

## Water Quality Standards Amendments

### Summary of Public Comments and Responses

The Department of Environmental Conservation held a public comment period from July 20, 2016 through September 7, 2016 on the proposed amendments and updates to the Vermont Water Quality Standards (VWQS). During that time, the Department hosted four public meetings on the proposed rule amendments, one each in Washington, Chittenden, Bennington, and Windham Counties. The Department received comments<sup>1</sup> from the following organizations:

- American Whitewater
- Connecticut River Watershed Council (CRWC) (two sets of written comments)
- Conservation Law Foundation (CLF)
- Lake Champlain International (LCI)
- Mac Lean, Meehan & Rice (MMR)
- Trout Unlimited
- Two Rivers Ottauquechee Commission (TRORC) (two sets of written comments)
- Vanasse Hangen Brustlin, Inc. (VHB)
- Vermont Conversation Voters
- Environmental and Natural Resources Law Clinic at Vermont Law School (ENRLC)
- Vermont Natural Resources Council (VNRC)
- Vermont Rural Water Association
- Windham Regional Commission

In this document, comments of alike nature from multiple commenters are presented in a summarized form.

#### **1. Commenter:** American Whitewater

The reclassification proposal for Bingo Brook to Class A(1) for aquatic life, aquatic habitat, and swimming does not recognize the existing high quality whitewater boating that exists in this stream. The streams gradient and natural flow characteristics are such that it is a very well used paddling stream during high water periods. The use as such is documented by the American Whitewater Inventory that is maintained by American Whitewater. The proposed stream should also be designated for whitewater boating as well.

American Whitewater is concerned that management activities, specifically “chop and drop” habitat restoration actions that occur in Bingo Brook may hamper whitewater boating activities by introducing physical hazards. As such, should the stream be designated as Class A1 for boating use, USFS’ management of these waters should simultaneously manage the stream in its natural condition, while avoiding management actions that may hamper recreational boating use.

**Response:** The Department has reviewed the information contained in the American Whitewater Inventory for Bingo Brook. Bingo Brook is indeed identified as a Class III-IV paddling reach at normal

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<sup>1</sup> In this responsiveness summary, verbal comments have been addressed. However, questions posed by participants during the meetings for the purpose of obtaining clarification were addressed on-the-spot and are not included.

flows. The Vermont Paddlers Club website's trip reports reveal a low level of usage, but expressions of high quality features, including "beautiful green water" and "ledge drops."

The designation of recreational boating use from Class B(2) to Class A(1) will change the management objectives to "achieve and maintain excellent quality boating as compatible with the natural condition," and the criteria to "boating the full extent naturally feasible without degradation due to artificial flow and water level management or artificial physical impediments." Insofar as these objectives and criteria are aligned with the objectives and criteria for the proposed designations of Class A(1) aquatic biota, aquatic habitat, and fishing, and after consultation with USFS, the Department finds no reason to object to the proposal.

The Department notes that "chop and drop," an approach to introduce large natural wood in streams, is undertaken to restore the natural condition of streams for habitat and ecological processes. In Bingo Brook, "chop and drop" largely occurs upstream of the areas that are reasonably boatable, however, there may be opportunities for this type of restoration downstream, and in other areas of the USFS, a topic USFS and the Commenter have discussed. Since the activities are intended to restore the natural condition of streams, the Department does not view USFS' management activities as conflicting with the objective of excellent quality boating as compatible with the natural condition. Further, the Department clarifies that while the predominant form of boating on Bingo Brook appears to be whitewater paddling, the designation as Class A(1) is for boating generally, and not whitewater paddling specifically.

**Change to proposed VWQS:** The designated use of boating in Bingo Brook has been added to the list of proposed reclassifications from Class B(2) to Class A(1) in Appendix F of the VWQS.

**2. Commenter:** Windham Regional Commission

Styles Brook Reservoir is inaccurately characterized in Appendix F. It is no longer used by Stratton Mountain.

**Response:** The Department notes this inaccuracy. Please see the response to comment immediately below filed by Vermont Rural Water Association.

**3. Commenter:** Vermont Rural Water Association

*Thank you for giving us the opportunity to provide comments on the Proposed Vermont Water Quality Standards (7/11/16 version). On behalf of the Vermont Rural Water Association, we would like to submit edits and suggestions exclusively regarding the Water Quality Classifications in Appendix F.*

*Our comments on Class A2 Waters were generated in consultation with the Drinking Water and Groundwater Protection Division and public drinking water system personnel. Please see the markup on the attached Word Document for details.*

**Response:** The Department has reviewed the proposed edits to the descriptions of public water source surface waters in Appendix F of the VWQS, and finds that these descriptions improve upon the accuracy and descriptions of these surface waters.

