the following specialized facilities: Claude Kitchens Outdoor School at Fairview, Agricultural / Environmental Academy at Clear Spring High School, and the Math Science STEM magnet schools at Springfield Middle School and Williamsport Elementary School.
6. Installation of rain barrels at Clear Spring Elementary School.
7. Stream Bank erosion repair completed at Northern Middle School.

**Municipal Phase II MS4:**

City of Hagerstown

1. Continue the City's current street sweeping program, and possibly expand the scope of the program (i.e. hit more streets more frequently) if the City Council approves additional funding, and if the pollutant reduction benefits are significant.
2. Continue (and possibly expand) the City's program to plant street trees throughout the City to increase the overall forest canopy coverage; this program would be contingent upon continued grant funding from DNR and other agencies, and on continued budget support from the City Council.
3. Develop plans for the reconstruction/reconfiguration of the lake at Pangborn Park, which will include replacement of existing hardscape surfaces with a more natural lake shoreline, and the restoration of approximately 400 linear feet of the existing Hamilton Run stream channel adjacent to the park. Planning, design, and ultimate construction are contingent upon anticipated grant funding, and General Fund expenditures approved by the City Council.
4. Under direction from the City Council, study additional sections of Hamilton Run, Marsh Run, and Antietam Creek within the City's corporate limits to identify sites for future stream restoration projects.
5. Study, and possibly implement (based upon City Council approval), an Urban Nutrient Management Plan for City-owned facilities with significant amounts of maintained turf area (e.g. Fairgrounds Park, Hagerstown Greens golf course, other parks and playgrounds, etc.).
6. Study the feasibility of an expanded Urban Nutrient Management program to reduce pollutant loads from non-City owned facilities and properties. Facilities that would be investigated include Board of Education Facilities within the City's corporate limits (e.g. North High, South High, and other school facilities), Rose Hill cemetery, and possibly larger commercial sites. This effort would require the support of the City Council, as well as the cooperation of the affected private property owners and agencies. Ultimately, the study could be expanded to look at a City-wide Nutrient Management program for all properties within City limits.
7. In anticipation of load reduction requirements likely to result from WIP and NPDES regulations, begin initial studies to identify existing storm water management facilities that could be retrofitted to improve water quality, and studies to identify potential sites for the construction of new storm water management facilities to provide "treatment" for pre-1985 impervious areas.
8. If so directed by the City Council, begin preliminary studies on the feasibility of potential funding mechanisms to pay for anticipated storm water improvements. Mechanisms could include a future Storm Water Utility Fee, or other programs to develop a revenue stream to pay for the required improvements.

#### Town of Smithsburg

1. Annual Mechanical Street Sweeping of all Town streets. 12.17 miles.

2. Evaluate potential of expanding the street sweeping program; planting of additional trees and education outreach on rain gardens and barrels for load reduction potential in meeting the loading allocation. The implementation of these practices is dependent on adoption of the Mayor and Council and funding availability.
3. Continue investigation of sewage collection system I&I problem areas and schedule repairs based on financial capabilities.

### **Non-regulated Urban**

1. Review potential of Urban Nutrient Management Plan for load reduction potential and financial feasibility.
2. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
3. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.

### **Septic Tanks**

1. Based on current BRF funding levels from MDE approximately 20 systems are upgraded each Fiscal Year. Contingent upon funding from the BRF, approximately 40 BAT systems will be installed in FY12/13.
2. Review current septic tank repair policies for 1 acre lot sizes and sensitive areas for potential changes to incorporate the requirement of BAT. Implementation of new policies proposed in FY 14 contingent upon approval from overseeing authority.

#### **Proposed actions from Health Department**

- Effective July 1, 2013 (FY14) all repairs on 1 acre lot size or smaller will be BAT technology.
- Effective July 1, 2013 (FY14) all new septic tanks and all repairs in sensitive areas will be BAT. (Note only repairs can be counted in BAT)

### **Wastewater Treatment Plants**

#### **Washington County Division of Environmental Management**

1. FY12/FY13 – Receive approval of the Preliminary Design Report for the Conococheague WwTP ENR Upgrade project from MDE and begin design.



2. FY12/FY13 – Receive approval of the Preliminary Design Report for the Winebrenner WwTP ENR Upgrade project from MDE and begin design.

**Actions under review of the Washington County Watershed Implementation Team with implementation contingent upon approval from overseeing authorities and receipt of funding.**

1. Analysis of Urban Nutrient Management Plan program in Washington County.
2. Review and establish a County reporting and tracking system for WIP implementation.
3. Review potential septic connections to public sewer systems.
4. Development of educational outreach programs.
5. Review of alternatives to achieve the reductions required in the septic sector including funding requirements and potential sources for presentation to the BoCC to obtain directions and approvals.
6. Review current tracking, verification and reporting methods of all agencies involved in WIP activities for development of a central consolidation of this information to enhance WIP and local watershed management.

APPENDIX E -  
POSITION DOCUMENTS  
FROM  
ELECTED BODIES

**BOARD OF COUNTY COMMISSIONERS OF  
WASHINGTON COUNTY  
Hagerstown, Maryland**

May 22, 2012

**NATIONAL PUBLIC WORKS WEEK**

The County Commissioners met at 8:00 a.m. at the Hagerstown Regional Airport Fire Station, 18434 Showalter Road, Hagerstown, to present a proclamation to Public Works employees to observe Public Works Week during the week of May 20-26.

President Terry L. Baker called the regular meeting of the Board of County Commissioners of Washington County, Maryland to order at 10:05 a.m. in the County Administration Building located at 100 West Washington Street, Hagerstown, Maryland with the following members present: Vice President John F. Barr and Commissioners Ruth Anne Callaham, Jeffrey A. Cline, and William B. McKinley.

**INVOCATION AND PLEDGE OF ALLEGIANCE**

Commissioner Barr gave the Invocation followed by the Pledge of Allegiance to the Flag by the full assemblage.

**APPROVAL OF MINUTES –MAY 15, 2012**

Commissioner McKinley, seconded by Callaham, moved to approve the minutes of May 15, 2012 as presented. The motion passed unanimously.

