

Adams County Department of Emergency Services

230 Greenamyer Lane Gettysburg, Pennsylvania 17325-2313

> Telephone (717) 334-8603 Fax (717) 334-1822 9-1-1 Center Fax (717) 334-6926

May 28, 2004

Mr. Joseph Hoffman Interstate Commission on the Potomac River Basin 6110 Executive Boulevard Rockville, Maryland 20852

Dear Mr. Hoffman:

The Watershed Alliance of Adams County (WAAC) has recognized that water is one of the most valuable resources to the citizens of Adams County and all of Pennsylvania, and that it is a resource that must be managed carefully. With eighty-one percent of Adams County's water supply being ground water, and with the current and expected future development in the county, management of this limited resource becomes even more critical. One of the first steps that need to be taken in order to effectively manage our water supply is the development of a "water budget." A water budget is simply measuring water inflows and outflows in order to quantify the amount of water available for use within a watershed.

The WAAC would like to pursue the development of a water budget for Adams County. The Adams County Department of Emergency Services has agreed to work with the WAAC in helping to develop the water budget and serve as the repository for the data that will need to be collected in order for this project to be successful. The success of the water budget also depends upon the involvement of agencies such as yours. Because of this, we are inviting you or your representative to attend the initial planning meeting for the Adams County water budget project. The meeting will be held on Tuesday, June 15, 2004 at 10:00 a.m. at the Adams County Emergency Services Facility, 230 Greenamyer Lane, Gettysburg (directions are attached). Please contact Tammy at the Adams County Department of Emergency Services at (717) 334-8603 to confirm your attendance. We hope you will be able to attend and assist us in carrying out this project which will help all of us to manage one of our most critical resources.

Sincerely,

Jonathan C. Hansen, Director

Jonatha C. Hansen

Adams County Department of Emergency Services

Cc: file

Directions to Adams County Emergency Services Facility

10)	EC	<u> </u>	jį.	砂崖	Til.
	JUN	ŋ	s'	20114	

BY:

From the North and South:

Follow U.S. Route 15 exiting at the York Street (Route 30) exit. Proceed east on Route 30 (York Road) for approximately 2 miles. Turn left onto Granite Station Road (there is **not** a light at this intersection and the road sign is not very visible from Route 30 – the landmark at the intersection of Route 30 and Granite Station Road is the Adams Rescue Mission on the south-east corner of the intersection). Proceed north on Granite Station Road for approximately ½ mile. Turn right onto Greenamyer Lane. Follow Greenamyer Lane to the Emergency Services Facility.

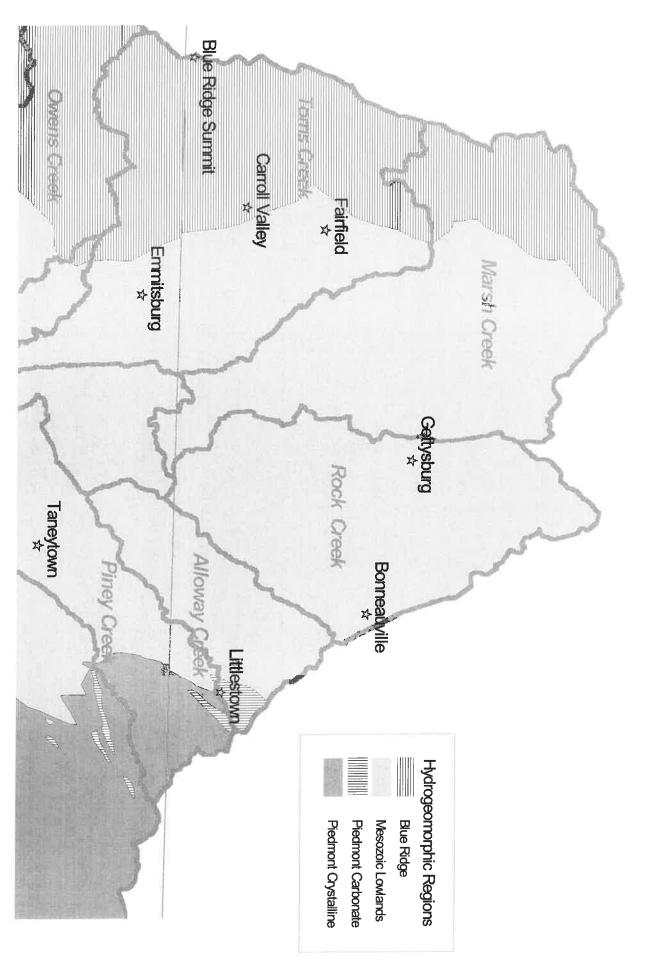
From the West:

Follow Route 30 east through Gettysburg. Proceed east on Route 30 (York Road) for approximately 4.2 miles. Turn left onto Granite Station Road (there is **not** a light at this intersection and the road sign is not very visible from Route 30 – the landmark at the intersection of Route 30 and Granite Station Road is the Adams Rescue Mission on the south-east corner of the intersection). Proceed north on Granite Station Road for approximately ½ mile. Turn right onto Greenamyer Lane. Follow Greenamyer Lane to the Emergency Services Facility.