**Changes to proposed VWQS:** The proposed edits have been incorporated into Appendix F of the VWQS.

**4. Commenter:** Connecticut River Watershed Council

In 29A-203 (2), the clause “in as cost-effective manner as possible” should be stricken as Act 64 of 2015 eliminated the consideration of cost in determining appropriate best management practices.

**Response:** Act 64 did not eliminate the consideration of costs, rather under, 6 V.S.A. Chapter 215 it states, “RAPs shall be designed to protect water quality and shall be *practical and cost-effective to implement*, as determined by the Secretary,” and “BMPs shall be *practical and cost-effective to implement*, as determined by the Secretary.” Rather than striking the language, as requested, which would be inconsistent with statute, the Department proposes the following change to ensure consistency with state statute.

**Changes to proposed VWQS:** The Department proposes the following edit to § 29A-203(a)(2)

(2) In implementing subdivision (a)(1) of this subsection, the Secretary and the Secretary of the Agency of Agriculture, Food and Markets are encouraged to exercise the full range of discretion authorized by the Act and 6 V.S.A. Chapter 215 and to manage discharges of nonpoint source waste in as a practical and cost-effective a manner as possible, consistent with the provisions of these rules.

**5. Commenter:** Connecticut River Watershed Council

In the definitions (31) and (35) remove “but not limited to.” Definition (49) refers to class B waters, if that means both B1 and B2 it should say so. This use of B not B1 and B2 occurs in several sections of the rule so however this reference is intended, its use should be consistent throughout the rule. CRWC feels the agency should delineate B1 and B2 in all cases where B is now used. § 29A-203 Nonpoint Source Pollution, Policy, remove the “but not limited to...”

**Response:** The Department agrees. “Including” means “including, but not limited to,” therefore, making this change is consistent with proper statutory and rule drafting conventions. Additionally, stating Class B(1) and B(2) when referring to all “Class B” waters provides for clarity and consistency throughout the VWQS. The Department has also made the same updated all references to “Class A” waters to state Class A(1) and A(2).

**Changes to proposed VWQS:** The proposed edits have been incorporated into the final proposed rule for adoption.

**6. Commenter:** Connecticut River Watershed Council

§ 29A-101 Applicability

- (a) CRWC feels it is important that the agency make it clear that this language does not limit in any way the aspirational aspect of the WQS and does not limit the attainment requirement for all uses to their highest level.
- (b) CRWC understands that the federal law has exemptions relative to the definition of “waters” but that need not necessarily apply to Vermont waters since Vermont may have stricter standards and broader definitions than the federal. This language should not limit Vermont in recognizing wetlands that the federal government does not. Vermont could, and we feel should recognize detached waters and intermittent streams as waters of Vermont.”

**Response:** The Applicability Section largely maintains the existing language. The limited changes that are proposed include updates to style and grammar, updates consistent with Act 79 of 2016, and an update to ensure that there is no confusion that the VWQS apply to all “waters” of the State, not just “waters of the United States.” “Waters” of the State, as defined in state statute and rule, include “all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.” Additionally, to clarify, the edits to the VWQS do not impact the Vermont Wetland Rules.

**7. Commenter:** Connecticut River Watershed Council

§ 29A-104 Classification of Water Uses (d) This subsection enumerating the designated uses does not incorporate the aspirational nature of the designated uses of the WQS. The language states the use in the active present tense. As an example (1) says, “that utilize or are present in the waters”;

CRWC feels that the statement should say, “that do, or may, utilize or have been present in the waters.” CRWC feels that because an aquatic species is absent does not mean that it was never present or in fact would be present except for natural or human intervention. Without regulatory recognition, here of the potential for our waters, we are not meeting the “protect, enhance, and restore” standard of the federal Clean Water Act and our own standard of “protect, maintain, and improve water quality.”

**Response:** The comment raises a valid point. Chapter 10 V.S.A. § 1252(a) states that Class B(2) waters are suitable for aquatic biota and habitat, among other uses. The draft statement “aquatic biota that utilize or are present in waters” implies that the biota presently utilize waters, or presently exist. In the context of impaired waters, those aquatic biota may not exist, however it is clearly the intent of the Legislature and the Agency to ensure that aquatic biota and wildlife are fully supported. As such, a minor modification to the language is warranted to cover aquatic biota that currently are present in the waters and aquatic biota that *may* utilize the waters at some point in the future, but for one reason or another are not currently present.

**Change to proposed VWQS:** The proposed language has been modified in §29A-104(d)(1) to read as follows: “Aquatic biota or wildlife that may utilize or are present in the waters.”