**COMMISSIONERS REPORTS AND COMMENTS**

Commissioner Cline recognized Public Works employees and Emergency Medical Service providers for the services they perform in the community. He attended the "Celebrating Minds at Work" event at Salem Avenue Elementary School and a meeting of the Agricultural Land Preservation Advisory Board. Mr. Cline congratulated Jersey Mike's on its one-year anniversary and thanked them for supporting charity events in the community. He participated in the Economic Development Commission's small business outreach visits to Ridge Runner Publishing and Parkway Neurological Center. Commissioner Cline attended a Chamber of Commerce mixer, Change Awareness event at Star Community, the National Pike Wagon Train event, and Smithsburg Pride Days. He also test-drove a vehicle at Hagerstown Ford in support of South Hagerstown High School's band uniform fundraiser. Mr. Cline enjoyed the "Rock 'n Roll Never Forgets" dance at North Hagerstown High School sponsored by the County's Recreation Department.

Commissioner Callaham attended Salem Avenue School's "We the People" celebration and the visits to local businesses Ridge Runner Publishing and Parkway Neurological Center. She enjoyed the Smithsburg Pride Days parade and the Ferry Hill Place dedication. Ms. Callaham welcomed a group of veterans of various wars to the County who were traveling from Wisconsin to Illinois to visit memorials. She attended the recent Maryland Municipal League (MML) meeting where Julie Pippel, Director of Environmental Management, discussed the Watershed Implementation Plan. Commissioner Callaham recognized the jobs well done by Public Works Department employees during Public Works Week.



Commissioner Callahan moved to extend the Residential Stimulus Program by six months and allow six additional houses per developer. Commissioner McKinley recommended a twelve-month extension period and an additional twelve houses per developer. Ms. Callahan restated her motion to extend the Residential Stimulus Program by twelve months, through June 30, 2013, and allow twelve additional houses per developer, or thirty total houses per developer. Commissioner McKinley seconded the motion. The motion passed unanimously.

#### **ESTABLISHMENT OF REVOLVING LOAN FUND**

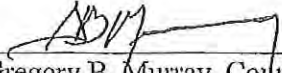
Jef Bohn, Chair of the Economic Development Commission (EDC) Board's Resource Development Committee, and Guy Winterberg, Assistant Director of the Tri-County Council for Western Maryland (TCC), presented information regarding the establishment of a Washington County Revolving Loan Fund (RLF) to assist local businesses. Jef Bohn indicated that the EDC Board has approved the recommendation to collaborate with the TCC to establish a separate County RLF using TCC's existing revolving loan structure and program. He stated that \$1 million would be needed to establish the fund and provide administrative fees to TCC. Guy Winterberg advised of the process by which the RLF would be administered and the criteria for applying for loans. The Commissioners discussed the information presented and agreed that the RLF should not compete with local initiatives such as the Hagerstown Loan Fund. It was the consensus of the Commissioners to direct the Committee to hold meetings with experts in the industry, continue to foster a working relationship with TCC, and develop details of a Revolving Loan Fund to present at a future meeting of the Commissioners.

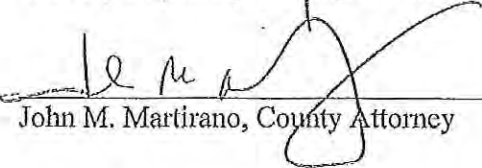
#### **WASHINGTON COUNTY WATERSHED IMPLEMENTATION PLAN**

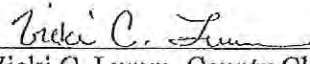
Julie Pippel, Director of Environmental Management, presented information on the process and development of the Watershed Implementation Plan (WIP) and introduced members of the County's WIP Committee in attendance. She stated that the WIP is a federally mandated plan due to a court ruling stating that counties with waters draining into the Chesapeake Bay must comply with the Federal Clean Water Act (CWA). Ms. Pippel stated that the CWA requires that any water body that does not meet the water quality standards established by regulations must have a Total Maximum Daily Load (TMDL) prepared for each of the water quality standards that it exceeds. The Committee prepared a report based on the septic and stormwater sectors. A preliminary cost estimate to meet the target load reductions for those sectors exceeded \$1 billion. Ms. Pippel read the alternatives on how to proceed that were suggested by the Committee, which include stating that the Board of County Commissioners agree that the plan would be fiscally irresponsible and financially unfeasible; but County staff would pursue grant funding as available to support projects that work toward the progress of meeting the target loads established by the Maryland Department of the Environment (MDE). Ms. Pippel indicated that the Committee is recommending a WIP Phase II report for submission to MDE that includes a plan containing methods to meet the target as a whole. The Commissioners discussed the proposal.

May 22, 2012  
Page 10

Commission President Terry L. Baker opened the hearing for public testimony. Nine individuals spoke on issues concerning the budget. After all testimony was given, Commissioner Baker adjourned the hearing at 7:50 p.m.

  
\_\_\_\_\_  
Gregory B. Murray, County Administrator

  
\_\_\_\_\_  
John M. Martirano, County Attorney

  
\_\_\_\_\_  
Vicki C. Lumm, County Clerk

**REQUIRED MOTION**

**MAYOR & CITY COUNCIL  
HAGERSTOWN, MARYLAND**

**DATE:** June 19, 2012

**TOPIC:** Motion: Watershed Implementation Plan Report & Statement  
Charter Amendment \_\_\_\_\_  
Code Amendment \_\_\_\_\_  
Ordinance \_\_\_\_\_  
Resolution \_\_\_\_\_  
Other  X

**MOTION:** I hereby move to approve the submittal of Washington County's Phase II Watershed Implementation Plan to the Maryland Department of the Environment, along with the attached Position Statement. This statement, which expresses the Council's concern over the estimated cost of the required stormwater practices, only commits the City to expenditures that are already contemplated in the Capital Improvement Project budget, or to projects that are determined to be financially feasible on a yearly basis.

