



WEST VIRGINIA SECRETARY OF STATE

MAC WARNER

ADMINISTRATIVE LAW DIVISION

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Office of West Virginia
Secretary Of State

NOTICE OF PUBLIC COMMENT PERIOD

AGENCY: Water Resources Division Of Water And Waste Management TITLE-SERIES: 47-02B

RULE TYPE: Procedural Amendment to Existing Rule: No Repeal of existing rule: No

RULE NAME: Assessment Methodology for the Biological Component of the Narrative Criteria in Wadeable Streams

CITE STATUTORY AUTHORITY: W.Va. Code §22-11-7b(f)

COMMENTS LIMITED TO:

Oral and Written

DATE OF PUBLIC HEARING: 03/26/2020 6:00 PM

LOCATION OF PUBLIC HEARING:

DEP Headquarters, 601 57th St SE Charleston, WV 25304

DATE WRITTEN COMMENT PERIOD ENDS: 03/26/2020 8:00 PM

COMMENTS MAY BE MAILED OR EMAILED TO:

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PLEASE INDICATE IF THIS FILING INCLUDES:

RELEVANT FEDERAL STATUTES OR REGULATIONS: No

(IF YES, PLEASE UPLOAD IN THE SUPPORTING DOCUMENTS FIELD)

INCORPORATED BY REFERENCE: No

(IF YES, PLEASE UPLOAD IN THE SUPPORTING DOCUMENTS FIELD)

PROVIDE A BRIEF SUMMARY OF THE CONTENT OF THE RULE:

The purpose of this rule is to satisfy SB 562 and SB 687 by defining in rule the aquatic life component of the narrative water quality standard and its thresholds. In 2012 Senate Bill 562 passed, directing the DEP to propose rules that define compliance with the aquatic life component of West Virginia's narrative water quality standard based on the holistic health of the aquatic ecosystem including fish. SB 687 made a slight change to this in 2017. All waters of the state are designated for Category B, the propagation and maintenance of fish and other aquatic life (§47-2-6). Following the passage of SB562, DEP contracted WVU professor Todd Petty to develop an assessment methodology for fish using available fish community data from WVDNR, WVDEP, USF&WS, USEPA, WVU and any other available sources. The plan was to utilize the fish assessment information along with existing benthic macroinvertebrate (aquatic insects, snails, crayfish, etc.) tools for assessment purposes.

The revised assessment methodology has not yet been finalized due to difficulties in the development of a fish assessment tool. Although the DEP is continuing to collect fish to further the development of the methodology there is a need to have an assessment methodology, in law, that defines compliance with the aquatic life component of the narrative water quality standard.

To satisfy the rule making requirement this rule describes an approach that is based on the same tools that have been in use for over 18 years. This approach relies on benthic macroinvertebrates using the West Virginia Stream Condition Index (WVSCI), a family level assessment tool that scores aquatic communities on a 0-100 point scale. The rule establishes an impairment threshold of 61 and an attainment threshold of 72. Between these thresholds a stream segment will neither be categorized as in attainment nor impaired but will be considered as having insufficient data until additional information is collected or supplied that allows a determination to be made.

SUMMARIZE IN A CLEAR AND CONCISE MANNER CONTENTS OF CHANGES IN THE RULE AND A STATEMENT OF CIRCUMSTANCES REQUIRING THE RULE:

Senate Bill 562 amended W. Va. Code § 22-11-7b in 2012, adding part (f) requiring the DEP secretary to propose rules that measure compliance with the biologic component of West Virginia's narrative water quality standard. That legislative action was modified slightly by SB 687 in 2017.

SUMMARIZE IN A CLEAR AND CONCISE MANNER THE OVERALL ECONOMIC IMPACT OF THE PROPOSED RULE:

A. ECONOMIC IMPACT ON REVENUES OF STATE GOVERNMENT:

No economic impacts on state government anticipated.

B. ECONOMIC IMPACT ON SPECIAL REVENUE ACCOUNTS:

No economic impacts on special revenue accounts anticipated.

C. ECONOMIC IMPACT OF THE RULE ON THE STATE OR ITS RESIDENTS:

No economic impacts on the state or its residents anticipated.

D. FISCAL NOTE DETAIL:

Effect of Proposal	Fiscal Year		
	2020 Increase/Decrease (use "-")	2021 Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
1. Estimated Total Cost	0	0	0
Personal Services	0	0	0
Current Expenses	0	0	0
Repairs and Alterations	0	0	0
Assets	0	0	0
Other	0	0	0
2. Estimated Total Revenues	0	0	0

E. EXPLANATION OF ABOVE ESTIMATES (INCLUDING LONG-RANGE EFFECT):

None are anticipated.

BY CHOOSING 'YES', I ATTEST THAT THE PREVIOUS STATEMENT IS TRUE AND CORRECT.

