



Maryland
Department of
the Environment

Maryland's 2016 Triennial Review of Water Quality Standards

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Overview of the 2016 Triennial Review of Water Quality Standards

The Clean Water Act (CWA) requires that States review their water quality standards every three years (Triennial Review) and revise the standards as necessary. A water quality standard consists of three separate but related components:

1. Designated Uses that define goals for a water body. Examples of Designated Uses include support of aquatic life, drinking water supply or a coldwater fishery such as trout.
2. Criteria that support the Designated Uses. There are numerous criteria for chemical substances, bacteria, acidity and physical characteristics (e.g., temperature). Examples include dissolved oxygen concentrations sufficient to support aquatic life, metals in sufficiently low concentrations that they will not interfere with aquatic life, or temperature values to support reproducing trout populations.
3. Antidegradation policy. Maryland has a policy in place which is implemented through the Maryland Department of the Environment's permitting authorities.

As part of Maryland's 2016 Triennial Review efforts, the Maryland Department of the Environment (MDE) reviewed more than just those sections of water quality standards that were altered in regulation. In many cases, existing standards remain valid and as a result, the Department maintains those standards in-force. MDE staff also considered adopting current nationally recommended water quality criteria, re-evaluated the State's restoration variances, and identified several future work items related to Maryland's designated and existing use classification system. These items are discussed in further detail in the sections immediately following. Actual amendments to Maryland's water quality standards are described later in the "Water Quality Standards Amendments" Section.

Maryland's water quality standards are found in the Code of Maryland regulations (COMAR) at 26.08.01 – 26.08.02. Maryland regulations may be accessed online at the Division of State Documents web site: www.dsd.state.md.us. Click on COMAR Online and enter the appropriate regulatory reference.

Nationally Recommended Water Quality Criteria Considered with Maryland's 2016 Triennial Review

2012 Recreational Water Quality Criteria: MDE is adopting these criteria with this (2016) Triennial Review of Water Quality Standards. The changes to Code of Maryland Regulations are shown in the “Water Quality Standards Amendments: Water Quality Criteria” Section.

2013 National Criteria for Ammonia: MDE is currently working with stakeholders to evaluate implementation options for the updated ammonia criteria. These options may include developing a streamlined recalculation procedure and/or discharge variance regulatory language. MDE hopes to adopt a version of these criteria with the 2019 Triennial Review.

2015 National Criteria for 94 human health criteria: MDE recognizes the importance of protecting human health and is reviewing the updated 94 human health criteria. The Department will be evaluating the feasibility of adopting these criteria with the 2019 Triennial Review.

2016 National Criteria for Cadmium: MDE is currently reviewing the updated national criteria for cadmium to determine the appropriateness of these criteria to Maryland's waters with the intention of adoption with the 2019 Triennial Review.

2016 National Criteria for Selenium: MDE is currently evaluating the updated national criteria for selenium to determine the appropriateness of these criteria to Maryland's waters with the intention of adoption with the 2019 Triennial Review.

National Criteria for Nutrients: MDE has conducted extensive review of these criteria and at this time concludes that confounding factors as well as extensive data gaps preclude the development of scientifically defensible nutrient criteria. Even so, Maryland's current water quality standards include statewide dissolved oxygen criteria as well as chlorophyll a criteria for most lakes and reservoirs in Maryland that serve as valuable surrogates for nutrient criteria. MDE will continue to monitor the state of the science and may consider adopting nutrient criteria if methodologies become available that are applicable to Maryland's surface waters.

Re-evaluation of Maryland's Restoration Variances

“Restoration Variance”, as defined in COMAR 26.08.01.01 “means a temporary exception to the water quality standards allowing nonattainment of designated uses granted in situations where no enforcement action will be taken if the nonattainment is due to the existence of one or more of the justifications in 40 CFR §131.10(g). Restoration variances will be reviewed every 3 years at a minimum as required by the Clean Water Act and EPA regulations.”

The following segments of the Chesapeake Bay and its tidal tributaries have been assigned restoration variances:

- Chesapeake Bay Mainstem Segment 4 mesohaline (CB4MH)
- Patapsco River mesohaline (PATMH)
- Lower Chester River Mesohaline (CHSMH)
- Eastern Bay Mesohaline (EASMH)

COMAR 26.08.02.02 C. (8)(h) further explains, “The percentage of allowable exceedance for restoration variances is based on water quality modeling and incorporates the best available data and assumptions. The restoration variances are temporary, and will be reviewed at a minimum every three years, as required by the Clean Water Act and EPA regulations. The variances may be modified based on new data or assumptions incorporated into the water quality model.”

A combination of the Chesapeake Bay observed Water Quality data and the Chesapeake Bay Modeling framework was used to support the development of Maryland's Chesapeake Bay water quality standards (i.e. those standards associated with Use II waters) which included the restoration variances for the segments identified above. This information and modeling also informed the development of water quality criteria, the Chesapeake Bay TMDLs, and Watershed Implementation Plans. Maryland's existing restoration variances are currently undergoing review through the Chesapeake Bay Program Partnership's Chesapeake Bay TMDL Midpoint Assessment and are not ready for finalization with this Triennial Review. However, after completion of the Midpoint Assessment, the Department will likely propose revised restoration variances for adoption in the 2019 Triennial Review based on factoring in the latest scientific research, modeling findings and monitoring data.

Other Future Water Quality Standards Work

Interactions with various stakeholder groups as well as internal discussions have highlighted the need to reevaluate the Department's Designated Use Classification system for non-tidal surface waters. More specifically, cold and/or coolwater obligate species have been found in waters with warmer water use class designations (e.g. Class I: Warmwater or Class IV: Recreational Trout waters) leading to questions about how the State handles existing use determinations, use class re-designations, and the very structure of Maryland's use classifications. To help inform the Department's policy on these issues and whether regulatory changes are necessary, EASP is forming an advisory committee composed of stakeholders and subject matter experts. The Committee will achieve four separate but related objectives that will help to provide regulatory certainty while at the same time protect cold and coolwater aquatic life species found in Maryland's surface waters. The four objectives are outlined briefly below.

- Develop Departmental policy for protecting streams with cold or coolwater species in advance of changing the Use Class (an existing use policy).
- Propose a new "coolwater" use classification based on analyses conducted by DNR and consideration of current stream scenarios.
- Propose changes to Class IV (or IV-P) recreational trout waters based on the different types of waters being stocked and/or trout stocking goals.
- Develop a process for conducting Use Attainability Analyses (UAA) for surface waters that support self-sustaining trout populations but which do not currently attain Class III (or III-P) water quality criteria.

Streams identified as having cool water or coldwater characteristics, as determined by the Department with advice from stakeholders including DNR, Trout Unlimited, and others, are included here in Maryland's 2016 Triennial Review submittal and also on MDE's Water Quality Standards webpage. Additionally, this list will be shared with the Department's permitting programs and applicants to ensure that upcoming permit applications will be evaluated in light of the recently identified resource and water quality so as not to allow degradation of this valued resource.