DATE OF INTRODUCTION: 6/19/2012

DATE OF PASSAGE: 6/19/2012

EFFECTIVE DATE: 6/19/2012



## WIP Phase II Position Statement

The City Council for the City of Hagerstown Maryland (the "Council"), acknowledges that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council further acknowledges that the United States Environmental Protection Agency (the "EPA") has prepared a Total Maximum Daily Load document for the Chesapeake Bay, and is requiring each of the Chesapeake Bay states to prepare for approval a Watershed Implementation Plan (a "WIP") outlining how the State will meet the loading reductions identified by EPA.

The Maryland Department of the Environment ("MDE") has calculated a target load for each county in the State, and has requested that each of these geographical areas prepare a WIP developed by all stakeholders which outlines how this geographical area will meet the target loads for the urban, wastewater, and septic sectors. The Council has addressed the wastewater treatment plant upgrades required to meet the portion of the wastewater section under their jurisdiction by approving projects in the City of Hagerstown's Capital Improvement Plan budget.

The WIP Committee has provided a report to the Council on the urban and septic sectors which documents that the overall cost to meet the target load reductions will exceed \$1 billion. These costs were prepared utilizing historically known values for upgrades in the septic sector, and the "Cost of Stormwater Practices in Maryland Counties" report prepared by Dr. King and provided by MDE for use in estimating costs in the urban stormwater sector.

In response to the WIP Committee's reports, the Council is unable to adopt or support a plan which documents a full implementation plan of best management practices to meet MDE's target loads which would directly impact City citizens. Adoption of such a plan by the Council would be fiscally irresponsible and financially unfeasible. However, the Council does acknowledge that even though full implementation is unacceptable, progress at an acceptable, financially feasible level as determined by operating and capital improvement budgets on an annual basis should be considered by the then elected Council. Additionally, City staff should pursue grant funding as available to support projects that work toward meeting MDE's target loads.

Therefore, the Council recommends submission of a WIP Phase II report to MDE which encompasses the following:

- previously approved operating and CIP budget lines which work toward achieving the target loads, with the caveat that full implementation is contingent upon funding availability;
- development of a project list which can be utilized in development of yearly funding requests from the Council, grant sources, and other potential funding sources;
- continued investigation by City staff into new and alternative methods to meet target load reductions;
- education of citizens on the WIP and what they can do to reduce pollutant loads in the City;
- continued work with MDE staff to refine the loading reductions assigned to the City



# TOWN OF BOONSBORO

21 NORTH MAIN STREET, BOONSBORO, MD 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5690

July 10, 2012

Julie Pippel, Director  
Wash. Co. Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

RE: Town Of Boonsboro Watershed Implementation Plan Concurrence

Ms. Pippel,

The Mayor and Council of the Town of Boonsboro discussed the Washington County Watershed Implementation Plan (WIP) at their regular meeting on July 2, 2012. The Mayor and Council of Boonsboro took the following action:

The Mayor and Council of Boonsboro acknowledge the plan and feel that it is fiscally irresponsible and financially unfeasible for the Town of Boonsboro to commit to the loading reductions and implementation actions as presented in the plan; however agree to the concept of the plan overall and will continue efforts, based upon yearly budget review and availability of funds, to work towards reducing maximum daily loads.

If you need any additional information, please feel free to contact me at 301-432-5690.

Sincerely,

Megan Clark  
Town Planner/Zoning Administrator  
Town of Boonsboro



PAUL D. HOSE, JR.  
MAYOR

STEVEN L. BLICKENSTAFF  
VICE MAYOR

PHONE 301-842-2252  
FAX 301-842-2920

## TOWN OF CLEAR SPRING

P.O. BOX 104  
CLEAR SPRING, MARYLAND 21722-0104

COUNCIL  
MEGAN L. YEAKLE  
THEODORE R. HOVERMALE  
CAROL E. HOVERMALE

WILLIAM S. BARTON  
ATTORNEY

To Whom It May Concern:

The Clear Spring Mayor and Council acknowledge that the Chesapeake Bay has been identified as a water body which is impaired for nutrients and sediments. The Council also acknowledges that the United States Environmental Protection Agency has prepared a Total Maximum Daily Load document for the Bay and is requiring each of the Bay states to prepare for approval a Watershed Implementation Plan outlining how the State will meet the loading reductions identified by EPA. The Town staff served on a Water Implementation Committee and developed a plan. Therefore, in response to the WIP Committee reports, the Clear Spring Mayor and Council are unable to adopt or support a plan which documents a full implementation plan of best management practices to meet the target loads prepared by Maryland Department of the Environment under their jurisdiction and which would directly impact the Citizens of Clear Spring. Adoption of such a plan by the Mayor and Council would be fiscally irresponsible and financially unfeasible. However, the Mayor and Council do acknowledge that even though full implementation is unacceptable, progress at an acceptable financially feasible level as determined by the operating and capital improvement budgets on a yearly basis should be considered by the elected officials.

Sincerely,

Paul D. Hose, Jr.  
Mayor





**FUNKSTOWN MAYOR & COUNCIL**

P.O. Box 235 • 30 East Baltimore St.  
Funkstown, Maryland 21734

June 29, 2012

Ms. Julie Pippel, Director  
Washington County Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Dear Julie,

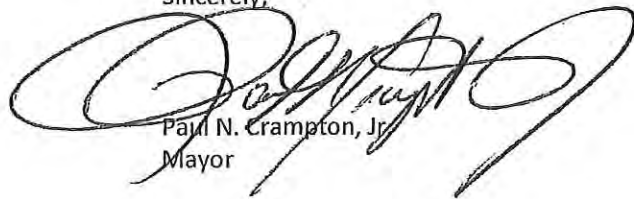
The Mayor and Council understand that the State of Maryland has requested that each of the elected bodies review and adopt the WIP Phase II document for their jurisdiction.

After lengthy discussion between the Mayor and Council, and detailed clarification, we will pursue potential funding sources of implementation projects, and work with the County staff to continue investigation into new and alternative methods of working towards the target load reductions.

The Mayor and Council voted at the June 11, 2012 meeting that while they do not recognize a problem, there was a unanimous agreement to do what is possible based on the Town's budget.

