Montgomery County - Water Quality Advisory Group Meeting
https://www.montgomerycountymd.gov/water/advisory-group.html
May 10, 2021 (7:00 - 8:30 pm) – Draft Minutes
Microsoft Teams Online Meeting
(+1 443-692-5768 United States, Baltimore (Toll)
Conference ID: 386 899 686#)

I. Introductions

Member and affiliation	Present		Others in attendance and affiliation
	Yes	No	
Ken Bawer, Public-at-Large	X		• Kate Bennett, DEP • Ken Mack, DEP • Bob Hilderbrand, UMCES • Edna Miller, Public
Keith Brooks, Public-at-Large	X		
Bob Buglass, Public Agency, WSSC	X		
Michael Carmel, Public-at-Large	X		
Andrew Der, Public-at-Large	X		
El Hadji Fall, Academic/Scientific	X		
Michael McAvey, Public-at-Large		X	
Pamela Rathbone, Co-Chair, Public-at-Large	X		
Miranda Reid, DEP	X		
Tracy Rouleau, Co-Chair, Academic/Scientific	X		
Linda Silversmith, Public-at-Large	X		
Tim Stemann, Business		X	
Amy Stevens, Public Agency, DEP	X		
Mark Symborski, Public Agency, MNCPPC	X		
Allison Wright, Environmental	X		

Agenda Item	Major Points
I. Introductions	The meeting was called to order at 7:05 PM by Pamela Rathbone.
II. Reading and Approval of the Minutes	Minutes for April were approved.
III. New Business	<u>Ken Mack presented on Water Quality Monitoring in Montgomery County</u> • DEP water quality monitoring feeds into adaptive management and future decision making. • In stream benthic macroinvertebrate and fish sampling feed into an integrated biotic index (IBI). Fish and benthic macroinvertebrate species range from sensitive to tolerant to environmental stressors and species composition can give a picture of conditions in the watershed. • DEP conducts in-stream qualitative and quantitative habitat monitoring, including stream cross section profiles size and distribution of sediment. • Consistent IBI monitoring since ~ 1995. • IBI – Percent good and excellent sub-watersheds have been generally holding relatively steady. • West and north areas of the County are generally in better condition, with exceptions in the Upper Paint Branch and Potomac Direct watersheds • Updated Round 5 IBI map will be available soon. Results are showing many good and fair watersheds and a loss of a few excellent watersheds. • DEP is partnering with USGS on chemical, water quality, and hydrological monitoring in the Clarksburg Special Protection Area. Results show runoff is increasing. This may possibly be attributed to climate change and the increased frequency and intensity of rainfall events. • DEP conducts monitoring at its Breewood restoration site. The Breewood project consists of a Regenerative Stormwater Conveyance (RSC) stream restoration design with intensive upstream stormwater management. The RSC design consists of step pools designed to increase water retention time and in-stream nutrient processing and heavy metal binding. Monitoring showed reduced stormflow and increased in-stream stormwater storage. Benthic macroinvertebrate communities saw a slight uptake in tolerant species diversity. Chemical monitoring showed an increase in biological oxygen demand and decreases in copper, lead, and sediment (TSS) in small rain events. Larger storms saw significant decreases in lead and nitrogen (TKN). • The County has 5 Special Protection Areas (SPA), with additional monitoring efforts in the Clarksburg SPA to look at the effects of development. Lidar in the Clarksburg SPA shows natural drainage swales disappearing after development and regrading and an overall change in drainage pathways. Many stormwater best management practices were implemented in the watershed during development. IBI's dipped significantly during active development and construction in the watershed, but recovered post-development, although not all the way to pre-development levels.

	• Geomorphological monitoring of DEP stream restoration projects includes in-stream cross sections and long profiles of streams that identify vertical stream bed movement. The goal is to make sure the restored streams are stable and not actively moving and causing erosion. • There are new monitoring requirements in the upcoming MS4 permit. Chloride monitoring may take place in the Cabin John watershed. <u>Bob Hilderbrand presented on the Ecological Impacts of Stream Restoration</u> • Many early stream restoration project goals focused on ecological response, although these same projects weren't necessarily designed in this way. • Streams are vulnerable systems. Water flows downhill, which integrates impacts of land-use upstream. Organisms and habitat are constrained to a linear environment, which is easily fragmented. Isolated historical events can cause legacy effects, which can make it very difficult to bring back ecological communities. • Impervious surface cover is a good indicator of the chronic stressors in urban watersheds (hydrology/pollutants/erosion/temperature) • Successful stream restorations should mitigate upstream watershed stressors, which can be difficult in urban streams. Urban streams have frequent and larger flood events, more erosion and sediment altered habitat, higher water temperatures, and more pollutants. • Urban stream restorations can be effective in repairing physical habitat, but few cases show ecological attribute improvement. • Found little ecological difference between restored and non-restored reaches of the same stream. Ecological recovery does not seem to improve with time since restoration. • Upstream land use is still exerting pressure on stream systems despite in-stream improvements. • Developed a model that predicts achievable benthic IBI score based on watershed impervious surface cover (ISC). Many restored streams underperformed what would be expected given ISC.
IV. Reports of Officers, Boards, and Standing Committees	None at this time.
V. Reports of Special Committees	None at this time.
VI. Special Orders	None at this time.
VII. Unfinished Business and General Orders	Mark Symborski gave an overview of M-NCPPC's Environmental Guidelines update process and the Thrive Montgomery 2050 plan status. The anticipated updates to the Environmental guidelines include changes to reflect recent revisions in the Ten Mile Creek limited amendment to the

	Clarksburg Master Plan and the Ten Mile Creek Special Protection Area and also includes redrafting figures and maps to provide more clarity and legibility. The Planning Board has finalized its draft of the Thrive Montgomery 2050 plan and it has been forwarded to the Council Council. There will be a Council hearing on 6/17. Council revisions will come back to M-NCPPC to be formally adopted by the Planning Board.
VIII. Adjournment	Next meeting is June 14, 2021. Notetaker will be Tim Stemman. There will be a working meeting on stream restoration and next steps in June. The meeting was adjourned at 9:05 pm.

2021 Priority Speaker Topics			
Rank	**Subject Area**	**Topic**	**Votes**
1	Other	Understanding how climate change impacts water quality in Montgomery County	5
2	Stormwater	Meeting on trash – (February/March) – DEP/Alice Ferguson Foundation	3
3	Stormwater	Twice a year updates from Stormwater Partners Stream Restoration Working Group	2
4 (tie)	Wastewater	WSSC discharges from Potomac Filtration Plant and the ensuing litigation, sewage overflows	1
4 (tie)	Stormwater	Quantitative approaches to stormwater management (MS4, BMPs) (Quarterly updates?)	1
4 (tie)	Stormwater	RainScapes Update – 2022	1
4 (tie)	Stormwater	Erosion and Sediment Control (ESC) plan transparency	1
4 (tie)	Other	DOT Street Tree Policy	1
9	Other	Mont. Co. Sustainability Committee report & water related issues	0
10	Wastewater	Blue Plains and Seneca Treatment Plants Tours (July field trip)	0
11	Other	Educational Outreach – Other Organizations	0
12	Other	Community gardening	0
13	Other	Continue discussions on communicating the benefits of improved water quality	0
14	Other	Communications update from DEP	0
15	Wastewater	Replacing all public urinals in Montgomery county with waterless urinals	0
16	Parks	MNCPPC topics (invasive species)	0