Yes

Jason E Wandling -- By my signature, I certify that I am the person authorized to file legislative rules, in accordance with West Virginia Code §29A-3-11 and §39A-3-2.

TITLE 47
PROCEDURAL RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT

SERIES 2B
ASSESSMENT METHODOLOGY FOR THE BIOLOGICAL COMPONENT OF THE
NARRATIVE CRITERIA IN WADEABLE STREAMS

§47-2B-1. General

1.1. Scope – This procedural rule establishes the methodology for determining compliance with the biological component of narrative criteria set forth in the Legislative rule entitled “Requirements Governing Water Quality Standards” (47CSR2) for wadeable streams.

1.2. Authority. – W. Va. Code § 22-11-7b(f)

1.3. Filing Date. –

1.4. Effective Date. –

1.5. Applicability – This rule applies to wadeable streams.

§47-2B-2. Definitions

The definitions set forth in 47CSR2 apply to this rule along with the following definitions, unless the context in which used clearly requires a different meaning:

2.1. “Benthic Macroinvertebrates” are a group of aquatic organisms regularly used in biological monitoring programs. They are large enough to be seen with the naked eye (macro), have no backbone (invertebrates) and live on the bottom of streams, rivers, and lakes.

2.2. “Department” is the West Virginia Department of Environmental Protection.

2.3. “Index of Biotic Integrity” or “IBI” is a summary score that is comprised of several biological measures or metrics. A metric is a characteristic of the biological community that changes in a predictable way to environmental disturbance.

2.4. “Reference Samples” are samples collected at stream locations that the Department has determined to be least impacted by human disturbance.

2.5. “Secretary” means the Secretary of the West Virginia Department of Environmental Protection.

2.6. “Wadeable streams” are those streams or rivers from which a comparable benthic macroinvertebrate sample can be collected using wadeable protocols. Rivers that can only be sampled for benthic macroinvertebrates using “wadeable protocols” at a singular feature, such as a lock, isolated shoal, or isolated edge riffle, are not considered wadeable and attainment decisions should not be made using wadeable benthic macroinvertebrate protocols. An example of an isolated riffle is the Coal River at Tornado (lock), while an assessment can be performed to provide exploratory information about the

benthos at this and similar locations, wadeable protocols should not be used by The Department to place these streams or rivers on the 303(d) list.

§47-2B-3. Benthic Macroinvertebrate Assessment Methodology

3.1. The Department will assess the biological integrity of wadeable streams using WVSCI (WV Stream Condition Index), an index of biotic integrity for benthic macroinvertebrates (Benthic IBI) developed for use in West Virginia's wadeable streams.

3.1.a. The Department will use appropriately collected and processed biological samples that meet quality assurance/quality control and comparability protocols set forth in the Department's Watershed Assessment Section's Standard Operating Procedures Manual.

3.1.b. The attainment threshold for the Benthic IBI is 72, which is based on the 5th percentile of reference samples. The impairment threshold is 61, which reflects the threshold at which the Department is confident an impairment is present.

3.2. Initial Biological Integrity Assessment – Collection and evaluation of benthic macroinvertebrate data. In most circumstances, at least two samples collected within five years are required to make an attainment determination for a previously unclassified stream segment.

3.2.a. For stream segments with a Benthic IBI value equal to or greater than 72, a single sample may be used to determine attainment with the biological integrity criterion. A stream segment with multiple samples at a single location shall be considered to be in attainment if the most recent 2 samples have an average value equal to or greater than 72.

3.2.b. For stream segments with multiple sample stations, assessment decisions will be based on the preponderance of the Benthic IBI values from recent samples from those stations or, if an obvious reason for data disagreement amongst sample stations exists, the Secretary may subdivide the stream segment into smaller assessment units.

3.2.c. For stream segments with a Benthic IBI value less than 50, a single sample may be used to determine non-attainment with the biological integrity criterion.

3.2.d. In all other circumstances, at least one additional Benthic IBI sample is required to determine compliance with the biological integrity criterion.

3.3. Collection and evaluation of additional biological data where the initial Benthic IBI value is between 50 and 72.

3.3.a. The Department will prioritize the collection of additional biological data from streams that have an initial Benthic IBI value between 50 and 72.

3.3.b. The Department will determine biological integrity criterion compliance by averaging the score of both samples, or in cases where more than two samples exists, by averaging the score of the two most recent samples.

3.3.c. Stream segments with average scores less than the impairment threshold will be classified as impaired for the biological integrity criterion. Stream segments with average scores equal to or greater than the attainment threshold will be classified as meeting the biological integrity criterion.

3.3.d. Where the average Benthic IBI value is between 61 and 72, the stream segment will neither be categorized as in attainment nor impaired but will be considered as having insufficient data until additional information is collected or supplied that allows a determination to be made based on the thresholds set forth above in 3.1.b.

3.4. Fish Index of Biological Integrity – Reserved.