If you have any questions, or I can be of further assistance please do not hesitate to contact me.

Sincerely,



Paul N. Crampton, Jr.  
Mayor

PNC

Cc: Robert Kuczynski, Town Attorney  
Funkstown Council



## *Town of Hancock*

*126 West High Street,  
Hancock, MD 21750  
301-678-5622*

July 2, 2012

Julie Pipple,  
Washington County WIP Coordinator  
16232 Elliot Parkway  
Williamsport, MD 21795

Dear Ms. Pipple

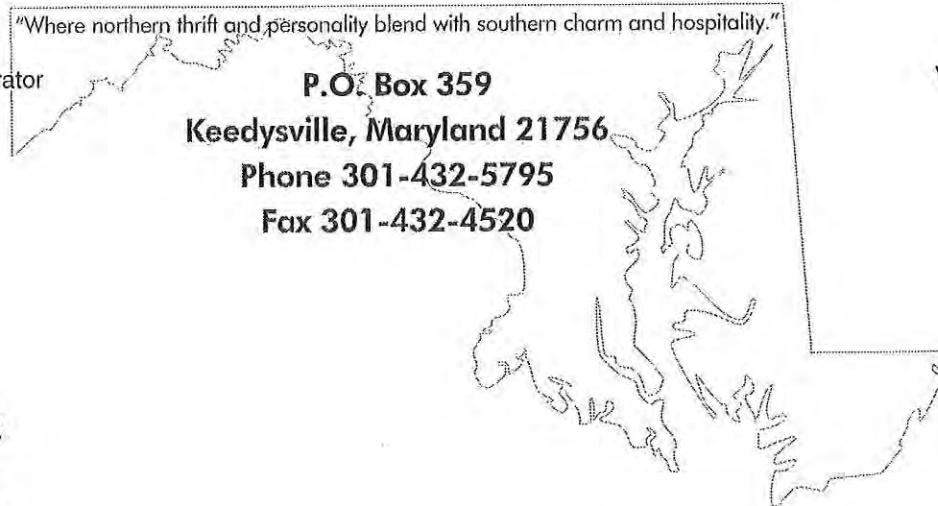
The Mayor and Council of Town of Hancock recognizes the need to address the issues raised in the Watershed Implementation Plan, however the associated costs make this impractical and fiscally irresponsible. The Town is committed to clean water and green operations, and will pursue grant funding when and where available to address targeted items, in an effort to reach goals set forth by the EPA.

Sincerely,

David D. Smith  
Town Manager/ CFO

# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Terry Levey, Asst. Mayor  
David Bishop, Town Administrator



Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

June 6, 2012

Julie Pippel  
Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, MD 21795

Julie,

At the June 4, 2012 meeting of the Mayor & Council of Keedysville, the following statement from the Mayor & Council, regarding Phase II of the Watershed Implementation Plan for the Chesapeake Bay, was read into the minutes:

“The Mayor & Council of Keedysville acknowledge that the Chesapeake Bay has been deemed to be impaired with nitrogen, phosphorous and sediment. The Mayor & Council also acknowledge that the U.S. Environmental Protection Agency is requiring the states in the Bay watershed to prepare a plan to reduce the introduction of these elements into the Bay and that the Maryland Department of the Environment has tasked the individual counties within the state to prepare a plan to reduce the introduction of these elements by specific amounts. The town of Keedysville has been working with the Washington County Watershed Implementation Plan group formed to devise the county’s plan for these reductions. After receiving the current Total Maximum Daily Load (TMDL) estimates and the associated reductions deemed necessary by MDE, and further distributing the reductions to the stakeholders in the County, of which Keedysville is one, the best management practices (BMP’s) approved by EPA that are necessary to achieve these reductions were calculated. Applying costs obtained from “Cost of Stormwater Practices in Maryland Counties”, by Dr. King, to the BMP’s necessary to reach the reductions distributed to Keedysville resulted in a cost of over \$10 million. Therefore, the Mayor & Council find it fiscally irresponsible to commit to a full implementation of this plan. However, the Mayor & Council will continue to work with the Washington County WIP group to further refine the load reductions necessary and the best methods to obtain these reductions, will seek fiscally responsible BMP’s to reduce the loads from Keedysville, will seek to develop a tracking and recording system for BMP implementation and will seek grant funding from various sources to further implement BMP’s.”



# KEEDYSVILLE CORPORATION

Matt Hull, Mayor  
Derry Levey, Asst. Mayor  
Richard Bishop, Town Administrator

"Where northern thrift and personality blend with southern charm and hospitality."

**P.O. Box 359**  
**Keedysville, Maryland 21756**  
**Phone 301-432-5795**  
**Fax 301-432-4520**

Council:  
Richard Walton  
Victoria Gudeman  
Gina Ellis

The section for Keedysville's milestones for FY 2013 is being composed and will be sent to you shortly.

Sincerely,

Richard Bishop  
Administrator

**POOLE & KANE, P.A.**  
ATTORNEYS AT LAW  
29 WEST FRANKLIN STREET  
HAGERSTOWN, MARYLAND 21740  
TELEPHONE (301) 790-3600  
FAX (301) 714-0082

D. BRUCE POOLE  
BRIAN A. KANE  
JAMES W. STONE

DAVID K. POOLE  
(1926-2005)

TRAVIS W. POOLE  
ANDREW J. SERAFINI, JR.

June 21, 2012

**RECEIVED**

JUN 25 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

Julie Pippel, Director  
Washington County Division of Environmental Management  
16232 Elliott Parkway  
Williamsport, Maryland 21795

Re: Town of Sharpsburg WIP Phase II

Dear Julie:

The Mayor and Council of Sharpsburg will, on July 9, 2012, be considering a proposed resolution in response to the request from the Maryland Department of the Environment that the municipality review and adopt the WIP Phase II document. The proposed resolution takes a position along the lines of that recommended by the County's WIP Committee.