Stream Name	Location of Sampling	County	Current Designated Use Classification	Cold/Coolwater Characteristics Found
Long Arm Creek	Northwest of Manchester	Carroll	I-P	Temperature data shows low ambient water temperatures. Believed to hold coldwater obligate species.
West Branch of the North Branch Patapsco main stem	Northeast of Westminster	Carroll	IV-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Aspen Run	Southwest of Hampstead	Carroll	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Board Run	Southwest of Hampstead	Baltimore, Carroll	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Deep Run	Southwest of Hampstead	Carroll	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Roaring Run	North of Finksburg	Baltimore, Carroll	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
North Branch Patapsco River main stem	North of Finksburg	Carroll	IV-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Unnamed Tributary to North Branch Patapsco at Hollingsworth Road	North of Finksburg	Baltimore, Carroll	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
South Branch Patapsco main stem	Northeast of Manchester	Carroll	IV	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).
Unnamed Tributary to Big Pipe Creek	Northeast of Westminster	Carroll	IV-P	Naturally reproducing population of Brook trout (<i>Salvelinus fontinalis</i>).
North Branch Potomac River (Laurel Run/Piney Swamp)	Southwest of Cumberland	Allegany	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>) and rainbow trout (<i>Oncorhynchus mykiss</i>).
North Branch Potomac River (Old Wilson Bridge and Jennings-Randolph Lake, and Piney Swamp and Route 956 in Pinto, MD)	Southwest of Cumberland	Allegany	I-P	These waters are actively stocked by the Department of Natural Resources.
Mill Creek	Northeast of Perryville	Cecil County	I-P	Naturally reproducing population of Brown trout (<i>Salmo trutta</i>).

Water Quality Standards Amendments

The following sections describe actual changes to Code of Maryland Regulations (COMAR) made as a result of the Notice of Final Action issued with the March 30, 2018 issue of the Maryland Register.

Designated Uses

The 2016 Maryland water quality standards amendments that deal with Designated Uses fall into three categories: 1) Correcting minor errors, 2) clarifying text and 3) Use Class re-designation. The minor errors that are proposed to be corrected include fixing coordinates that define boundaries for applying fresh versus marine/estuarine toxic substance water quality criteria, adding the drinking water designated use (-P) for certain waters upstream of drinking water sources, and replacing the term “Use” with the term “Class” in sections that were mistakenly not changed during the 2013 Triennial Review.

The clarifying text that is proposed to be added better defines how to interpret the table that enumerates Use Class designations.

Finally, there is one stream segment that is proposed to be re-designated to Class III based on the presence of a reproducing trout population and documented water quality data showing it meets Class III criteria. The specific regulations affected are listed below along with a brief description of the proposed amendments followed by the amended regulatory language. Please note that when reviewing amended text, [text in brackets is deleted] while *text in italics is new*.

REGULATIONS MODIFIED

COMAR 26.08.02.03-1 Toxic Substance Water Quality Criteria for Surface Waters

Summary of Changes: Amendments were made to incorporate minor corrections to the boundaries for applying fresh versus marine/estuarine toxic substance water quality criteria for the Chesapeake Bay Proper.

Specific Changes to Regulation: 26.08.02.03-1 Toxic Substance Water Quality Criteria for Surface Waters.

- A. General (Text Unchanged)
- B. Fresh Water, Estuarine, and Salt Water Boundaries.
 - (1) —(2) (Text Unchanged)
 - (3) For the purposes of applying numerical toxic substance criteria, the following are designated as the boundaries between fresh waters and estuarine or salt waters:

(a) — (s) (Text Unchanged)

(t) Chesapeake Bay Proper (Sub-Basin 02-13-99) boundary is a line connecting Booby Point ([39°17'4.5"] 39.284206 north latitude, [76°10'54"]-76.381400 west longitude) with Handy's Point ([39°17'31"] 39.291944 north latitude, [76°10'54"]-76.181388 west longitude).

COMAR 26.08.02.08 Stream Segment Designations

Summary of Changes to 26.08.02.08A: Text was added to clarify the tables that describe Use Classifications.

Specific Changes to Regulation 26.08.02.08A

.08 Stream Segment Designations.

A. General.

(1) All geographic coordinates provided within this regulation are expressed in decimal degrees latitude and longitude using the North American Datum of 1983. *In this Regulation, Maryland's waters are organized by sub-basin.* For most Class I, I-P, III, III-P, IV, or IV-P waters, the limits indicate the most downstream *boundary* point or line for the segment. In some cases, an upstream point and a downstream point are provided to describe those uses that may apply only to a limited segment of a water body. *In tidal areas, the segments are defined by polygons defined by three or more points as numbered and expressed in narrative format in column four and defined by latitude and longitude point locations in columns two and tree.* Any waterbody not *specifically* listed in the table is a Class I water.

(2)—(5) (Text Unchanged)

Summary of Changes to 26.08.02.08B and 26.08.02.08K: Two streams upstream of drinking water intakes currently do not have the “-P” public water supply designation. Those streams are described in the table below.

Table 1: Both of these water bodies were inaccurately classified as Class III and are being reclassified to Class III-P.

Water	Latitude	Longitude	Limits
Rock Run and all tributaries (Cecil County)	39.613544	-76.12697	Upstream of mouth
Roaring Run (Carroll County) and all tributaries	39.510061	-76.88728	Upstream from mouth

Specific Changes to Regulation: 26.08.02.08B and 26.08.02.08K Stream Segment Designations.

B. Sub-Basin 02-12-02: Lower Susquehanna River Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1)—(2) (Text Unchanged)			
(3) Class III: <i>None</i>			
[(a) Rock Run and all tributaries (Cecil County)]	39.613544	-76.126972	Upstream of mouth]
(4) Class III-P:			
(a)—(q)			
(r) <i>Rock Run and all tributaries (Cecil County)</i>	39.613544	-76.126972	<i>Upstream of mouth</i>
(5)—(6) (Text Unchanged)			

C.—J. (Text Unchanged)

K. Sub-Basin 02-13-09: Patapsco River Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1)—(2) (Text Unchanged)			
(3) Class III:			
(a)—(h) (Text Unchanged)			
[(i) Roaring Run (Carroll County) and all tributaries]	39.510061	-76.887278	Upstream from mouth]
(j)—(k) (Text Unchanged)			
(4) Class III-P:			
(a)—(n) (Text Unchanged)			
(o) <i>Roaring Run (Carroll County) and all tributaries</i>	39.510061	-76.887278	<i>Upstream from mouth</i>
(5)—(6) (Text Unchanged)			

L.—M. (Text Unchanged)

Summary of Changes to 26.08.02.08N: The description of the designated uses and extent of the Piscataway Creek Tidal Fresh (PISTF) segment was improperly located in COMAR 26.08.02.08 Section N under the Lower Potomac River Area sub-basin 02-14-01. The proper location for the description concerning PISTF is in COMAR 26.08.02.08 Section O under the Washington Metropolitan Area sub-basin 02-14-02.

