



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

June 15, 2011

David Mears, Commissioner
Vermont Department of Environmental Conservation
103 South Main Street
Waterbury VT 05671-0408

Re: Section 303(d) list approval

Dear Commissioner Mears:

Thank you for your final submittal of the 2010 Clean Water Act Section 303(d) list, **State of Vermont 303(d) List of Waters**, dated August 2010 and your submittal letter dated August 9, 2010. In accordance with Section 303(d) of the Clean Water Act and 40 CFR §130.7, the U.S. Environmental Protection Agency (EPA) conducted a complete review of Vermont's 2010 Section 303(d) list and supporting documentation. Based on this review, EPA has determined that Vermont's list of water quality limited segments still requiring Total Maximum Daily Loads (TMDLs) meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations. Therefore, by this order, EPA hereby approves Vermont's Section 303(d) list.

The submittal includes a list of those waters for which technology based and other required controls for point and nonpoint sources are not stringent enough to attain or maintain compliance with the State's Water Quality Standards. The submittal presents Vermont's TMDL strategy which describes a priority setting approach and identifies those waters for which TMDLs will be completed and submitted during the next two years. The statutory and regulatory requirements, and EPA's review of Vermont's compliance with each requirement, are described in detail in the enclosed approval document.

The Vermont Department of Environmental Conservation (VTDEC) has also successfully completed a public participation process during which the public was given the opportunity to review and comment on the Section 303(d) list. As a result of this effort, Vermont has considered public comments in the development of the final list. A summary of the public comments and VTDEC's response to comments was included in the submittal.

Your staff has done an excellent job of preparing a comprehensive and informative list, and providing EPA with thorough supporting documentation. My staff and I look forward to continued cooperation with VTDEC in implementing the requirements under Section 303(d) of

the CWA. Please feel free to contact me or Eric Perkins at 617-918-1602, if you have any questions or comments on our review.

Sincerely,

/s/

Stephen S. Perkins, Director
Office of Ecosystem Protection

Enclosure

cc: Tim Clear, VTDEC

VT §303(d) Approval Documentation: 6/15/2011

I. INTRODUCTION

EPA has conducted a complete review of Vermont's 2010 Section 303(d) list and supporting documentation and information and, based on this review, EPA has determined that Vermont's list of water quality limited segments (WQLSs) still requiring TMDLs meets the requirements of Section 303(d) of the Clean Water Act ("CWA" or "the Act") and EPA's implementing regulations. Therefore, by this order, EPA hereby approves Vermont's 2010 Section 303(d) list. The statutory and regulatory requirements, and EPA's review of Vermont's compliance with each requirement, are described in detail below.

II. STATUTORY AND REGULATORY BACKGROUND

Identification of WQLSs for Inclusion on 303(d) List

Section 303(d)(1) of the Act directs States to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that States do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by State or local authority, and (3) other pollution control requirements required by State, local, or federal authority. See 40 CFR Section 130.7(b)(1).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, States are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the State's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR §130.7(b)(5). In addition to

these minimum categories, States are required to consider any other data and information that is existing and readily available. EPA's 2006 Integrated Report Guidance describes categories of water quality-related data and information that may be existing and readily available. See EPA's May 5th, 2009 memorandum on *Information Concerning 2010 Clean Water Act Sections 303(d), 305 (b), and 314 Integrated Reporting and Listing Decisions*, which recommended that the 2010 integrated water quality reports follow the Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305 (b) and 314 of the Clean Water Act (2006 Integrated Report Guidance (IRG)) issued July 29, 2005 (available at http://www.epa.gov/owow/tmdl/2006_IRG/) as supplemented by an October 12, 2006 memo and attachments and the May 5, 2009 memo and attachments. All guidance, memoranda and attachments may be found at: <http://www.epa.gov/owow/tmdl/guidance.html>. While States are required to evaluate all existing and readily available water quality-related data and information, States may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring States to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR §130.7(b)(6) require States to include as part of their submissions to EPA documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that States establish a priority ranking for listed waters. The regulations at 40 CFR §130.7(b)(4) require States to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, States must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that States establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and State or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA's 2006 Integrated Report Guidance and the 2006 and 2009 memoranda and attachments.