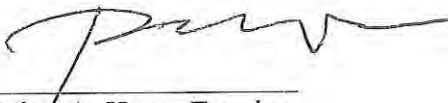
As and when a final resolution is adopted, I will forward same to you for your records.

If you have any questions, please don't hesitate to be in touch.

Very truly yours,

POOLE & KANE, P.A.

By: \_\_\_\_\_

  
Brian A. Kane, Esquire  
Town Attorney  
for Sharpsburg, Maryland

BAK/dlk

Cc: Mayor Hal Speilman



**MAYOR AND COUNCIL**  
P.O. Box 237  
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**RECEIVED**

JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

June 27, 2012

Julie Pippel, Chairman  
Washington County WIP Team  
16232 Elliott Parkway  
Williamsport, MD 21795

Dear Ms. Pippel:

The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.

If you need any additional information concerning this matter, please do not hesitate to contact this office.

Sincerely,

Mildred L. Myers,  
Mayor

MLM/bm



Tuesday, July 3, 2012

The regular meeting of the Smithsburg Mayor and Council was held on Tuesday, July 3, 2012, with Mayor Myers and Councilmembers Abbott, Fritsch, Jernigan and Lushbaugh present. Councilmember Souders was absent.

The meeting was opened with the Pledge of Allegiance led by Betsy Martin.

Mayor Myers then conducted the swearing in ceremony for the two new Councilmembers, James Fritsch and Heath Abbott. Mayor Myers noted that she had sworn in Councilmember Souders prior to the June work session due to the fact that he was on vacation this week.

On a motion by Councilmember Jernigan, Council unanimously approved the agenda as presented.

The minutes of the Organizational Meeting held on May 22<sup>nd</sup> were approved unanimously as presented on a motion by Councilmember Lushbaugh. Councilmember Lushbaugh made a motion to approve the minutes of the June 5, 2012 meeting of the Mayor and Council as presented. Motion passed by a unanimous vote. On a motion by Councilmember Jernigan, the minutes of the Special Meeting held on June 18<sup>th</sup> were approved by Council. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained. The minutes of the June 19<sup>th</sup> Work Session were approved on a motion by Councilmember Jernigan. Councilmembers Fritsch, Jernigan and Lushbaugh voted in favor of the motion, Councilmember Abbott abstained.

The Treasurer's report was unanimously approved by the Council on a motion by Councilmember Jernigan.

## **MAYOR'S REPORT**

Mayor Myers reported on the following: (1) Met with structural engineer and Public Works Director to review E. Water Street bridge. (2) Extended a thank you to the County Commissioners for bringing their regular meeting out to the Town. (3) Welcomed the incoming Council and looking forward to a new year of service to our citizens. (4) Extended her thanks and much appreciation to the outgoing Councilmembers Shirley Aurand and Jerome Martin for their dedicated service to their town.

## **REPORTS -- DEPARTMENT HEADS**

Betsy Martin, Clerk/Treasurer/ Manager reported the following: (1) Attended meeting of the County Commissioners held in Council Chambers. Extended a thank you from the Town for all the Commissioners have done for Smithsburg. (2) Reviewed water billing. Prepared and sent out quarterly water bills. (3) Assisted Public Works Director in tracking maintenance expenses on Town Trucks for report to Council. (4) Mailed out tax bills. (5) Continued preparatory work on town audit. (6) Nancy Walzl worked on preparing the Falls Sports schedules for usage of parks. (7) Attended Pride Days meeting. The next meeting of the Pride Days Committee will be held on Thursday, September 20<sup>th</sup> at 7 PM. Everyone is invited to attend to help plan for the Pride Days event which will include the town's 200<sup>th</sup> Birthday Celebration. (8) Thanked Shirley Aurand for her years of service to the Town as a Council person. (9) Extended a welcome to the two new Councilmembers.

Chief George Knight presented the following report: (1) There were 107 calls for service during the month of June with 1 juvenile arrest. (2) The department patrolled a total of 2,995 miles this month and did 17 hours and 20 minutes of foot patrol. (3) A total of 11 premise checks were conducted during the month. (4) The Department worked a total of 91 hours at the Firemen's Carnival which included 5 hours overtime. (5) Chief Knight, Corporal Witmer and OFC 1<sup>st</sup> Class Hudson attended firearms qualification. (6) Corporal Witmer attended training for school incidents. (7) The Department worked a

total of 10 hours for the Smooth Operator Grant and 9 hours for the Health Department Alcohol Grant. (8) Reported that all went well at the Firemen's Carnival. Chief Knight listed the following goals for his department: Upgrade Computers, Additional Incident Training for School Incidents, Additional Community Policing, School Speed Zones and Cameras. He also stated that he would like to partner with the Boys and Girls Clubs to have activities in the town.

Jeff Long, Public Works Director, submitted the following report: (1) Ongoing waste water infrastructure repairs. Mr. ReHab is in Town completing all priority 2 repairs. (2) Completed 2<sup>nd</sup> quarter water meter readings and re-reads. (3) Maryland Rural Water Association class was held on June 14<sup>th</sup> at Town Hall. (4) Repaired an 8 inch water main break on June 5<sup>th</sup>. (5) Painted the rest room floors at the Lions Community Park. (6) Installed wire in ceiling at the large pavilion at Lions Community Park. (7) Trimmed trees for visibility at the intersection of Geiser Way and N. Main Street. (8) Began second week spraying of the season. (9) Trimmed trees and shrubs at Veterans Park. (10) Repaired the roof at the Historical Society Building. (11) Cut and removed several broken and down limbs from storms throughout the month. Upcoming events and projects are: Continue sewer infrastructure work and smoke testing. Average daily water consumption for the month was 242,813 gallons.

On a motion by Councilmember Jernigan, Council unanimously voted to spend up to \$3,200 for safety surface at Lions Community Park. This money will be taken from the new park budget - \$1,000 – miscellaneous expenses and \$2,200 for roadway improvement at Veterans Park.

#### **REPORTS -- COMMISSIONS, COMMITTEES**

Appeals Board – Randy Dick reported that the Appeals Board will be meeting on July 26<sup>th</sup> to hear an appeal by Michele Cline of 100 Byron Drive for a variance from the required ten feet side and rear yard setback to five feet for the construction of a detached garage.