**8. Commenter:** Connecticut River Watershed Council

§ 29A-106 Discharge Policy (a) Discharge Criteria, (2) The rule should either define or replace the word unreasonable with a less subjective word, (9) The rule should either define or replace the word negligible with a less subjective word.

**Response:** As a part of this rulemaking, the Department did not propose any substantive updates to the existing Discharge Policy. Having not warned any substantive changes or additions to this section and having implemented the existing Discharge Policy for a long time, the Department does not think it appropriate or see a need to modify the foregoing terms in the Discharge Policy.

**9. Commenter:** Connecticut River Watershed Council

§ 29A-302 Criteria Applicable to Waters Based upon Fish Habitat Designation, Use Classification, or Type of Body of Water

(1) Temperature

CRWC remains concerned that the thermal variance language is not protective enough of Vermont waters. We would like to suggest that DEC add two new subsections after the existing 3 subsections. The existing language says,

§ 29A-302 (D) Assimilation of Thermal Wastes. The Secretary may, by permit condition, specify temperature limits that exceed the values specified above in order to authorize discharges of thermal wastes when it is shown that: The discharge will comply with all other applicable provisions of these rules; A mixing zone of 200 feet in length is not adequate to provide for assimilation of the thermal waste; After taking into account the interaction of thermal effects and other wastes, that change or rate of change in temperature will not result in thermal shock or prevent the full support of uses of the receiving waters;

CRWC would add the following language:

*(4) The owner or operator of any source seeking a thermal variance, can demonstrate that any effluent limitation proposed for the control of the thermal component of any discharge from such source requires thermal effluent limitations more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made, and;*

*(5) Any permit conditions with respect to the thermal component of the discharge (taking into account the interaction of such thermal component with other pollutants), will assure, the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water, notwithstanding any variance that exceeds the values specified above.*

Short of adopting our suggested language, we would request that the agency undertake the rewriting of this entire thermal section so that it explicitly includes biological integrity, not by inference as in (1) but in clear language in this thermal section.

**Response:** The language proposed by CRWC relates to § 316(a) of the federal Clean Water Act, which is implemented under 40 C.F.R. Part 125, subpart H. The requested change is unnecessary because the current thermal variance provision already meets federal requirements and has previously been approved by the U.S. Environmental Protection Agency (EPA). The variance provision in the VWQS only allows for a variance if the discharge will comply with all other applicable provision of the rules and if there will still be a full support of uses in the receiving water with the discharge. Uses protected under the rules include aquatic biota and wildlife that may utilize or are present in the waters and aquatic habitat to support aquatic biota, wildlife, or plant life.

**10. Commenter:** Environmental and Natural Resources Law Clinic at Vermont Law School

(...)

We urge the Vermont Department of Environmental Conservation (DEC) to include criteria for Permethrin and Anvil (Sumithrin), and any other pesticide or pesticidal ingredient that has been or is likely to be used in the state, in the 2016 Water Quality Standards revisions.

(...)

**Response:** Because the warned proposed amendments to the VWQS did not contain these additions, inserting such substantive changes at this time, without additional public or agency input, would not be in keeping with the intent and requirements of the APA process. Agency of Agriculture input, and a meaningful pre-rulemaking public outreach process to stakeholders, would be a critical part of any effort to adopt water quality criteria for the cited pesticides. Pursuant to the federal Clean Water Act, the Department has the responsibility to open the VWQS to examine the criteria and consider updates every three years. The formal APA process for this is always preceded by a pre-rulemaking stakeholder process, which is the best time to request insertion of new water quality criteria.

In addition, determining all other pesticides and pesticidal ingredients that are or are likely to be used in the State *and* developing criteria for those pesticides and pesticidal ingredients would take a huge amount of staff time and resources, time and resources not budgeted as part of this important set of updates to the VWQS.

Furthermore, the Department has examined the resources provided to assist the Department in adopting criteria for these pesticides, and noted that the Pesticides Action Network Database specifically stated that there are no recommended water quality guidelines from the United States or the World Health Organization for the two cited compounds. Additionally, a review of EPA's § 304(a) criteria reveals that EPA has not issued criteria for Permethrin or Sumethrin.

Based upon the foregoing, the Department will not be proposing additional criteria for pesticides in this round of water quality standard updates.

**11. Commenters:** CLF, Connecticut River Watershed Council, VNRC, Vermont Conservation Voters, LCI, MMR, VHB, and TRORC

The Department received numerous comments pertaining to the proposed changes to the Antidegradation Policy language. Comments largely focused on (1) the addition of the clause "in the area in which the waters are located" in 29A-105(c)(2)(B), and (2) the addition of the requirement for alternatives analysis in 29A-105(c)(3). These are addressed in turn.

- (1) All commenters requested additional clarification on the Agency's intent regarding the addition of the clause "in the areas in which the waters are located," while most commenters also requested that the proposed language change be delayed for adoption coincident with the Antidegradation Rule promulgation required by Act 64.

