

Attachment 1.

DEQ Assessment of Water Quality Conditions in Catoctin Watershed 2004 DEQ Fact

Stream	Location	Assessment	Status
Catoctin Creek Mainstem	7.2 mile segment begins at the confluence of Milltown Creek to Catoctin Creek, approx. 1.2 rivermiles downstream of Rt. 673, and continues downstream to its confluence with the Potomac River.	DEQ ambient, biological, and fish tissue/sediment station 1ACAX004.57. Citizen monitoring stations 1ACAX-4.57-LWC and 1ACAX-3-LWC. Fish tissue/sediment sampling was conducted in August 2001. Citizen biological monitoring results indicate an area of medium probability of adverse conditions at 1ACAX-3-LWC located approximately 1 RM downstream from the DEQ location. However, the DEQ monitoring data indicates fully supporting for all uses. This segment was initially listed in 1994 for a swimming use impairment due to fecal coliform bacteria exceedances. A fecal coliform TMDL for the Catoctin Creek watershed was submitted to the U.S. EPA on April 29, 2002 and approved May 31, 2002. The sources of fecal coliform bacteria requiring reductions are livestock and wildlife waste delivered directly to the stream, and human contributions from straight pipes. This segment was assessed as fully supporting the swimming use during this assessment cycle.	Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles.
Milltown Creek	2 mile stream segment not assessed by DEQ. Citizen Monitoring Station 1AMIH-11-LWC.	Six surveys: 6/6 Fair Rating. Area of medium probability of adverse conditions for biota.	Not assessed by DEQ
North Fork Catoctin Creek	4.12 mile segment begins at the confluence of x-trib to North Fork Catoctin Creek, approx. 0.2 rivermiles downstream from Rt. 287 bridge, downstream to	6 of 16 (37.5%) samples exceeded the instantaneous fecal coliform standard. A fecal coliform TMDL for the Catoctin Creek watershed was submitted to the U.S. EPA on April 29, 2002 and approved May 31, 2002. The sources of fecal coliform bacteria requiring reductions are livestock and wildlife waste delivered	Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles.

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	its confluence to Catoctin Creek. DEQ AWQM and sediment station 1ANOC000.42. Citizen Monitoring Station 1ANOC-1-LWC.	directly to the stream, and human contributions from straight pipes. Sixteen surveys at citizen monitoring station 1ANOC-1-LWC: 13/16 Fair ; 3/16 Poor rating. Citizen station finds medium probability of adverse conditions for biota.	
North Fork Catoctin Creek	3.16 mile segment begins at outlet from an unnamed impoundment, approx. 0.4 rivermiles upstream from the Rt. 611 bridge, downstream to confluence of x-trib and N.F. Catoctin Creek, approx. 0.2 rivermiles downstream from Rt. 287 bridge (start of segment NOC01A00). DEQ SS Monitoring Station 1ANOC004.38.	This segment was included in NOC01A00 in the 2000 cycle and was listed in the 1998 303 (d) report. SS Station 1ANOC04.38 was added as a special study based on the 1998 303(d) listing of North Fork Catoctin Creek. The segment is not considered part of the listed impaired section of North Fork Catoctin Creek as the special study monitoring station indicates full support of the swimming use.	Meets WQ standards
North Fork Catoctin Creek	2.45 mile segment begins at the confluence of an x-trib to North Fork Catoctin Creek, approx. 0.8 rivermile upstream of Rt. 719, near Hillsboro, downstream 2.45 rivermiles to an unnamed impoundment. DEQ SS Monitoring Station 1ANOC009.13.	This segment was included in NOC01A00 in the 2000 cycle and was listed in the 1998 303 (d) report for a swimming use impairment. SS Station 1ANOC09.13 was added as a special study based on the 1998 303(d) listing of North Fork Catoctin Creek. The segment was not listed in the 2002 303(d) report. However, with the lower fecal coliform instantaneous standard, it is considered impaired. 4 of 13 samples (30.8%) exceeded the instantaneous fecal coliform standard. A fecal coliform TMDL for the Catoctin Creek watershed was submitted to the U.S. EPA on April 29, 2002 and approved May 31, 2002. The sources of fecal coliform bacteria requiring reductions are livestock and wildlife waste delivered directly to the stream, and human contributions from straight pipes.	Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles.
South Fork Catoctin	5.77 mile segment begins at the confluence of an x-trib to South	Eight of 17 samples (47.1%) exceeded the instantaneous fecal coliform standard. Two of 17 samples (11.8%) exceeded the	Impaired for recreational use based upon fecal