III. REVIEW OF VERMONT'S §303(d) SUBMISSION

Waters listed by Vermont in Part A of the State's 2010 Integrated Report (which corresponds to EPA's Category 5 (as defined below)) represent the State's §303(d) list, which the State is required to submit to EPA for review and approval or disapproval. The water segments Vermont placed into one of Parts B through G of the State's 2010 Integrated Report (which correspond to EPA's Categories 3 through 4 (as defined below)) fulfill the requirements of §305(b) of the CWA and are not a part of Vermont's §303(d) list. Such integrated listing format allows states to provide the status of all assessed waters in a single multi-part list. States may list each water body or segment thereof into one or more of the following five categories, as appropriate:

- 1) All designated uses are supported, no use is threatened;
- 2) Available data and/or information indicate that some, but not all of the designated uses are supported;
- 3) There is insufficient available data and/or information to make a use support determination (VT Part C);
- 4) Available data and/or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed;
 - 4a) A state-developed TMDL has been approved by EPA or a TMDL has been established by EPA for any segment-pollutant combination (VT Part D);
 - 4b) Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period of time (VT Part B);
 - 4c) The non-attainment of any applicable water quality standard for the segment is the result of pollution and is not caused by a pollutant (VT Parts E, F, or G); and
- 5) Available data and/or information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed (VT Part A).

EPA reviewed and commented on Vermont's draft 2010 Section 303(d) list, dated March 2010. The Vermont Department of Environmental Conservation (VTDEC) then revised the list based on EPA's comments and comments from other interested parties received during the public comment period. Vermont submitted its final 2010 §303(d) list to EPA-New England on August 10, 2010. The submittal package included the following components:

1. State of Vermont 2010 §303(d) List of Waters (August, 2010). This submission included "Part A," the list of impaired surface waters needing total maximum daily loads (TMDLs).
2. State of Vermont 2010 List of Priority Surface Waters Outside the Scope of Clean Water Act Section 303(d). This submission included: Part B, impaired surface waters – no TMDL required; Part C, surface waters in need of further assessment; Part D, surface waters with completed and approved TMDLs; Part E, surface waters altered by exotic species; Part F, surface waters altered by flow regulation; and Part G, surface waters altered by channel alteration .
3. VT DEC's Response to Public Comments on Vermont's March 2010 draft §303(d) list.

VTDEC conducted a public participation process, in which it provided the public the opportunity to review and comment on the State's 2010 draft §303(d) list. A public comment period was opened on March 11, 2010 and was closed on April 9, 2010. During the comment period a public meeting was held in Waterbury VT on March 24, 2010. Comments were solicited from the public both through regional newspapers and the VTDEC website. EPA concludes that Vermont's public participation process was consistent with its Continuing Planning Process (CPP), and that Vermont provided sufficient public notice and opportunities for public involvement.

Vermont's final submittal took into account suggested changes to the State's draft 2010 §303(d) list from interested parties. VTDEC prepared a "Response to Comments" document which lists each comment and the State's response. EPA reviewed VTDEC's responses and concludes that Vermont adequately responded to the comments.

IV. IDENTIFICATION OF WATERS AND CONSIDERATION OF EXISTING AND READILY AVAILABLE WATER QUALITY-RELATED DATA AND INFORMATION

EPA has reviewed the State's submission, and has concluded that the State developed its §303(d) list in compliance with §303(d) of the Act and 40 CFR §130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

Vermont used the VTDEC Water Quality Division assessment databases to develop its 2010 §303(d) list. The same databases are used to assist in the preparation of the biennial §305(b) report. These databases contain all reported water quality information. In the development of the 2010 §303(d) list, Vermont began with its existing EPA approved 2008 §303(d) list and relied on new water quality assessments (i.e., post-2008) to update the list accordingly. All data sources used to develop previous §303(d) lists were carefully reviewed. Where valid monitoring data, including recent data as well as data older than 5 years, and/or evaluative information were collected and determined to be sufficient to make §303(d) listing judgments, waterbodies that were assessed as impaired for one or more uses due to pollutants were added to the 2008 §303(d) list. Vermont believes that information pertaining to impairment status must be well substantiated, preferably with actual monitoring data, for it to be used for §303(d) listing.

EPA has reviewed Vermont's description of the data and information it considered, and its methodology for identifying waters. EPA concludes that the State properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR §130.7(b)(5).

In addition, the State provided a rationale for not relying on particular and readily available water quality-related data and information as a basis for listing waters. Beginning with the 1998 list and continuing through the 2010 listing process, Vermont chose not to list waters where the only

information regarding water quality was unsubstantiated anecdotal information (e.g., citizen complaint). Vermont analyzed relevant data and information for each water body in the State in deciding whether there was sufficient, reliable data to support listing. The State's use of this listing methodology is reasonable and consistent with EPA's regulations. The regulations require states to "assemble and evaluate" all relevant water quality related data and information, and Vermont did so for each of its waterbodies. The regulations permit states to decide not to use any particular data and information as a basis for listing, provided they have a reasonable rationale in doing so. Vermont's decision not to use unsubstantiated anecdotal information is reasonable in light of the uncertainty about the reliability of such information. Moreover, it is reasonable for Vermont to decide to focus its listing and TMDL development resources on waters where water quality impairments are well-documented, rather than on waters with only unreliable water quality information. As additional waters are assessed, EPA expects Vermont would add waters to its list where such assessments show water quality standards are not being met.