**Response:** Based upon the extensive public comments voicing concern over the clause "in the area in which the waters are located," the Department has decided to remove that language from the proposed rule.

**Change to proposed VWQS:** The Department proposes that Section 29A-105(c)(2)(B) now read, "after an analysis of alternatives, allowing lower water quality is necessary to prevent substantial adverse economic or social impacts on the people of the State."

- (2) Several commenters expressed concern over the construction of the alternatives analysis language in § 29A-105(c)(3). While commenters do not disagree with the alternatives analysis language per-se, they note that the language is open to interpretation.

**Response:** The proposed alternatives analysis language, along with the public participation language, reflects new federally-required language pursuant to 40 C.F.R. § 131.12(a)(ii), as adopted under the “Final Rulemaking to Update the National Water Quality Standards Regulation” in 2015. The insertion of the alternatives analysis carries forward good practice that occurs with many projects already. A good example would be the avoidance and minimization steps that are taken, and documented, during the development of a project subject to Sections 404 and 401 of the federal Clean Water Act. In those instances, applicants commonly undergo iterative project designs that identify alternatives to avoid or minimize impacts to water resources. The Department’s interpretation of the federally-required language is that a lowering would only be allowable when an alternative that prevents or lessens the degradation is selected. Should an alternative be chosen that prevents a degradation entirely, then antidegradation would be satisfied, de-facto. This is a useful provision that will be further addressed by the Antidegradation Rule.

Further, the Federal Register, 80:162, p. 51032-51033 provides useful guidance on this matter, which begins: *“The final rule at § 131.12(a)(2)(ii) provides that before allowing a lowering of high water quality, states and authorized tribes must find, after an analysis of alternatives, that such a lowering is necessary to accommodate important economic or social development in the area in which the waters are located. That analysis must evaluate a range of non-degrading and less degrading practicable alternatives. For the purposes of this requirement, the final rule at § 131.3(n) defines “practicable” to mean “technologically possible, able to be put into practice, and economically viable.” When an analysis identifies one or more such practicable alternatives, states and authorized tribes may only find that a lowering is necessary if one such alternative is selected for implementation. This rule requires that states’ and authorized tribes’ antidegradation policies must be consistent with these new requirements.”*

The remainder of this section of the Federal Register provides useful guidance for the implementation of alternatives analysis in the context of an antidegradation review.

**Changes to proposed VWQS:** To ensure full compliance with federal regulations and to provide clarity, the Agency is proposing to make the following minor edits and to add the definition of “practicable” to the Antidegradation Policy section. The Department proposes that Section 29A-105(c)(3) now read:

*“The analysis of alternatives required under subdivision (c)(2)(B) of this subsection shall evaluate a range of ~~practicable~~ alternatives that would prevent or lessen the degradation associated with the proposed activity. When the analysis identifies one or more practicable alternatives, the Secretary shall only find that a lowering is necessary if one such practicable alternative is selected for implementation. For purposes of this section, “practicable” means technologically possible, able to be put into practice, and economically viable.”*

## **12. Commenters:** MMR and VHB

Can examples be provided of where the 2010 Interim Procedure has been applied in a variety of permit situations? Are there examples of where the “necessary to prevent substantial adverse economic or social impacts on people of the State” test has been applied?

**Response:** The 2010 Interim Antidegradation Procedure has been used in a variety of permitting proceedings, including the Kingdom Community Wind wind project, the Vermont Gas Systems transmission pipeline project, and the TDI-NE electric transmission project, among others. In those instances, the Department conditioned relevant permits in such a manner that required practices would preclude a lowering, and thus a socioeconomic justification analysis was not needed. Furthermore,

those permits were also conditioned to include water quality monitoring to ensure on-going protectiveness.

**13. Commenters:** MMR and VHB

Section 29A-104 Classification of Water Uses: Why does the list of designated uses include “other recreational uses” in separate types of recreational uses? This is confusing.

**Response:** The Department agrees that the language is confusing and is proposing the following minor clarifying edits.

**Changes to proposed VWQS:** The Department proposes the following edits to § 29A-104(d):

(d) The designated uses are:

- (1) Aquatic biota and wildlife that may utilize or are present in the waters;
- (2) Aquatic habitat to support aquatic biota, wildlife, or plant life;
- (3) The use of waters for swimming and other primary contact recreation;
- (4) The use of waters for boating and ~~other~~ related recreational uses;
- (5) The use of waters for fishing and ~~other~~ related recreational uses;
- (6) The use of waters for the enjoyment of aesthetic conditions;
- (7) The use of the water for public water source; and
- (8) The use of water for irrigation of crops and other agricultural uses.