Specific Changes to Regulation: 26.08.02.08N Stream Segment Designations.

N. Sub-Basin 02-14-01: Lower Potomac River Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1) (Text Unchanged)			
(2) Class II:			
(a) Lower Potomac River Tidal Fresh (POTTF):	38.524168	- 77.284804	(1) MLW midway between Shipping Pt. and Quantico Pier
Designated Uses Present in Segment:	38.523266	- 77.256630	(2) 1,000 feet SW of Moss Pt.
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.554722	- 77.220268	(3) Stump Neck, E of radio towers & W of Roach Rd.
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive	38.566856	- 77.209755	(4) Cornwallis Neck, 0.25 miles NW of Deep Pt.
Application Depth: 2.0 meters, NGZ present	38.702038	- 77.044693	(5) Mockley Pt., 500 feet west of tip
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive	38.711002	- 77.036736	(6) West of Fort Washington
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation	38.809449	- 77.016184	(7) DC/MD State Line-northern shore of Oxon Creek
	38.805753	- 77.020951	(8) DC/MD State Line-southern shore of Oxon Creek
	38.802464	- 77.025166	(9) DC/MD State Line-near Fox Ferry Pt.
	38.791836	- 77.038923	(10) DC/MD/VA State line, 200' east of Jones Point Park
	38.711002	- 77.036736	(11) West of Ft. Washington

	38.702038	- 77.044693	(12) Mockley Pt., 500 west of tip
	38.566856	- 77.209755	(13) Cornwallis Neck, 0.25 miles NW of Deep Pt.
	38.554722	- 77.220268	(14) Stump Neck, E of radio towers and W of Roach Rd.
<p>Following the mean low water (MLW) line which defines the Maryland/Virginia State boundary to the first point described above, except for the following Virginia embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River; Hunting Creek, Little Hunting Creek, Dogue Creek, Gunston Cove, the unnamed embayment in Mason Neck NWR, Occoquan Bay, Powells Creek, and Quantico Creek.</p>			
(b) Lower Potomac River Oligohaline 1 (POTOH1):	38.389680	- 77.029268	(1) MLW 1 mile SE of Mathias Pt., just north of 639
Designated Uses Present in Segment:	38.407509	- 76.997322	(2) 0.65 miles NW of the town of Popes Creek
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.444935	- 77.016396	(3) 1.5 miles SE of Chapel Pt., due E of Windmill Pt.
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive	38.444565	- 77.040695	(4) Windmill Pt.
Application Depth: 2.0 meters, NGZ present	38.408894	- 77.110886	(5) Blossom Pt.
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive	38.408745	- 77.124855	(6) 0.15 miles SW of Benny Gray Pt.
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation	38.523266	- 77.256630	(7) 1,000 feet SW of Moss Pt.
	38.524168	- 77.284864	(8) MLW midway between Shipping Pt. and Quantico Pier
<p>Following the Mean Low Water (MLW) line which defines the Maryland/Virginia State boundary to the first point described above, except for the following Virginia embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River; Unnamed embayment (Chopawamsic Island), Unnamed embayment (near Arkendale Road), Aquia Creek, and Potomac Creek.</p>			
(c) Lower Potomac River Oligohaline 2 (POTOH2): Port Tobacco River	38.444565	- 77.040695	(1) Windmill Pt.

Designated Uses Present in Segment:	38.444935	- 77.016396	(2) 1.5 miles SE of Chapel Pt., due E of Windmill Pt.
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.500164	- 77.026306	(3) Port Tobacco Marina (edge of 7.5 foot quad sheet)
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive			
Application Depth: 1.0 meters, NGZ present			
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive			
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation			
(d) Lower Potomac River Oligohaline 3 (POTOH3): Nanjemoy Creek	38.408745	- 77.124855	(1) 0.15 miles SW of Benny Gray Pt.
Designated Uses Present in Segment:	38.408894	- 77.110886	(2) Blossom Pt.
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.475391	- 77.130676	(3) Wards Run, 0.25 miles upstream of Hill Top Fork
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive			
Application Depth: 1.0 meters, NGZ present			
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive			
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation			
(e) Lower Potomac River Mesohaline (POTMH):	37.909777	- 76.263700	(1) MLW East of Ophelia, 300 feet NW of light
Designated Uses Present in Segment:	38.038605	- 76.321442	(2) Point Lookout
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.407509	- 76.997322	(3) 0.65 miles NW of the town of Popes Creek
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive	38.389680	- 77.029268	(4) MLW 1 mile SE of Mathias Pt., just north of 639

Application Depth: meters, NGZ present			
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive			
Seasonal Deep Water Fish and Shellfish Use: Upper pycnocline to lower pycnocline from June 1 to September 30, inclusive			
Seasonal Deep Channel Refuge Use: Lower pycnocline boundary to bottom from June 1 to September 30, inclusive			
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation			
Following the mean low water (MLW) line which defines the Maryland/Virginia State boundary to the first point described above, except for the following Virginia embayments where the boundary is the confluence of the mouth of the embayment with the Potomac River: Upper Machodoc Creek, Rosier Creek, Monroe Bay, Mattox Creek, Popes Creek, Nomini Bay, Lower Machodoc Creek, unnamed embayment (south of Ragged Pt.), Gardner Creek, Jackson Creek, Bonum Creek, Yeocomico River, Coan River, Presley Creek, Hull Creek, and Hock Creek.			
[(f) Piscataway Creek Tidal Fresh (PISTF):	38.711002	- 77.036736	(1) West of Ft. Washington
Designated Uses Present in Segment:	38.702038	- 77.044693	(2) Mockley Point, 500 feet west of tip
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.697979	- 76.996788	(3) Piscataway Creek Park, north of sewage disposal plant
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive.			
Application depth: 2.0 meters, NGZ Absent			
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive.			
Shellfish Harvest: See §N(2)(h) of this regulation]			
[(g)] (f) Mattawoman Creek Tidal Fresh (MATTF):	38.566856	- 77.209755	(1) Cornwallis Neck, 0.25 miles northwest of Deep Point

Designated Uses Present in Segment:	38.554722	- 77.220268	(2) Stump Neck, east of radio towers and west of Roach Road
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.591194	- 77.124672	(3) 2300 feet downstream of Routes 224/225
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive.			
Application depth: 1.0 meters, NGZ Absent			
Open Water Fish and Shellfish Use: January 1 to December 31, inclusive.			
Shellfish Harvest: See [§N(2)(h)] §N(2)(g) of this regulation			
[(h)] (g) Shellfish Harvest Subcategory. All estuarine portions of tributaries except Potomac River and tributaries	38.415027	- 77.265037	Above line from Smith Pt. to Simms Pt.
	38.397067	- 77.311346	
(3) —(6) (Text Unchanged)			