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Creek	Fork Catoctin Creek, approx. 0.55 rivermile upstream of Rt. 9, downstream to its confluence to Catoctin Creek. DEQ AWQM Station 1ASOC001.66.	screening value of 0.2 mg/L for total phosphorus. A fecal coliform TMDL for the Catoctin Creek watershed was submitted to the U.S. EPA on April 29, 2002 and approved May 31, 2002. The sources of fecal coliform bacteria requiring reductions are livestock and wildlife waste delivered directly to the stream, and human contributions from straight pipes.	coliform bacteria exceedances during past assessment cycles.
South Fork Catoctin Creek	2.97 mile segment begins at confluence of x-trib to S. Frk Catoctin Creek, approx 0.75 rivermiles upstream from Rt. 287 bridge, downstream to the confluence of x-trib to S. Frk Catoctin Creek, approx. 0.55 rivermiles upstream from Rt. 9 bridge (start of SOC01A00). DEQ SS Monitoring Station 1ASOC007.06.	This station was added as a special study based on the 1998 303(d) listing of South Fork Catoctin Creek. Three of 11 samples (27.3%) exceeded the instantaneous fecal coliform standard.	Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles.
South Fork Catoctin Creek	3.4 mile segment begins at the Purcellville town limits and continues downstream to the confluence with x-trib to S. Frk Catoctin Creek, approx 0.75 rivermiles upstream from Rt. 287 bridge (start of segment SOC02A02). DEQ biological monitoring stations 1ASOC011.98 and 1ASOC012.60. DEQ SS station 1ASOC012.38. Citizen monitoring station 1ASOC-4-LWC.	Station 1ASOC012.38 was added as a special study based on the 1998 303(d) listing of South Fork Catoctin Creek. Four of 12 samples (33.3%) exceeded the instantaneous fecal coliform standard. A fecal coliform TMDL for the Catoctin Creek watershed was submitted to the U.S. EPA on April 29, 2002 and approved May 31, 2002. The sources of fecal coliform bacteria requiring reductions are livestock and wildlife waste delivered directly to the stream, and human contributions from straight pipes. This segment was included in VAN-A02R_SOC03A02 last cycle. It was segmented differently because of the biological monitoring performed in this assessment cycle. Both DEQ monitoring stations indicate moderate biological impairments. The citizen monitoring station indicates a high probability of adverse conditions for biota. The two DEQ surveys indicating moderate benthic impairment were confirmed in the summer of 2003.	Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles. Impairment for aquatic life based upon moderately adverse conditions for biota.

Stream	Location	Assessment	Status
South Fork Catoctin Creek	5.17 mile segment begins at the headwaters of S. Frk Catoctin Creek downstream to the Purcellville town limits, downstream from the Rt. 7 bridge crossing. DEQ biological monitoring station 1ASOC013.05.	Downstream DEQ SS station 1ASOC012.38 was used to perform the physical/chemical and pathological assessment. Station 1ASOC012.38 was added as a special study based on the 1998 303(d) listing of South Fork Catoctin Creek. 4 of 12 samples (33.3%) exceeded the instantaneous fecal coliform standard. This segment was included in VAN-A02R_SOC03A02 last cycle. It was segmented differently because of the biological monitoring performed in this assessment cycle. Biological monitoring results from station 1ASOC013.05 indicate a slight benthic impairment.	<p>Impaired for recreational use based upon fecal coliform bacteria exceedances during past assessment cycles.</p> <p>Slight impairment for aquatic life based upon slight adverse conditions for biota.</p>

APPENDIX B

DEQ's Station by Station Assessment of Loudoun Waters

(Pink= Impaired; Yellow=Threatened/Observed Effects; Green=Meets Standards; Italics=new in category since 2002 Assessment; NA=river segment overlaps with another segment)

Watershed Monitoring Station	Monitoring Location	Type Data	River Miles	Categories (Number of River Miles)								
				2A – Meet Stnds	2B-Exceed Screening Value	3A – No Data	3B- Insufficient DEQ Data	3C- Citizen Data Show Problems	3D- Citizen Data Show No Problems	4A- Impaired with TMDL	5A- Impaired TMDL Needed	5D- TMDL Needed for Benthic
Piney Run/Dutchman Creek A01			38.98			31.90						
IAPIA001.80	Rt. 671	DEQ									3.52	
<i>New IASDH-15-LWC</i>	Unnamed Tributary	Citizen						3.56				
Catoctin Creek A02			132.91			96.67						
IACAX004.57	Rt. 663	DEQ								7.20		
<i>New IACAX-3-LWC</i>		Citizen						(NA)				
North Fork Catoctin Creek A02												
IANOC000.42	Rt. 681	DEQ								4.12		
IANOC004.38	Rt. 287	DEQ		3.16								
<i>New IANOC009.13</i>	Rt. 812	DEQ								2.45		
<i>New IANOC-1-LWC</i>		Citizen						(NA)				
South Fork Catoctin Creek A02												
IASOC001.66	Rt. 698	DEQ								5.77		
IASOC007.06	Rt. 738	DEQ								2.97		
<i>New IASOC0011.98</i>	Rt. 611	DEQ										(3.40)
IASOC0012.38		DEQ								5.17		
<i>New IASOC012.60</i>	Rt. 690	DEQ										(NA)
IASOC013.05	Rt. 7	DEQ										(NA)
IACSOC-4-LWC	Rt. 611	Citizen						(NA)				