From the East:

Follow Route 30 west to the square of New Oxford. Continue west on Route 30 (York Road) for approximately 5½ miles. Turn right onto Granite Station Road (there is **not** a light at this intersection and the road sign is not very visible from Route 30 – the landmark at the intersection of Route 30 and Granite Station Road is the Adams Rescue Mission on the south-east corner of the intersection). Proceed north on Granite Station Road for approximately ½ mile. Turn right onto Greenamyer Lane. Follow Greenamyer Lane to the Emergency Services Facility.

Pennsylvania Portion of Monocacy Basin



Hydrogeomorphic Regions (HGMRs) of the Monocacy Sub-basin

(HGMRs by USGS for Chesapeake Bay Program)

Mesozoic Lowlands

- Triassic-Jurassic age sedimentary rocks: shale, siltstone, sandstone, minor limestone, and conglomerate
- In PA, includes Gettysburg Formation, New Oxford Formation, diabase
- Lowest annual recharge rate of the basin HGMRs (mean is 5.5 in/yr)¹
- Shortest "residence time": baseflow recession index² in range of 15 to 30 days¹

Blue Ridge

- Primarily precambrian age metavolcanic rock (metabasalts, metarhyolite, greenstone schist)
- Includes Catoctin Formation, and Weverton and Loudoun Formations
- Annual recharge rate of 8.8 in/yr³
- Baseflow recession index in range of 20 to 60 days³

Piedmont - Crystalline Rock

- Primarily metamorphic rock including quartzite, phyllite and schists
- In PA, includes Marburg Schist, Antietam, and Harpers Formations
- Annual recharge rate of 9.1 in/yr⁴
- Longer "residence times" baseflow recession index in range of 30 to 90 days⁴

Piedmont - Carbonate Rock

- Limestone and dolomites with some shale and marble
- In PA, includes Conestoga Formation
- Generally found to have higher than average annual recharge rates
- Generally found to have smaller baseflow recession indices

¹ ICPRB preliminary results based on stream flow data from USGS Monocacy River gage at Bridgeport, MD

² Base flow recession index is time it takes for stream discharge to fall to 10% of initial value, under conditions of no precipitation

³ ICPRB preliminary results based on stream flow data from USGS Catoctin Creek gage near Middletown, MD

⁴ ICPRB preliminary results based on stream flow data from USGS Bennett Creek gage at Park Mills, MD

Water availability vs. withdrawals (preliminary results)

Toms Creek	Rock Creek	Marsh Creek	Alloway Creek	2			
ek	ek	eek	reek				
44%	100%	75%	93%	2	% ML % BR	^ (
56%	0%	25%	0%	2		ĩ	
0%	0%	0%	6%		% PCA	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
89	62	80	24	(mi2)	Area		
1.34	0.61	0.98	0.36	(mgd)	7Q2	^	
0.18	0.00	0.07	0.04	(mgd)	7Q10		
31	16	24	O	(mgd)	medBF	Recharge E	
23	12	18	Ŋ	(mgd)	5_yr BFR	Recharge Estimates	
19	10	15	4	(mgd)	10_yr BFR	>	
16	8	12	ω	(mgd)	20_yr BFR	\ \ \	
1.0	1.1	0.9	0.4	(mgd)	GW Withdr	^	
1.0	0.1	<u>.,</u>	0.0	(mgd)	SW Withdr	Withdrawals>	
2.0	1.1	1.9	0.4	(mgd)	Total	>	

ML = Mesozoic Lowlands

BR = Blue Ridge

PCA = Piedmont - Carbonate Rock

Recharge estimates based on preliminary ICPRB analysis of stream flow data from selected USGS gage stations. from 2002 (dry year)

MD withdrawal estimates from MDE/USGS withdrawal data for 2000. PA withdrawal estimates based on PADEP/USGS 1990's usage data, with adjustments made to public supply withdrawals based on summary info.

Per capita use from domestic wells based on USGS Aggregated Water Use Data results for Adams County, PA.