**14. Commenters:** MMR and VHB

Is the GMNF Proposal based upon data, or management objectives?

**Response:** The basis for the Green Mountain National Forest (GMNF) proposal is described in detail in the proposal document posted at <http://dec.vermont.gov/watershed/laws> in support of this rulemaking. For federally-designated Wilderness and the National Recreation Area, the designations were based on management objectives. For proposed Class A(1) outside of congressionally-designated areas of the GMNF, the designations were based on data for specific uses.

**15. Commenters:** MMR and VHB

Section 29A – 302 Criteria: Why are specific temperature criteria given for “waters for fishing” and not other uses such as biota? Please explain.

**Response:** The more stringent temperature criteria are proposed specifically to support cold-water obligate salmonids, and are appropriate when a specific Class B(1) or A(1)-level fishery is designated. Aquatic biota, as determined using the procedures in Appendix G, may be present at very high levels of quality at higher temperatures than coldwater-obligate salmonids, and therefore are protected by the existing temperature criteria.

**16. Commenters:** MMR and VHB

Section 29A-102 Definitions: There are a number of new or amended definitions that warrant explanation and understanding of how they will be used in assessing compliance with the VWQS. In particular, it would be useful to understand how these definitions tie back into the criteria for various designated uses: equilibrium condition, flow characteristics, physical structure, and stream processes.

**Response:** The new definitions were added for purposes of applying the aquatic habitat criteria for rivers and streams and are consistent with the definitions and terminology used in state statute, the Stream Alteration Rule, and ANR Stream Geomorphic Assessment and Reach Habitat Assessment Protocols. Additionally, minor clarifying edits are proposed to the definitions.

**Changes proposed to VWQS:**

“Equilibrium condition” means the condition in which water flow, sediment, and woody debris are transported in a watershed in such a manner that the stream maintains its dimension, pattern, and profile without unnaturally aggrading or degrading the channel bed elevation at the ~~river~~ stream reach scale.

“Flow characteristics” means the depth, volume, velocity, and variation of streamflow that, in part, determine stream processes, physical habitat structure, and aquatic habitat quality in channels and floodplains as governed by factors associated with valley setting, geology, and climate.

“Physical habitat structure” means the diverse combination and complexity of instream forms created within substrate and woody debris on and within the bed and banks of the channel by ~~natural~~ stream processes and flow characteristics. Physical habitat structure, in part, determines aquatic habitat quality at the stream reach and stream network scales by providing for all life cycle functions, which include the full set of forms necessary for the provision of and access to cover, overwintering, and temperature refuge and the substrates necessary for feeding and reproduction of aquatic biota and wildlife.

“Stream processes” means the hydrologic, bed-load sediment, and large woody debris regimes of a particular stream reach and is a term used to describe stream channel hydraulics, or the erosion, deposition, sorting, and distribution of instream materials by the power of flowing water. Stream processes work toward an equilibrium condition, are governed by flow characteristics, stream morphology, channel roughness, and floodplain connectivity and, in part, determine physical habitat structure and aquatic habitat quality ~~as vertical and lateral stream movements work toward an equilibrium condition.~~

**17. Commenters:** MMR and VHB

Sections 29A-102 Definitions and Section 29A-306 Aquatic Habitat: Given the proposed addition of the following definitions: (14) Equilibrium Condition, (34) Physical Structure, and (43) Stream Processes, along with the proposed Management Objective language as written appears to be inconsistent with existing policy, and would be highly problematic. For example, the combined reading of these sections would seem to make it impossible for ANR to issue a Sec. 401 Certification for any kind of hydroelectric project, including existing facilities undergoing relicensing. In contrast, EPR Chapter 27 (Section 27-102(c)) recognizes the following: “Many of Vermont’s cities, towns, villages, highways, and other critical

infrastructure have been built next to streams, and are therefore vulnerable to flooding and erosion. The State recognizes that particular stream reaches must be managed in a non-equilibrium condition to protect pre-existing improved property.” The language should be revised to recognize that there are existing departures from the equilibrium condition, and that obtaining Sec. 401 certification for such facilities would not be precluded by the aquatic habitat criterion.

**Response:** In the initial proposed draft of amendments to the VWQS, the only differentiation between Class B(1) and Class B(2) aquatic habitat management objectives and criteria for rivers and streams was the word “very” describing the degree of high quality habitat in Class B(1) waters. This raised a legitimate concern that without greater differentiation, the Agency would not be able to issue water quality certifications for facilities that modify the natural stream processes associated with bed load sediment and woody debris.

Since it is not the intent of the current VWQS revision to increase or decrease the habitat standard used to certify the existing instream structures and facilities that occur in Class B(2) waters, the Department is proposing that language be added that is consistent with language in the existing VWQS and that more clearly distinguishes between the criteria for Class B(1) and Class B(2).