Watershed Monitoring Station	Monitoring Location	Type Data	River Miles	Categories (Number of River Miles)								
				2A – Meet Stnds	2B-Exceed Screening Value	3A – No Data	3B- Insufficient DEQ Data	3C- Citizen Data Show Problems	3D- Citizen Data Show No Problems	4A- Impaired with TMDL	5A- Impaired TMDL Needed	5D- TMDL Needed for Benthic
Milltown Creek A02												
<i>New IAMIH-11-LWC</i>		Citizen						2.00				
Limestone Branch A03			61.33			49.71						
1ALIM001.16	Rt. 15	DEQ									4.75	
<i>New IAXAQ-5-LWC</i>	Rt. 661	Citizen						1.90				
<i>New IAXGJ-16-LWC</i>	Tutt Lane	Citizen						4.97				
Middle Goose Creek/Panther Skin A05			120.52			102.78						
<i>New IAGOO022.44</i>	Rt. 734	DEQ								7.20		
IAGOO030.75	Rt. 611	DEQ		2								
<i>New IAPAE-12-LWC</i>	Rt. 623	Citizen						3.71				
Non-Loudoun Waters		DEQ		3.22						3.61		
North Fork Goose Creek/Crooked Run A06			60.43			41.29						
1ANOG005.69	Rt. 722	DEQ								4.29		
<i>New IACRF-6-LWC</i>	Rt. 727	Citizen						2.08				
1ANOG-7-LWC	Rt. 762	Citizen						2.56				
1ANOG-1-NFGC		Citizen							(NA)			
1AJAC-2-NFGC		Citizen							2.89			
1ACRF-3-NFGC		Citizen							(NA)			
<i>New IANOG-4-NFGC</i>		Citizen						2.47				
<i>New IANOG-5-NFGC</i>		Citizen						(NA)				
1ANOG-6-NFGC		Citizen							3.82			
1ASIM-8-NFGC		Citizen							1.03			
Beaverdam Creek A07			73.08			54.54						
1ABEC004.76	Rt. 734	DEQ								6.32		
1ABEC011.19	Rt. 626	DEQ		1.17								
1ANOB005.49	Rt. 719	DEQ		2.45								
1ANOB007.97	Rt. 831	DEQ			4.60							
<i>New IABUS-10-LWC</i>	Rt. 779	Citizen						1.11				

Watershed Monitoring Station	Monitoring Location	Type Data	River Miles	Categories (Number of River Miles)								
				2A – Meet Stnds	2B-Exceed Screening Value	3A – No Data	3B- Insufficient DEQ Data	3C- Citizen Data Show Problems	3D- Citizen Data Show No Problems	4A- Impaired with TMDL	5A- Impaired TMDL Needed	5D- TMDL Needed for Benthic
IANOB-9-LWC	Rt. 630	Citizen						2.89				
Lower Goose Creek A08			161.58			121.54						
1AGOO002.38	Rt. 7	DEQ								4.77		(NA)
1AGOO003.18		DEQ										(NA)
1AGOO011.23	Rt. 621	DEQ		3.00								
1644000.00		USGS			3.20							
Little River A08												
1ALIV001.70	Rt. 15	DEQ								(NA)		(NA)
1ALIV004.78	Rt. 50	DEQ								6.13		(NA)
Sycolin Creek A08												
New 1ASYC002.03	Rt. 653	DEQ								2.85		
1ASYC004.93	Rt. 621	DEQ								3.51		
1ASYC007.43	Rt. 797	DEQ								3.59		
1ASFS000.28	Rt. 15	DEQ								3.31		
Tuscarora Creek A08												
New 1ATUS000.37	Rt. 653	DEQ								3.55		
1ATUS-2-LWC		Citizen						(NA)				
Broad Run/Horsepen Run A09			128.54			113.87						
New 1ABRB002.15	Rt. 7	DEQ									2.88	
1AHPR003.87	Dulles Rd	DEQ		6.38								
1ASOR002.99	Rt. 616	DEQ		4.96								
New 1ABEM-13-LWC	Rt. 641	Citizen						0.45				
Sugarland Run A10			4.42			0						
1ASUR004.42	Rt. 7	DEQ									4.42	
New ASUG-14-LWC		Citizen						(NA)				
County Totals			774	30	8	612	0	30	8	104	16	(3)