O. Sub-Basin 02-14-02: Washington Metropolitan Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1) (Text Unchanged)			
(2) Class II:			
(a) Anacostia River Tidal Fresh (ANATF):	38.938805	- 76.942162	(1) DC/MD State Line-eastern side of Rt. 50 bridge
Designated Uses Present in Segment:	38.918850	- 76.941951	(2) 100 feet below Bladensburg Road bridge
Migratory Spawning and Nursery Use: February 1 to May 31, inclusive	38.918261	- 76.941198	(3) DC/MD State Line-western shore
Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive			
Application Depth: 0.5 meters, NGZ present			

Open Water Fish and Shellfish Use: January 1 to December 31, inclusive			
<i>(b) Piscataway Creek Tidal Fresh (PISTF):</i>	38.711002	- 77.036736	<i>(1) West of Ft. Washington</i>
<i>Designated Uses Present in Segment:</i>	38.702038	- 77.044693	<i>(2) Mockley Point, 500 feet west of tip</i>
<i>Migratory Spawning and Nursery Use: February 1 to May 31, inclusive</i>	38.697979	- 76.996788	<i>(3) Piscataway Creek Park, north of sewage disposal plant</i>
<i>Shallow Water Submerged Aquatic Vegetation Use: April 1 to October 30, inclusive.</i>			
<i>Application depth: 2.0 meters, NGZ Absent</i>			
<i>Open Water Fish and Shellfish Use: January 1 to December 31, inclusive.</i>			
(3) —(6) (Text Unchanged)			

P.—Q. (Text Unchanged)

Summary of Changes to 26.08.02.08R and 26.08.02.08S: References to “Use” were removed and replaced with “Class” where appropriate. Previously, in the 2013 Triennial Review of Water Quality Standards (TR) one of the changes made to the regulation was making sure that terminology was consistent with respect to referring to “classes” of designated uses. In the 2013 TR, the Department removed references to “Use” and replaced it with “Class” to make it clear that a Class was a grouping of individual designated uses (eg. Water contact sports, fishing, etc.). Maryland’s current Class system includes four main classes (e.g. I, II, III, and IV) that may each have the public water supply suffix applied (-P). These changes were largely all made in the previous TR. However, some of the proposed changes were omitted from COMAR and thus they are proposed to be corrected during this (2016) Triennial Review. This revision will correct the sections that were overlooked.

The Department also reviewed available information which indicated that a water body should be assigned a designated use class different than that to which it is currently assigned. Several interested parties submitted data for water bodies in support of use class re-designation to either Class III (or III-P) nontidal coldwater or Class IV (or IV-P) recreational trout water. The Department reviewed this information in light of its new approach to use class re-designation which is based on the EPA letter from Ms. Denise Keehner (Director of the USEPA Standards

and Health Protection Division) to Mr. Derek Smithee (State of Oklahoma Water Resources Board) dated September 5th 2008. This new approach requires a water body to have an existing use that satisfies both the aquatic life community and water quality requirements for the Class to which it will be re-designated. In using this approach, only Bucks Run, a stream in Garrett County, Maryland met these conditions and was therefore changed from Class I (nontidal warmwater aquatic life) to Class III (nontidal coldwater) in COMAR 26.08.02.08S.

Table 2: Coordinates for the Bucks Run stream reclassification. The classification of Bucks Run stream in Garrett County from Class I to Class III was based on the presence of trout and water temperatures that meet the Class III criterion.

Water	Latitude	Longitude	Limits
Bucks Run and all tributaries	39.721831	-79.24282	

Specific Changes to Regulation: 26.08.02.08R and 26.08.02.08S Stream Segment Designations.

R. Sub-Basin 02-14-10: North Branch Potomac River Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1) [Use] <i>Class I-P</i> :			
(a)—(d) (Text Unchanged)			
(2) [Use] <i>Class II</i> : None.			
(3) [Use] <i>Class III</i> : None.			
(4) [Use] <i>Class III-P</i> :			
(a) (Text Unchanged)			
(b) All other waters are [Use] <i>Class III-P</i> except:			From confluence of North and South Branches of the Potomac River to the MD/WV state line
(i) Those designated above as [Use] <i>Class I-P</i>			
(ii) Those designated below as [Use] <i>Class IV-P</i> waters			
Note: Mill Run and all tributaries upstream from the Route 220 McMullen Highway road crossing (near intersection with Hansel Drive) are designated as [Use] <i>Class III-P</i> .			
(5) [Use] <i>Class IV</i> : None.			

(6) [Use] <i>Class IV-P</i> :			
(a)—(c) (Text Unchanged)			

S. Sub-Basin 05-02-02: Youghiogheny River Area.

Designated Use Class and Waterbody	Latitude	Longitude	Limits
(1) [Use] <i>Class I-P</i> :			
(a)—(b) (Text unchanged)			
(2) [Use] <i>Class II</i> : None.			
(3) [Use] <i>Class III</i> :			
(a)—(f) (Text Unchanged)			
(g) <i>Bucks Run and all tributaries</i>	39. 721831	- 79.242819	
(4) [Use] <i>Class III-P</i> :			
(a)—(b) (Text Unchanged)			
(5) <i>Class IV</i> : Casselman River	39.722386	- 79.111767	Mainstem only, from Pennsylvania line upstream to the confluence of the South and North Branches of the Casselman
(6) <i>Class IV-P</i> : None.			

T.—U. (Text Unchanged)

Criteria

With this Triennial Review (2016), Maryland is adopting the nationally recommended recreational criteria and also language related to the Beach Action Value (BAV). All regulations that are associated with or referenced by the recreational criteria and/or BAV are also being amended to ensure consistency. The specific regulations affected are listed below along with a brief description of the proposed amendments followed by the amended regulatory language. Please note that when reviewing amended text, [text in brackets is deleted] while *text in italics is new*.

REGULATIONS MODIFIED

COMAR 26.08.02.03-3 Water Quality Criteria Specific to Designated Uses

Summary of Changes: These changes remove the older bacteriological water quality criteria and replace with the nationally recommended 2012 recreational water quality criteria.

Specific Changes to Regulation: 26.08.02.03-3 Water Quality Criteria Specific to Designated Uses.

A. Criteria for Class I Waters — Water Contact Recreation and Protection of Nontidal Warmwater Aquatic Life.

(1) Bacteriological.

[(a) Table 1. Bacteria Indicator Criteria for Frequency of Use.