The proposed aquatic habitat criteria for B(1) waters is: change in flow characteristics, physical habitat structures, and stream processes limited to minor differences from the natural condition and consistent with the full support of very high quality aquatic habitat. This means that only minor changes in the natural hydrologic, bed-load sediment, and large woody debris regimes (i.e., hydrology and hydraulics) may occur provided the physical habitat structures fully support the life cycle functions of aquatic biota and wildlife at the very high quality level.

The proposed aquatic habitat criteria for B(2) waters is: change in flow characteristics, physical habitat structures, and stream processes limited to moderate differences from the natural condition and consistent with the full support of high quality aquatic habitat. This means that only moderate changes in the natural hydrologic, bed-load sediment, and large woody debris regimes (i.e., hydrology and hydraulics) may occur provided the physical habitat structures fully support the life cycle functions of aquatic biota and wildlife at the high quality level.

This differentiation recognizes that modified streams (i.e., those experiencing long-term and persistent moderate changes in bed sediment and woody debris regimes) can fully support high quality habitat that fully provides for the life cycle functions of aquatic biota. This is achievable as long as flow characteristics are maintained (i.e., set by the Hydrology Criteria in § 29A-304), and actions going forward do not cause new instability in the stream bed and a further departure from equilibrium.

This is consistent with the ANR Stream Geomorphic Assessment and Reach Habitat Assessment Protocols, the policies set forth in the Stream Alteration Rule (§27-102), and the Flood Hazard Area and River Corridor Protection Procedure (§5.0(c)(2)(B)(2)).

**Changes proposed to VWQS:** The Department proposes the following clarifying edits to § 29A-306(b) Aquatic Habitat:

(1) Class A(1).

(A) Management Objectives. Waters shall be managed to achieve and maintain excellent quality aquatic habitat. The physical habitat structure, stream processes, and flow characteristics of rivers and streams and the physical character and water level of lakes and ponds shall be managed consistent with waters in their natural condition.

(B) Criteria.

(i) Rivers and Streams. ~~Flow~~ No change in flow characteristics, physical habitat structure, and stream processes ~~consistent with waters in their~~ outside the range of the natural condition.

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(2) Class B(1).

(A) Management Objectives. Waters shall be managed to achieve and maintain very high quality aquatic habitat. The physical habitat structure, stream processes, and flow characteristics of rivers and streams and physical character and water level of lakes and ponds necessary to fully support all life-cycle functions of aquatic biota and wildlife, including overwintering and reproductive requirements, are maintained and protected.

(B) Criteria.

(i) Rivers and Streams. ~~Flow~~ Changes to flow characteristics, physical habitat structure, and stream processes ~~necessary to~~ limited to minor differences from the natural condition and consistent with the full support of very high quality aquatic habitat.

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(3) Classes A(2) and B(2).

(A) Management Objectives. Waters shall be managed to achieve and maintain high quality aquatic habitat. The physical habitat structure, stream processes, and flow characteristics of rivers and streams and physical character and water level of lakes and ponds necessary to fully support all life-cycle functions of aquatic biota and wildlife, including overwintering and reproductive requirements, are maintained and protected.

(B) Criteria.

(i) Rivers and Streams. ~~Flow~~ Changes to flow characteristics, physical habitat structure, and stream processes ~~necessary to~~ limited to moderate differences from the natural condition and consistent with the full support of high quality aquatic habitat.

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**18. Commenters:** VNRC, Vermont Conservation Voters, LCI, and TRORC

Section 29A – 103, 29A-104 and 306 (and throughout proposed rule) – As noted in the FAQ for the proposed rules, the main impetus behind the rule changes is because Act 70 of 2016 revised the water classification structure for Vermont’s surface waters. We supported Act 79, and support reflecting the new B1 and B2 classifications in the VWQS, and the fact that specific uses of waters may have different classifications. We believe these changes have the potential to lead to more waters being properly classified to reflect their higher level of water quality. To ensure that the intent of Act 79 is realized, we recommend that Section 29A-103 be revised to require DEC to propose reclassifications of waters made in tactical basin plans as a result of the basin planning process.

**Response:** Under 10 V.S.A. § 1253(c) the “Secretary *may* initiate” rulemaking on the Secretary’s own motion or on receipt of a written request that the Secretary adopt, amend, or repeal a reclassification. Further, under 10 V.S.A. § 1253(d)(2) basin plans *shall* identify waters that should have one or more uses reclassified under section 1252. Because the requested change goes beyond the statutory intent, the Department is not contemplating further changes to § 29A-103(e)(5), and instead intends to carry out its stated commitment to pursue reclassifications under the VWQS once new tactical basin plans have been issued which contain Class B(1) recommendations.