Smithsburg Community Activities Commission – No report.

Parks and Improvement Commission – Betsy Martin, in the absence of the Park Commission Chairperson, reported the following: (1) Will be checking with Jeff Long, Public Works Director, for a list of improvements made since last month at Lions Community Park. (2) Moving forward with checking on the electrical upgrades for Veterans Park. (3) Next meeting will be held on July 9<sup>th</sup> at 7 PM at the Lions Community Park.

Planning Commission – Randy Dick reported that the Planning Commission will be meeting on July 19<sup>th</sup>. On the agenda will review of the subdivision on Clopper Ave., Zoning Ordinance and Land Subdivision Ordinance.

On a motion by Councilmember Lushbaugh, Council unanimously voted to accept all reports as presented.

#### **COMMUNITY ORGANIZATION REPORTS**

Chief James Ulrich of SEMS reported that they participated in the procession and memorial service for Bridgette Heller. He reported that they did standbys at the fire works for both the Smithsburg Carnival and the Mountain Heritage Days. He also announced that SEMS fund drive is currently underway.

#### **OLD BUSINESS**

On a motion by Councilmember Lushbaugh, Council unanimously approved the letter to Julie Pipple, regarding Council's action on the Watershed Implementation Plan. In the letter it is stated that: "The Mayor and Council of the Town of Smithsburg wishes to inform you that the Town

acknowledges that issues exist as documented in the Watershed Implementation Plan, but that the cost to implement them is fiscally irresponsible. The Town will pursue CIP funding, if available, to meet implementation targets and goals as set by EPA.”

On a motion by Councilmember Jernigan, Council unanimously voted to table discussion of the Charter Changes until more comments have been received by Council and members of the Charter Ad Hoc Committee.

#### **NEW BUSINESS**

Councilmember Fritsch made a motion to approve Mayor Myers’ appointment of Victor Lawrence James to the Smithsburg Community Activities Commission. Motion passed a unanimous vote of Council.

Betsy Martin reported that, to date, there is no need to make any line item transfers in the budget that ended June 30<sup>th</sup>. If needed, the auditors can recommend transfers prior to the completion of the audit.

On the agenda for the July 24<sup>th</sup> work session will be: (1) Speed Camera Presentation – Chief Knight. (2) Lutheran Work Camp. (3) Review of Resolution for Commission, Board and Committees Qualification. (4) Review Municipal Infraction Ordinance. (5) Charter Changes. (6) Smoke Testing Update.

#### **COUNCILMEMBER REMARKS**

Councilmember Lushbaugh welcomed Jim Fritsch and Heath Abbott to the Council. He thanked Jerome Martin and Shirley Aurand for their years of service to the town. He thanked everyone who was involved with helping with the Carnival. He wished everyone a great holiday.

Councilmember Abbott thanked everyone for welcoming him to the Council. He hopes to do as much work for the town as he can. He is looking forward to the challenge. Councilmember Abbott invited everyone to come to the Little Sluggers Field to watch the games during their tournaments starting Friday night and continuing through the next three weekends.

Councilmember Jernigan also thanked Jerome Martin and Shirley Aurand for their service on the Council. He welcomed Jim Fritsch and Heath Abbott to the Council and welcomed their different backgrounds.

Councilmember Fritsch thanked the Town for putting their confidence and trust in him. He stated that he had big shoes to follow with Jerome Martin and Shirley Aurand. Councilmember Fritsch also said that in the next 30 days he would be meeting with the Mayor and Town Staff.

Mayor Myers noted that she and the department heads would be more than willing to meet with the new councilmembers.

The meeting was adjourned at 8:20 PM.

Respectfully submitted,

Betsy Martin,  
Clerk/Treasurer/Manager





# The Town of Williamsport

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OFFICE OF  
MAYOR AND COUNCIL

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Julie Pippel, Director  
Washington County  
Division of Environmental Management

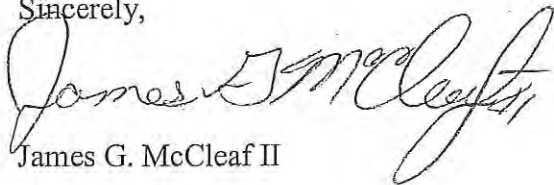
June 28, 2012

Dear Julie,

The Mayor & Council of The Town of Williamsport will on July 9, 2012 be considering the proposed resolution in response to the request from Maryland Department of the Environment that the town review and adopt the WIP Phase II document. The proposed Resolution takes a position of along the lines of that recommended by the County's WIP Team Committee.

When the final Resolution is adopted I will forward to you for your records. If you have any questions concerning this matter please feel free to contact me town hall at 301-223-7711.

Sincerely,



James G. McCleaf II

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JUN 29 2012

WASHINGTON COUNTY  
DIVISION OF ENV MNGT

APPENDIX F -  
MILESTONES  
FOR  
FY12/13

**Washington County**  
**Watershed Implementation Plan Phase II**  
**WIP Report -**  
**Appendix F - Milestones for FY12/13**  
**(July 1, 2011 to June 30, 2013)**  
**JULY 15, 2012**

**Urban Sector**

**County Phase II MS4:**

Washington County Government

1. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
2. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.
3. Analyze the potential of placing County owned property under an Urban Nutrient Management Plan.
4. Completion of the Black Rock Creek Stream Restoration project in FY12.
5. Completion of stream restoration in the Devil's Backbone Dam project.
6. Addition of storm water management infrastructure on Robinwood Drive Project to address an area with no prior storm water management.
7. Addition of storm water management infrastructure on Marsh Pike/Longmeadow Road project.
8. Replacement of storm water pipe on Brookfield Road with grass swale.
9. Analyze potential of replacement of impervious paving with pervious paving for load reduction credit and financial feasibility.
10. Increasing FTE by one position in the Division of Environmental Management for a Watershed Specialist which will manage the County's local watershed and WIP efforts.
11. Analyze potential changes to the County Phase II MS4 permit which could become effective in 2012.
12. Review the level of implementation projects required to meet the WIP loading reduction numbers and prepare a presentation to the BoCC for their direction and



approval. This report will address funding requirements and will provide funding alternatives which may include, but are limited to, state and/or local fees.