Indicator	All Areas	Steady State Geometric Mean Indicator Density		Single Sample Maximum Allowable Density		
		75% CL)	82% CL)	Moderately Frequent Full Body Contact Recreation (Upper 90% CL)	Occasional Full Body Contact Recreation (Upper 95% CL)	Infrequent Full Body Contact Recreation (Upper 95% CL)
Freshwater (Either apply)						
Enterococci	33	61	78	107	151	
E. coli	126	235	298	410	576	
Marine water						
Enterococci	35	104	158	275	500	

CL = confidence level

All numbers are counts per 100 milliliters

(b) In freshwater for *E. coli*, the following formula is used to calculate the upper 75 percent confidence interval for single sample maximum allowable density: $\text{antilog}[(\log 126) + 0.675 * \log(\text{SD})]$.

(c) In freshwater for enterococci, the following formula is used to calculate the upper 75 percent confidence interval for single sample maximum allowable density: $\text{antilog}[(\log 33) + 0.675 * \log(\text{SD})]$, where $\log(\text{SD})$ is the standard deviation of the log transformed *E. coli* or enterococci data. If the site data are insufficient to establish a log standard deviation, then 0.4 is used as the log standard deviation for both indicators. At the default log standard deviation, the values are 235 for *E. coli* and 61 for enterococci.

(d) In saltwater, for enterococci, the following formula is used to calculate the upper 75 percent confidence interval for single sample maximum allowable density: $\text{antilog}[(\log 35) + 0.675 * \log(\text{SD})]$, where $\log(\text{SD})$ is the standard deviation of the log transformed enterococci data. If the site data are insufficient to establish a log standard deviation, then 0.7 is used as the log standard deviation. At the default log standard deviation, the value is 104.

(e) Confidence Level Factors.

(i) The factors in Table 2 are used in the formulas in this subsection to calculate the appropriate confidence limits when site-specific standard deviations are used.

(ii) Table 2.

Confidence Level	Factor
75%	0.675
82%	0.935
90%	1.280
95%	1.650

(f) Establishment of a Site-Specific Standard Deviation. A site-specific standard deviation for use in the formulas in this subsection shall be based on at least 30 samples, taken over not more than one recreational season, at base flows.]

(a) Table 1. Bacteria Indicator Criteria Magnitudes

		<i>Geometric Mean</i>	<i>Statistical Threshold Value</i>
<i>Indicator</i>	<i>Enterococci (fresh or marine) - culturable</i>	35	130
	<i>E. coli (fresh)- culturable</i>	126	410

All magnitudes in Table 1 are expressed as counts per 100 milliliters

(b) The geometric mean of samples taken over a 90 day period shall not exceed the steady state geometric mean values for the given indicator.

(c) 10 percent of samples taken over a 90 day period shall not exceed the statistical threshold value.

[(g)] (d) When a sanitary survey and an epidemiological study approved by the Department disclose no significant health hazard, the criteria in Table 1 do not apply.

(2) —(7) (Text Unchanged)
B.—H. (Text Unchanged)

COMAR 26.08.09.01 Definitions

Summary of Changes to 26.08.09.01B: BEACH regulations were updated to define the Beach Action Value (BAV) for beach notifications.

Specific Changes to Regulation: 26.08.09.01 Definitions.

- A. (Text Unchanged)
- B. Terms Defined.
 - (1) (text unchanged)
 - (2) “*Beach Action Value*” (*BAV*) means the value the approving authority uses to issue beach notifications and is defined as follows:
 - (a) *BAV is 235 colony forming units (cfu) using E. coli indicator at freshwater beaches.*
 - (b) *BAV is 104 cfu using Enterococci indicator at marine beaches.*
 - [(2)] (3) — [(6)] (7) (Text Unchanged)

COMAR 26.08.09.04 Drinking Water at Permitted Beaches

Summary of Changes to 26.08.09.04: Additional language was added to BEACH regulations for clarification.

Specific Changes to Regulation: 26.08.09.04 Drinking Water at Permitted Beaches.

.04 Drinking Water at Permitted Beaches.

An adequate supply of potable drinking water shall be available to bathers at [the] *each permitted* beach.

COMAR 26.08.09.06 Sanitary Quality of Permitted Beaches

Summary of Changes: BEACH regulations were updated for consistency with new terminology and the new recreational water quality criteria shown above in proposed changes to 26.08.02.03-3.

Specific Changes to Regulation: 26.08.09.06 Sanitary Quality of Permitted Beaches.

A.—D. (Text Unchanged)

E. An operating permit may be issued if a sanitary survey reveals no dangerous sources of pollution and if the microbiological samples collected during the sanitary survey satisfy the [criteria listed in Table 1 of COMAR 26.08.02.03-3] *Beach Action Value (BAV)*.

F. When results of the samples show an exceedence of the [criteria listed in Table 1 of COMAR 26.08.02.03-3] *BAV*, a permit may be issued only if it is further determined by the approving authority, after additional sampling and analysis, that the bathing water poses no significant health risk to the bathers.

G. The approving authority shall periodically sample the bathing waters under permit for microbiological quality. Sampling shall be consistent with Regulation .07 of this chapter. All permitted beaches are considered Tier I and shall be monitored at least weekly unless a justification for lower priority is provided by the approving authority. The approving authority may order restrictions, including suspension of the permit and closing of the bathing water to use, as necessary, when the results of the bacterial indicator density exceed the [limits established in Table 1 of COMAR 26.08.02.03-3] *BAV*. A permit may be reinstated when the bacterial indicator densities return to acceptable limits.

H. (Text Unchanged)

COMAR 26.08.09.07 Tiered Monitoring – Applicable Memorial Day Through Labor Day.

Summary of Changes: BEACH regulations were updated to recognize the use of the BAV and new recreational water quality criteria.

Specific Changes to Regulation: 26.08.09.07 Tiered Monitoring—Applicable Memorial Day Through Labor Day.

A. (Text Unchanged)

B. Bacteriological Monitoring.

(1) (Text Unchanged)

(2) Sampling Frequency.

(a)— (c) (Text Unchanged)

[(d) Water quality shall be assessed using the criteria values in Table 1 of COMAR 26.08.02.03-3.]

(3) [Assessment for Public Notification.] *Evaluation of water quality using Beach Action Values (BAV)*.

[(a) Tier 1 and Tier 2 beaches shall apply the geometric mean and the upper 75 percent Confidence Limit (CL) single sample maximum from Table 1 of COMAR 26.08.02.03-3.]

(b) Tier 3 beaches shall apply the geometric mean and the upper 82 percent Confidence Limit (CL) single sample maximum from Table 1 of COMAR 26.08.02.03-3.]

[(c)](a) Sampling events shall consist of at least three *indicator* bacteria samples per sampling event.

[(d)](b) In addition to the application of the [criteria in §B(3)(a) and (b) of this regulation] *BAV*, the approving authority may consider other factors, including the results of sanitary surveys, prior rainfall, and other environmental conditions in making public health decisions.