**19. Commenter:** TRORC

TRORC is primarily concerned with the onerous process in place for the reclassification of waters. TRORC believes that it takes too long to establish the sufficient criteria required to support reclassification. The superfluous steps required to initiate a reclassification are a serious impediment to the reclassification of waters, and are not needed since the test is not whether such quality exists, but that it is *reasonably attainable*.

TRORC believes that a simplified process, although slightly less thorough, can be efficient and effective. If a specific surface water starts as an A(1) ecological water because it is above 2,500 feet in elevation, and that water continues below 2,500 feet but the land use surrounding that water is unchanged, then the classification should also be an A(1) ecological water. This method significantly expedites the reclassification process and would lead to the greater protection of Vermont’s surface waters. There are several examples of this in our region, including Corporation Brook in Pittsfield and Rochester, Chittenden Brook in Rochester, Howe Brook in Hancock, and several tributaries of the Upper White River.

**Response:** In regards to the development of a simplified process, DEC worked with the Vermont General Assembly on Bill H.394 (2014), which would have conferred to the Secretary authority to conduct “upward” reclassifications, and designations of Outstanding Resource Waters, following an administrative determination process. The process would have relied on a comprehensive public outreach effort for each determination, but Secretary determinations would have been made without the need for the APA process for each individual surface water. The Bill was not supported by the Committee of jurisdiction.

In regards to the extension of Class A(1) designations, the Department does not agree that Class A(1) designation should be conferred based simply on watershed characteristics. The determination of Class A(1) should be made in those instances where the management objectives for Class A(1), essentially the management of the waterbody to maintain its natural condition, are understood and debated by all stakeholders, with full understanding of the associated regulatory implications. Thru the process of tactical basin planning, candidate Class A(1) surface waters may be vetted for proposal for

reclassification. The present proposed WQS reclassifications to Class A(1), that are supported by TRORC, exemplify this.

**20. Commenter:** TRORC

29A-103(C)(4) should be amended to reflect that basin plans “shall” contain recommendations for reclassification.

**Response:** Since 10 V.S.A. § 1253(d)(2) contains “shall,” the Department agrees with this comment and proposes to amend the language as shown below. The Department is not, however, incorporating the additional TRORC-proposed markup at this time as it was not available for consideration by all stakeholders during the public comment period.

**Changes to proposed VWQS:** The Department proposes the following edits, including a clarifying edit, to § 29A-103(e)(4):

- (4) Each tactical basin plan shall identify strategies, where necessary, by which to allocate levels of pollution between various sources as well as between individual discharges. Tactical basin plans ~~should~~ shall, to the extent appropriate, contain specific recommendations by the Secretary that include the identification of all known existing uses, any recommended changes in classification and designation of waters, including reclassifying waters’ uses from Class B(2) to a higher classification level and designating waters as Outstanding Resource Waters, schedules and funding for remediation, stormwater management, riparian zone management, and other measures or strategies pertaining to the enhancement and maintenance of the quality of waters within the basin.

**21. Commenters:** Trout Unlimited and Connecticut River Watershed Council

Only four areas have been designated ORWs and none since 1996. They include the Batten Kill and its West Branch, Town of East Dorset and Arlington; Pikes Falls / Ball Mountain Brook North Branch, Town of Jamaica; the lower Poultney River in the Towns of Poultney and Fair Haven; and Great Falls on the Ompompanoosuc River in Thetford. The fact that none have been designated in the past twenty years shows the need to update the policy and procedure for designation.

**Response:** The Department shares the enthusiasm of Trout Unlimited and CWRC regarding outstanding resource water (ORW) designation. In fact, it should be noted that each tactical basin plan issued since 2010, except for one, has contained recommendations for ORWs. One opportunity to further highlight ORWs is to acknowledge them in the VWQS, since presently, ORW designations are only listed in individual old Water Resources Panel decision files. As such and in response, the Department proposes to add a new Appendix H. to the VWQS to list the four existing ORWs and for purposes of designating future ORWs. Additionally, the Department proposes adding a cross reference to the new Appendix H. in § 29A-105(d).

**Change to proposed VWQS:** The Department proposes adding Appendix H. for purposes of listing ORWs. The Department also proposes the following addition to § 29A-105(d):

(d) Protection of Outstanding Resource Waters. The Secretary may under 10 V.S.A. § 1424a designate certain waters as Outstanding Resource Waters. Outstanding Resource Waters are listed in Appendix H of these rules. Where the Secretary so designates such waters for specific exceptional natural, recreational, cultural, or scenic values, their existing quality, associated with the values for which they have been designated, shall, at a minimum, be protected and maintained.