13. Define the County Phase II MS4 regulated area and work with MDE for approval. This area will exclude any areas which fall in an incorporated municipal area or are under a storm water system that is owned or operated by a separate entity.
14. Development of a project list which can be utilized in development of yearly funding requests from the Board and various grant sources.
15. Investigate new and alternative methods of working towards the target load reductions.
16. Pursue various grant funding sources for implementation projects.
17. Education of citizens on the WIP and how they can reduce the nutrient and sediment load in Washington County.
18. Continue to work with MDE staff on refining the load reductions assigned to Washington County.

### **Urban Sector applicability still under review and/or agency serves multi-sectors**

#### **Town of Boonsboro**

1. Annual clean-up of stream in Shafer Park with various organizations, including Boonsboro Recycling Task Force and Boy Scout Troops.
2. Begin a televising study of the sewage collection system to identify I&I problem areas in FY12.
3. FY12, begin planning of stream buffer areas and conservation easements on Town Farm Property and Shafer Park. Implementation contingent on funding availability and Mayor and Council approval.
4. FY12, begin planning with King Road Association on potential stream buffer project on property. Implementation contingent on funding availability and Mayor and Council approval.
5. Work with local WIP Implementation Team on development of educational outreach on WIP related issues.
6. FY12/13 - Implement reforestation plantings in Shafer Park for Fletcher's Grove. Implementation contingent on funding availability and Mayor and Council approval.
7. FY12 – continue working with property owners to address broken cleanout caps in an effort to reduce inflow and infiltration in the sewage collection system.
8. Mechanical Street Sweeping of all streets in the Town on a bi-monthly basis. 13.39 miles. Evaluate the potential reduction and financial feasibility of expanding the program for load reduction. Implementation contingent on funding availability and Mayor and Council approval. Implementation of program changes contingent on financial feasibility and approval of Mayor and Council.
9. Annual Green Fest event to promote, educate and encourage environmentally friendly actions.

### Town of Clear Spring

1. Annual cleaning of storm drains and culverts.
2. Analyze potential of mechanical street sweeping for load reduction in Town. 1.97 miles. Implementation is contingent on financial feasibility and approval of the Mayor and Council.

### Town of Funkstown

1. Mechanical street sweeping completed on an as needed basis. Typically at least once per year. 3.92 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
2. Cleaning of storm drains and culverts on a minimum of an annual basis.
3. Pursue grant funding from POS for tree planning.

### Town of Hancock

1. Investigate the potential of mutual projects with C&O Canal to address storm water in Town. Implementation contingent upon National Park Service and Mayor and Council approval and additional on financial feasibility.
2. Mechanical street sweeping completed twice per year on 11.25 miles. Analyze potential of expanding mechanical street sweeping for load reduction in Town. Implementation is contingent on financial feasibility and approval of the Mayor and Council.
3. Storm drains and culverts cleaning a minimum of twice per year.
4. FY12, cleaning of the stream through Woodmyer Park completed.

### Town of Keedysville

1. Mechanical street sweeping will be increased to 5 times yearly (from the present level of 2 times yearly) on 5.75 miles of roadway in town.
2. An educational program of communication with town residents through email and the town newsletter is being implemented advising residents of what individual actions they can take to support the WIP, such as tree planting and installations of rain barrels.
3. Town Management (Mayor and Council) is exploring ways of interim reporting, milestones and actions taken.
4. Town Management (Mayor and Council) will research the ideas developed by County staff during a site visit to review what the town can do in support of the WIP. It should be emphasized that no action can be taken on those ideas until full information

becomes available on their financial feasibility and approval of the Mayor and Council.

#### Town of Sharpsburg

1. No mechanical street sweeping completed in Town. Investigate potential reduction of street sweeping for load reduction. Implementation is contingent upon financial feasibility and Mayor and Council approval.

#### Town of Williamsport

1. Mechanical street sweeping completed once per week on 9.87 miles.
2. Continue ongoing work on sewage collection I&I correction. Level of effort dependent upon budgetary restraints and Mayor and Council approval.
3. Completed application for Urban Greening Grant which includes 700 tree plantings.
4. Received grant for greening of the main street which includes rain barrel installation, replacement of sidewalk with pervious concrete and planting of trees.
5. Cleaning of storm drains on a monthly basis.
6. Semi-annual cleanup of the stream in the Town Park.
7. Hold a benefit concert at River Bottom Park with proceeds being divided between participating WIP stakeholders and utilized for educational and implementation projects for the WIP. Exact projects will be dependant upon amount of funds raised.

#### Soil Conservation District

1. Planning FY12/13 stream restoration project with Crest View HOA. Implementation of project contingent upon approval by all parties and funding.
2. Planning FY12/13 stream restoration project with Washington County Division of Environmental Management for Smithsburg WwTP. Implementation of project contingent upon approval by all parties and funding.
3. Planning FY12/13 stream restoration project with Town of Hancock for Kirkwood Park. Implementation of project contingent upon approval by all parties and funding.
4. Work with Washington County staff on the review of County properties for potential projects. Implementation of project contingent upon approval by all parties and funding.
5. Evaluate the potential of painting of storm drain inlets (curb) to signify "Chesapeake Bay" drainage area. Implementation is contingent upon financial feasibility and elected body approvals.



6. Evaluate the potential of installing rain barrels and/or rain gardens on school properties for educational/outreach initiatives. Implementation contingent upon approval and Board of Education approval.
7. Tree planting at the Williamsport School Complex (1.0 + acres). (66 trees and shrubs)
8. Tree planting at the Black Rock Run Stream Restoration. (300 trees)
9. Tree planting at Kirkwood Park in Hancock. (191 trees and shrubs)
10. Tree planting at Fountaindale Elementary. (150 trees and shrubs)
11. Continue current outreach events at the Home Builder's Show; Green Fest; Urban Conference; Green Card Class; Sharpsburg Heritage Festival; and tree sale.
12. Evaluate potential locations for rain barrel and/or rain garden projects at Washington County Agricultural and Education Center complex as educational outreach. Implementation is contingent upon funding and approval by appropriate parties.