COMAR 26.08.09.08 Public Notification

Summary of Changes to 26.08.09.08: To update BEACH regulations for consistency with terminology and new recreational water quality criteria shown above in proposed changes to 26.08.02.03-3.

Specific Changes to Regulation: 26.08.09.08 Public Notification.

A. When results of the samples show an indicator organism density that exceeds the [standards in Regulation .08 of this chapter] *Beach Action Value*, the Approving Authority shall issue a public notification unless there is reason to doubt the accuracy or certainty of the first sample. The approving authority shall then *promptly* resample and, if [standards] *Beach Action Value* are being exceeded, prompt public notification of the advisory or closure if required. If a known pollution source exists, such as combined sewer overflow, failing sewer infrastructure, wastewater treatment discharge, or other source, the approving authority shall close the beach and provide prompt public notification of the closing.

B. The beach may be opened or the advisory lifted only after subsequent bacteriological sampling results in indicator densities that satisfy the [applicable water quality standards] *Beach Action Value*.

C. (Text Unchanged)

Antidegradation

The proposed amendments to Maryland’s Antidegradation policy address the addition and removal of Tier II stream segments from the codified list of Tier II waters. The full description and justification of the proposed changes are described below. Please note that when reviewing amended text, [text in brackets is deleted] while *text in italics is new*.

REGULATIONS MODIFIED

COMAR 26.08.02.04-1 Antidegradation Policy Implementation Procedures.

Summary of Changes: Twenty nine Tier II segments were added to the codified list of Tier II waters based on high indices of biotic integrity scores. In addition, 19 Tier II stream segments were removed from the codified list of Tier II waters. MDE is removing these 19 segments from the list of Tier II waters for the following reasons:

- Four segments were removed because the Tier II streams identified twice under two different names. This is inconsequential from a regulatory perspective because the segment itself is still Tier II but will now be classified under the correct name.
- Four segments were removed because corrected GPS coordinates relocated the baseline station(s) of the Tier II segment.
- One segment was removed due an accidental data omission error.
- Ten segments were removed due to errors in the Baseline IBI scores. Of these ten, eight were associated with errors resulting directly from IBI miscalculation. Two of these eleven were removed due to vetting determinations being reversed.

For additional detail on the reasons these 19 segments were removed from the Tier II list, please read the document titled “Issue in Review: Proposed Removal of 19 Tier II waters from the Code of Maryland Regulations 26.08.02.04-1”.

Table 3: Summary table of waters removed from the list of Tier II high quality waters.

Stream Name	County	From Lat	From Long	To Lat	To Long
Aydelotte Branch 1	Wicomico	38.41395	-75.44652	38.40576	-75.38133
Bens Run 1	Baltimore	39.31682	-76.79279	39.31402	-76.79400
Choptank River UT 2	Caroline	38.88450	-75.87640	38.87218	-75.85988
Deer Creek 1	Baltimore	39.72289	-76.61175	39.70730	-76.59021
Fifteenmile Creek 2	Allegany	39.67463	-78.45777	39.69293	-78.45128

Stream Name	County	From Lat	From Long	To Lat	To Long
Indian Run 1	Baltimore	39.54821	-76.74264	39.54230	-76.73384
Lyons Creek 2	Anne Arundel, Calvert	38.76474	-76.65903	38.76498	-76.65334
Mudlick Hollow 1	Allegany	39.69590	-78.39292	39.65611	-78.40011
Murley Branch 1	Allegany	39.66398	-78.61768	39.66340	-78.61151
North Branch Patapsco River 2	Carroll	39.52579	-76.87790	39.52245	-76.87527
Persimmon Creek 1	Saint Mary's	38.42150	-76.71305	38.44077	-76.69696
Saint Marys River UT 1	Saint Mary's	38.21487	-76.43063	38.21155	-76.45141
Saint Marys River UT 2	Saint Mary's	38.21065	-76.40308	38.19760	-76.41921
Savage River 3	Garrett	39.50101	-79.10657	39.48643	-79.08279
Town Creek 2	Allegany	39.69388	-78.54752	39.71306	-78.53643
Western Run 1	Baltimore	39.52739	-76.72217	39.51503	-76.74060
Browns Branch 1	Queen Anne's	39.117590	-75.956460	39.116500	-75.965620
Browns Branch 2	Queen Anne's	39.116510	-75.965630	39.130350	-75.977880
Southeast Creek UT 1	Queen Anne's	39.159680	-75.920760	39.163600	-75.951770

Table 4: Summary table of waters added to the list of Tier II high quality waters.

Stream Segment	County	From LAT	From LONG	To LAT	To LONG
Big Run 1	Garrett	39.58348	-79.17124	39.55629	-79.15005
Browns Branch 3	Queen Anne's	39.15968	-75.92076	39.16360	-75.95177
Fifteenmile Creek 6	Allegany	39.65610	-78.40009	39.65591	-78.39701
Gravel Run 1	Queen Anne's	39.03535	-76.03710	39.05027	-76.06391
Harris Mill Creek 1	Baltimore	39.71528	-76.62412	39.71307	-76.59763
Island Creek 1	Queen Anne's	39.08896	-76.05355	39.11732	-76.06863
Laurel Run UT 1	Garrett	39.47897	-79.15120	39.47772	-79.11977

Stream Segment	County	From LAT	From LONG	To LAT	To LONG
Little Deer Creek UT 1	Harford	39.62878	-76.48475	39.66009	-76.48109
Little Gunpowder Falls 4	Baltimore, Harford	39.47306	-76.40243	39.46108	-76.39091
Lyons Creek 3	Anne Arundel, Calvert	38.76472	-76.65905	38.75572	-76.67206
Marbury Run 1	Charles	38.56780	-77.14674	38.57919	-77.15872
Middle Fork Crabtree Creek 3	Garrett	39.53507	-79.18800	39.51565	-79.16892
Mill Run 4 Garrett Co	Garrett	39.71883	-79.30088	39.71553	-79.34541
Mill Run UT 2 Garrett Co	Garrett	39.71594	-79.27141	39.71849	-79.30071
Murphy Run 1	Baltimore, Carroll	39.62639	-76.83087	39.62004	-76.81855
N Branch Patapsco River UT 2	Baltimore	39.49571	-76.83795	39.49463	-76.86357
Norwich Creek 2	Queen Anne's, Talbot	38.92547	-75.97541	38.91998	-75.96930
Norwich Creek 3	Queen Anne's	38.94203	-75.99741	38.92547	-75.97541
Potomac River UT 2	Charles	38.48546	-77.23682	38.47495	-77.25927
Reeder Run 3	Charles	38.50269	-77.18977	38.50940	-77.20911
Saint Clements Creek 2	Saint Mary's	38.35866	-76.72707	38.34859	-76.73061
Southeast Creek UT 2	Queen Anne's	39.11759	-75.95646	39.11650	-75.96562
Southeast Creek UT 3	Queen Anne's	39.11651	-75.96563	39.13035	-75.97788
Spring Lick Run 1	Garrett	39.50365	-79.20005	39.49073	-79.17532
Toms Spring Run 1	Garrett	39.51704	-79.20115	39.51565	-79.16893
Tuckahoe River 2	Caroline, Queen Anne's	38.98128	-75.93486	38.97278	-75.93518
Wolf Den Branch 2	Charles, Prince George's	38.67283	-76.80444	38.63902	-76.81987
Wolf Den Run 1	Garrett	39.39655	-79.21193	39.38905	-79.19443
Wolf Den Run UT 1	Garrett	39.41259	-79.22063	39.39655	-79.21193

Specific Changes to Regulation: 26.08.02.04-1 Antidegradation Policy Implementation Procedures.