**22. Commenters:** Trout Unlimited and Connecticut River Watershed Council

The commenters would appreciate assurance that ORW's are exempt from 29A-105(c)(2).

**Response:** The provisions in § 29A-105(c)(2) allowing for a limited lowering of water quality after completing a socio-economic justification do not apply to Outstanding Resource Waters.

**23. Commenters:** Trout Unlimited and Connecticut River Watershed Council

Second, the adjudicative process for designation of an ORW is too onerous and expensive for the average citizen, effectively locking them out of the process and thereby limiting the potential for designation. Moreover, the Agency may not have the same expertise as the shuttered quasi-judicial Water Resources Board to carry out this type of adjudicative process. While the Agency inherited this process, it was created for the Board. Instead, the Agency should develop, working with the Legislature as necessary, a simpler, but thoughtful, process.

**Response:** Designation of ORWs is no longer subject to an adjudicative process. This changed under Section 38 of Act 115 of 2004. Pursuant to 10 V.S.A. § 1424a(a), designation of ORWs must now comply with the administrative rulemaking process provided for under 3 V.S.A. Chapter 25. Pursuant to 10 V.S.A. § 1424a(a) and 3 V.S.A. § 806, any person may petition the Secretary to designate an ORW. Within 30 days of receiving the request, the Secretary must either initiate rulemaking proceedings or deny the petition, giving its reasons in writing.

**24. Commenters:** Trout Unlimited and Connecticut River Watershed Council

The commenter recommends that ORW be included in the criteria for inclusion in tactical basin plans, in 29A-103(c).

**Response:** Because 10 V.S.A. § 1253(d) specifically identifies ORWs in the list of items required by tactical basin plans, the Department agrees. Please note, ORWs have been added to § 29A-103(e)(4), as shown in response to Comment 20.

**25. Commenters:** Trout Unlimited and Connecticut River Watershed Council

The commenter requested an update on the development of guidance for ORW, stating specifically:

Has DEC made any strides in drafting a guidance document? Were the specific, scientific-based criteria every developed? And were there any results from working with the Legislature? DEC seems genuinely interested in expanding the ORW program, making it easier to petition and implement, as well as easier to understand. We would be very interested in assisting in any work that is underway, or help jump-start any such work that may have stalled over the years.

**Response:** In 2014, the Department drafted, and then very recently updated a draft Procedure for the Identification of Outstanding Resource Waters, for use in tactical planning, and to assist stakeholders whom may be interested in pursuing ORW designation. The Department is presently finalizing that document for Commissioner signature, and would be happy to meet with stakeholders to describe our vision of its application, and identify opportunities for complementary efforts in this area.

**26. Commenters:** MMR and VHB

Section 29A-103 Riparian Policy: The Riparian policy includes an expanded concept of “the provision of habitat and travelways for a wide variety of species”. Presumably this is designed to protect non-aquatic species like birds and mammals that use the riparian areas. Why is this change being proposed as part of the VWQS? How will it be used as part of the VWQS? What is the relationship, if any, to the ANR Buffer Policy/guidance document used for Act 250 and Section 248 proceedings?

**Response:** The added statement concerning the “provision of habitat and travelways for a wide variety of species” was proposed by the Vermont Department of Fish and Wildlife for inclusion in the Riparian Policy, for the simple purpose of creating consistency between the policy statement in the Standards, and ANR’s riparian buffer guidance, which is used for Act 250 and Section 248 project review. The statement is not intended to confer protections to terrestrial species through the VWQS. Rather, the statement is intended to clarify that riparian buffers have important functions and values that complement the protection of designated uses in the Standards.

**27. Commenters:** MMR and VHB

Section 29A-305 Numeric Biological Indices and Aquatic Habitat Assessments: In subsection (a), we disagree with the deletion of “and aquatic habitat uses”, as the determination of full support for the aquatic biota use should, of necessity, demonstrate full support of aquatic habitat criterion, since appropriate habitat is required for healthy biota.

**Response:** When all life-cycle functions of aquatic biota and wildlife, including overwintering and reproductive requirements, are maintained and protected, and such is evidenced by numeric biological indices, or other appropriate assessments of aquatic life use, then the Department agrees that aquatic habitat is necessarily supported. The original proposed deletion was made specifically in the context of those numeric biological indices that are captured by Appendix G, and not considering other aquatic life use assessments that may be made. With this caveat understood, the Department agrees.

**Change to proposed VWQS:** The Department proposes the following edit to § 29A-305(a):

(a) In addition to other applicable provisions of these rules and other appropriate methods of evaluation, the Secretary may establish and apply numeric biological indices to determine whether there is full support of the aquatic biota and aquatic habitat uses for each class of water ...