Washington County Board of Education

1. Implementation of 2.85 acres of Forest Conservation for the Ruth Ann Monroe Primary School.
2. Implementation of 1.73 acres of Forest Conservation for the Antietam Academy.
3. Implementation of 1.9 acres of Forest Conservation for the Bester Elementary School.
4. Continue to offer students a variety of education programs including environmental science courses, watershed field trips to the Potomac River, and the Envirothon competition that focuses on environmental resources management. Students have incorporated rain barrels and rain gardens into several school water management plans as an application of their lessons.
5. Continue students' participation in additional environmental themed programs at the following specialized facilities: Claude Kitchens Outdoor School at Fairview, Agricultural / Environmental Academy at Clear Spring High School, and the Math Science STEM magnet schools at Springfield Middle School and Williamsport Elementary School.
6. Installation of rain barrels at Clear Spring Elementary School.
7. Stream Bank erosion repair completed at Northern Middle School.

**Municipal Phase II MS4:**

City of Hagerstown

1. Continue the City's current street sweeping program, and possibly expand the scope of the program (i.e. hit more streets more frequently) if the City Council approves additional funding, and if the pollutant reduction benefits are significant.
2. Continue (and possibly expand) the City's program to plant street trees throughout the City to increase the overall forest canopy coverage; this program would be contingent upon continued grant funding from DNR and other agencies, and on continued budget support from the City Council.
3. Develop plans for the reconstruction/reconfiguration of the lake at Pangborn Park, which will include replacement of existing hardscape surfaces with a more natural lake shoreline, and the restoration of approximately 400 linear feet of the existing Hamilton Run stream channel adjacent to the park. Planning, design, and ultimate construction are contingent upon anticipated grant funding, and General Fund expenditures approved by the City Council.
4. Under direction from the City Council, study additional sections of Hamilton Run, Marsh Run, and Antietam Creek within the City's corporate limits to identify sites for future stream restoration projects.
5. Study, and possibly implement (based upon City Council approval), an Urban Nutrient Management Plan for City-owned facilities with significant amounts of maintained turf area (e.g. Fairgrounds Park, Hagerstown Greens golf course, other parks and playgrounds, etc.).
6. Study the feasibility of an expanded Urban Nutrient Management program to reduce pollutant loads from non-City owned facilities and properties. Facilities that would be investigated include Board of Education Facilities within the City's corporate limits (e.g. North High, South High, and other school facilities), Rose Hill cemetery, and possibly larger commercial sites. This effort would require the support of the City Council, as well as the cooperation of the affected private property owners and agencies. Ultimately, the study could be expanded to look at a City-wide Nutrient Management program for all properties within City limits.
7. In anticipation of load reduction requirements likely to result from WIP and NPDES regulations, begin initial studies to identify existing storm water management facilities that could be retrofitted to improve water quality, and studies to identify potential sites for the construction of new storm water management facilities to provide "treatment" for pre-1985 impervious areas.
8. If so directed by the City Council, begin preliminary studies on the feasibility of potential funding mechanisms to pay for anticipated storm water improvements. Mechanisms could include a future Storm Water Utility Fee, or other programs to develop a revenue stream to pay for the required improvements.

#### Town of Smithsburg

1. Annual Mechanical Street Sweeping of all Town streets. 12.17 miles.

2. Evaluate potential of expanding the street sweeping program; planting of additional trees and education outreach on rain gardens and barrels for load reduction potential in meeting the loading allocation. The implementation of these practices is dependent on adoption of the Mayor and Council and funding availability.
3. Continue investigation of sewage collection system I&I problem areas and schedule repairs based on financial capabilities.

### **Non-regulated Urban**

1. Review potential of Urban Nutrient Management Plan for load reduction potential and financial feasibility.
2. Annual mechanical street sweeping of 863 miles in both regulated and non-regulated urbanized areas and also in non-urbanized areas.
3. Reviewing the potential storm water retrofits and bio filter projects for roadways that could be included in County CIP. Final inclusion and implementation contingent upon funding and approval by Board of County Commissioners.

### **Septic Tanks**

1. Based on current BRF funding levels from MDE approximately 20 systems are upgraded each Fiscal Year. Contingent upon funding from the BRF, approximately 40 BAT systems will be installed in FY12/13.
2. Review current septic tank repair policies for 1 acre lot sizes and sensitive areas for potential changes to incorporate the requirement of BAT. Implementation of new policies proposed in FY 14 contingent upon approval from overseeing authority.

#### **Proposed actions from Health Department**

- Effective July 1, 2013 (FY14) all repairs on 1 acre lot size or smaller will be BAT technology.
- Effective July 1, 2013 (FY14) all new septic tanks and all repairs in sensitive areas will be BAT. (Note only repairs can be counted in BAT)

### **Wastewater Treatment Plants**

#### **Washington County Division of Environmental Management**

1. FY12/FY13 – Receive approval of the Preliminary Design Report for the Conococheague WwTP ENR Upgrade project from MDE and begin design.



2. FY12/FY13 – Receive approval of the Preliminary Design Report for the Winebrenner WwTP ENR Upgrade project from MDE and begin design.

**Actions under review of the Washington County Watershed Implementation Team with implementation contingent upon approval from overseeing authorities and receipt of funding.**

1. Analysis of Urban Nutrient Management Plan program in Washington County.
2. Review and establish a County reporting and tracking system for WIP implementation.
3. Review potential septic connections to public sewer systems.
4. Development of educational outreach programs.
5. Review of alternatives to achieve the reductions required in the septic sector including funding requirements and potential sources for presentation to the BoCC to obtain directions and approvals.
6. Review current tracking, verification and reporting methods of all agencies involved in WIP activities for development of a central consolidation of this information to enhance WIP and local watershed management.