A. —N. (Text Unchanged)

O. List of Tier II Waters.

Date	Stream Name	County	12-Digit Watershed	From Lat	From Long	To Lat	To Long	Baseline: Fish IBI	Benthic IBI
	Black Sulphur Run 1— Fifteenmile Creek 1 (Text Unchanged)								
[2007	Fifteenmile Creek 2	Allegany	021405110137	39.69293	-78.45128	39.67463	-78.45777	4.67	4.00]
2003	Fifteenmile Creek 3— Fifteenmile Creek 5 (Text Unchanged)	Allegany	021405110135	39.64046	-78.39719	39.63082	-78.38600	5.00	4.25
2011	<i>Fifteenmile Creek 6</i>	<i>Allegany</i>	<i>021405110135</i>	<i>39.65610</i>	<i>-78.40009</i>	<i>39.65591</i>	<i>-78.39701</i>	<i>4.67</i>	<i>4.00</i>
[2007	Mudlick Hollow 1	Allegany	021405110141	39.69590	-78.39292	39.65611	-78.40011	4.33	4.50
2007	Murley Branch 1	Allegany	021405120130	39.66398	-78.61768	39.66340	-78.61151	4.33	4.00]
	Town Creek 1 (Text Unchanged)								
[2007	Town Creek 2	Allegany	021405120131	39.71306	-78.53643	39.69388	-78.54752	4.33	4.00]
2007	White Sulphur Run 1—Lyons Creek 1 (Text Unchanged)								
[2007	Lyons Creek 2	Anne Arundel, Calvert	021311020909	38.76498	-76.65334	38.76474	-76.65903	4.67	5.00]
2011	<i>Lyons Creek 3</i>	<i>Anne</i>	<i>021311020909</i>	<i>38.76472</i>	<i>-76.65905</i>	<i>38.75572</i>	<i>-76.67206</i>	<i>4.33</i>	<i>4.00</i>

		<i>Arundel, Calvert</i>							
2009	Patuxent River 1— Beetree Run 1 (Text Unchanged)								
[2012	Bens Run 1	Baltimore	021309061018	39.31682	-76.79279	39.31402	-76.79400	4.44	4.00]
2007	Blackrock Run 1	Baltimore Co.	021308050303	39.54230	-76.73384	39.52739	-76.72217	4.67	4.00
2007	Cooks Branch 1	Baltimore Co.	021309071048	39.43616	-76.84026	39.43789	-76.86894	4.67	4.84
2007	Cooks Branch 2	Baltimore Co.	021309071048	39.43792	-76.86879	39.43825	-76.87277	4.84	5.00
[2007	Deer Creek 1	Baltimore Co.	021202020332	39.72289	-76.61175	39.70730	-76.59021	4.67	4.00]
2007	Delaware Run 1 (Text Unchanged)								
2011	<i>Harris Mill Creek 1</i>	<i>Baltimore Co.</i>	<i>021202020332</i>	<i>39.71528</i>	<i>-76.62412</i>	<i>39.71307</i>	<i>-76.59763</i>	<i>4.67</i>	<i>4.00</i>
[2007	Indian Run 1	Baltimore Co.	021308050307	39.54821	-76.74264	39.54230	-76.73384	4.00	4.33]
2003	Keysers Run 1— Timber Run 1 (Text Unchanged)								
[2007	Western Run 1	Baltimore Co.	021308050303	39.51503	-76.74060	39.52739	-76.72217	4.00	4.00]
2007	Gunpowder Falls 1 (Text Unchanged)								
2011	<i>Murphy Run 1</i>	<i>Baltimore Co., Carroll</i>	<i>021308060314</i>	<i>39.62639</i>	<i>-76.83087</i>	<i>39.62004</i>	<i>-76.81855</i>	<i>5.00</i>	<i>4.00</i>
2007	First Mine Branch 1— Little Gunpowder Falls 3 (Text Unchanged)								

2011	<i>Little Gunpowder Falls 4</i>	<i>Baltimore Co., Harford</i>	021308040298	39.47306	-76.40243	39.46108	-76.39091	4.00	4.33
2007	Choptank River UT 1 (Text Unchanged)								
[2007	Choptank River UT 2	Caroline	021304040487	38.88450	-75.87640	38.87218	-75.85988	4.33	4.14]
2007	Faulkner Branch 1— Tuckahoe River 1 (Text Unchanged)								
2016	<i>Tuckahoe River 2</i>	<i>Caroline, Queen Anne's</i>	021304050533	38.98128	-75.93486	38.97278	-75.93518	4.67	5.00
2007	Beaver Run 1— North Branch Patapsco River 1 (Text Unchanged)								
[2007	North Branch Patapsco River 2	Carroll	021309071048	39.52579	-76.87790	39.52245	-76.87527	4.00	4.00]
2009	Piney Branch 2 (Carroll Co.)— Jennie Run 1 (Text Unchanged)								
2016	<i>Marbury Run 1</i>	<i>Charles</i>	021401110780	38.56780	-77.14674	38.57919	-77.15872	4.33	4.14
2007	Mattawoman Creek UT 1— Potomac River UT 1 (Text Unchanged)								
2011	<i>Potomac River UT 2</i>	<i>Charles</i>	021401020789	38.48546	-77.23682	38.47495	-77.25927	4.00	4.43
2007	Reeder Run 1— Reeder Run 2 (Text Unchanged)								
2016	<i>Reeder Run 3</i>	<i>Charles</i>	021401020789	38.50269	-77.18977	38.50940	-77.20911	4.78	4.52
2012	Swanson Creek 4— Swanson								

	Creek 3 (Text Unchanged)								
2016	<i>Wolf Den Branch 2</i>	<i>Charles, Prince George's</i>	021401080769	38.67283	-76.80444	38.63902	-76.81987	4.00	4.43
2007	Smoots Pond Run 1— Weldon Creek 1 (Text Unchanged)								
2003	Bear Creek 1	Garrett	050202010018	39.65018	-79.28886	[39.65101] 39.65046	[- 79.29905] - 79.298011	4.43	4.07
2007	Bear Creek 2— Bear Creek 4 (Text Unchanged)								
2007	Bear Creek 5	Garrett	050202010018	[39.65482] 39.65593	[- 79.36370] -79.33884	[39.65593] 39.65482	[- 79.33884] -79.36370	4.67	4.00
2003	Bear Creek UT 1— Bear Pen Run 1 (Text Unchanged)								
2016	<i>Big Run 1</i>	<i>Garrett</i>	021410060078	39.58348	-79.17124	39.55629	-79.15005	4.88	4.13
2007	Big Run UT 1	Garrett	021410060078	[39.57855] 39.57835	[- 79.19347] -79.19349	39.58348	-79.17124	4.00	4.75
2007	Blacklick Run 1— Hoyes Run 1 (Text Unchanged)								
2011	<i>Laurel Run UT 1</i>	<i>Garrett</i>	021410050050	39.47897	-79.15120	39.47772	-79.11977	4.00	4.25
2003	Little Bear Creek 1— Middle								

	Fork Crabtree Creek 2 (Text Unchanged)								
2011	<i>Middle Fork Crabtree Creek 3</i>	<i>Garrett</i>	021410060076	39.53507	-79.18800	39.51565	-79.16892	4.00	4.50
2003	Mill Run 1 (Garrett Co.)	Garrett	050202010021	[39.71883] 39.71553	[- 79.30088] -79.34541	39.70909	-79.34891	4.21	4.56
2003	Mill Run 2 (Garrett Co.) (Text Unchanged)								
2003	<i>Mill Run 4 (Garrett Co.)</i>	<i>Garrett</i>	050202010021	39.71883	-79.30088	39.71553	-79.34541	5.00	4.58
2011	<i>Mill Run UT 2 (Garrett Co.)</i>	<i>Garrett</i>	050202010021	39.71594	-79.27141	39.71849	-79.30071	4.50	4.50
2003	Monroe Run 1— Savage River 2 (Text Unchanged)								
[2007	Savage River 3	Garrett	021410060075	39.50101	-79.10657	39.48643	-79.08279	4.33	4.13]
2009	Savage River 4— South Branch Casselman River 2 (Text Unchanged)								
2011	<i>Spring Lick Run 1</i>	<i>Garrett</i>	021410060074	39.50365	-79.20005	39.49073	-79.17532	4.00	4.25
2011	<i>Toms Spring Run 1</i>	<i>Garrett</i>	021410060076	39.51704	-79.20115	39.51565	-79.16893	4.50	4.75
2016	<i>Wolf Den Run 1</i>	<i>Garrett</i>	021410050047	39.39655	-79.21193	39.38905	-79.19443	4.00	4.00
2016	<i>Wolf Den Run UT 1</i>	<i>Garrett</i>	021210050047	39.41259	-79.22063	39.39655	-79.21193	4.00	4.00
2007	Youghiogheny River UT 1— Little Deer Creek 2 (Text Unchanged)								
2011	<i>Little Deer Creek UT 1</i>	<i>Harford</i>	021202020328	39.62878	-76.48475	39.66009	-76.48109	4.67	4.33

2008	Otter Point Creek 1— Blockston Branch UT 1 (Text Unchanged)								
[2008	Browns Branch 1	Queen Anne's	021305080401	39.11759	-75.95646	39.11650	-75.96562	4.33	4.71
2008	Browns Branch 2	Queen Anne's	021305080401	39.11651	-75.96563	39.13035	-75.97788	4.44	4.71]
2003	<i>Browns Branch 3</i>	<i>Queen Anne's</i>	<i>021305080403</i>	<i>39.15968</i>	<i>-75.92076</i>	<i>39.16360</i>	<i>-75.95177</i>	<i>4.33</i>	<i>5.00</i>
2007	Granny Finley Branch 1 (Text Unchanged)								
2011	<i>Gravel Run 1</i>	<i>Queen Anne's</i>	<i>021305070397</i>	<i>39.03535</i>	<i>-76.03710</i>	<i>39.05027</i>	<i>-76.06391</i>	<i>4.00</i>	<i>4.02</i>
2011	<i>Island Creek 1</i>	<i>Queen Anne's</i>	<i>021305080398</i>	<i>39.08896</i>	<i>-76.05355</i>	<i>39.11732</i>	<i>-76.06863</i>	<i>4.33</i>	<i>4.14</i>
2008	Mill Stream Branch 1— Norwich Creek 1 (Text Unchanged)								
2011	<i>Norwich Creek 3</i>	<i>Queen Anne's</i>	<i>021304050522</i>	<i>38.94203</i>	<i>-75.99741</i>	<i>38.92547</i>	<i>-75.97541</i>	<i>4.00</i>	<i>4.14</i>
2003	Red Lion Branch 1— Southeast Creek 2 (Text Unchanged)								
[2003	Southeast Creek UT 1	Queen Anne's	021305080403	39.15968	-75.92076	39.16360	-75.95177	4.33	5.00]
2008	<i>Southeast Creek UT 2</i>	<i>Queen Anne's</i>	<i>021305080401</i>	<i>39.11759</i>	<i>-75.95646</i>	<i>39.11650</i>	<i>-75.96562</i>	<i>4.33</i>	<i>4.71</i>
2008	<i>Southeast Creek UT 3</i>	<i>Queen Anne's</i>	<i>021305080401</i>	<i>39.11651</i>	<i>-75.96563</i>	<i>39.13035</i>	<i>-75.97788</i>	<i>4.44</i>	<i>4.71</i>
2007	Three Bridges Branch 1— Wye East River UT2 (Text Unchanged)								

2011	Norwich Creek 2	<i>Queen Anne's/Talbot</i>	021304050522	38.92547	-75.97541	38.91998	-75.96930	4.33	4.71
2007	Burnt Mill Creek 1— McIntosh Run 1 (Text Unchanged)								
2008	McIntosh Run 2	Saint Mary's	021401040721	[38.31354] 38.32555	[- 76.65517] -76.64337	[38.32555] 38.31354	[- 76.64337] -76.65517	4.00	4.43
[2007	Persimmon Creek 1	Saint Mary's	021311010880	38.42150	-76.71305	38.44077	-76.69696	4.00	4.14]
2007	Saint Clements Bay UT 1— Saint Mary's River 1 (Text Unchanged)								
[2007	Saint Marys River UT 1	Saint Mary's	021401030710	38.21487	-76.43063	38.21155	-76.45141	4.00	4.00
2007	Saint Marys River UT 2	Saint Mary's	021401030712	38.21065	-76.40308	38.19760	-76.41921	5.00	4.14]
2010	Saint Mary's River UT 3— Adkins Race 1 (Text Unchanged)								
[2007	Aydelotte Branch 1	Wicomico	021302030653	38.41395	-75.44652	38.40576	-75.38133	4.67	4.14]
2008	Little Burnt Branch 1— Nassawango Creek 3 (Text Unchanged)								

P. (Text Unchanged)