Vermont did in certain cases include waters on the 2010 §303(d) list based solely on evaluative information, i.e., information the evaluation of which requires the use of judgment, in contrast to information consisting of straightforward numerical sampling results. Vermont based a listing decision on evaluative information when the State had confidence that an impairment existed. For example, most critically and chronically acidified waters, for which only limited measurements of pH and alkalinity exist, are listed based on the "evaluative" relationship between aquatic biota, pH and alkalinity, rather than on actual measurements of biological integrity.

Another example of Vermont's use of evaluative information includes waters based on data older than 5 years of age (i.e., "evaluated" waters under EPA's §305(b) guidance) where such data showed exceedences of one or more criteria of Vermont water quality standards. Although data older than 5 years is considered "evaluative" information under EPA's Section 305(b) guidance, Vermont chose to use such data as a basis for listing. The State concluded that the use of such data is reasonable because, without specific information to the contrary, there is no reason to believe that data older than 5 years are no longer representative of the water quality of the waterbody in question. EPA believes this conclusion is reasonable, and it is consistent with EPA regulations for states to decide to list waters based on data older than 5 years. The regulations require states to consider all available data and to use it unless the state provides a reasonable rationale for not doing so.

Waters were not added to the 2010 §303(d) list where the limited information might indicate a possible impairment but the information was determined to be insufficient (usually because the information was not well documented) for the purpose of listing on the §303(d) list. For example, waters were not listed for pathogens where questionable volunteer monitoring data (e.g., situations with few samples and data absent a QA/QC plan) indicate potential exceedences of the bacteria criterion. Instead, Vermont included such water segments on a separate list of priority waters in need of further assessment. In these cases, Vermont believes the information is too limited (for reasons discussed above) creating considerable uncertainty with respect to the assessment and whether uses are truly impaired.

In summary, Vermont considered the most recent §305(b) assessments, as required by EPA's regulations, and evaluated all existing and readily available water quality-related data and information, obtained primarily through monitoring, as the basis for adding water quality impairments to the 2010 §303(d) list. The State added nine new impaired waters to the 2010 §303(d) list. EPA concludes that Vermont appropriately considered all relevant and appropriate information during the State's development of the 2010 §303(d) list.

Priority Ranking

As described in its methodology, Vermont established a priority ranking for listed waters by considering: 1) the presence of health issues, 2) the nature, extent, and severity of the pollutant(s) causing the impairment, 3) the use or uses that are impaired, 4) the availability of resources, and 5) the amount or degree of public interest in problem abatement. Additionally, Vermont also considered the merits of addressing – on a regional or statewide basis – waters with similar problems (e.g., pH impaired waters due to acid rain). Individual priority rankings for listed waters are reflected in the list with indications of low, medium or high priority for TMDL development. Vermont defines its priorities in the following manner: H = high, 1-3 years; M = medium, 4-8 years; L = low, 8+ years.

EPA finds that the waterbody prioritization and targeting method used by Vermont is reasonable and sufficient for purposes of Section 303(d). The State properly took into account the severity of pollution and the uses to be made of listed waters, as well as other relevant factors described above. EPA acknowledges that the schedule of TMDL completion establishes a meaningful priority ranking system.

Water impairments Not Listed on Vermont's 2010 §303(d) List Because of Delisting

Vermont did not include on its 2010 §303(d) list 15 water impairments included on the State's 2008 §303(d) list, and EPA asked the State to provide rationales for its decisions to "delist" these previously listed waters. The State also removed one segment from the category 4b list (impaired but for which no TMDL is required) because the State has determined the segment is not impaired by a pollutant. The State has demonstrated, to EPA's satisfaction, good cause for not listing these waters on its 2010 §303(d) list, consistent with 40 CFR §130.7(b)(6)(iv).

Of the 15 water impairments, Vermont did not include 10 impairments because new monitoring data indicate applicable water quality standards are no longer exceeded. The remaining 5 water impairments are no longer listed because TMDLs have been completed for them since the State's 2008 §303(d) list was prepared. The bases for delisting the 10 impairments are described below.

Mill Brook in Fairfax (VT07-09) was impaired for aquatic life support due to suspected nutrient and sediment loadings associated with agricultural activities in the watershed. The brook was placed on the §303(d) list in 1998 as a result of a "fair" biological rating in 1997. Following implementation of a variety of agricultural best management practices (BMPs) in the watershed, subsequent biological monitoring documented a steady trend of improvement, culminating with a

“very good” rating in 2007, indicating compliance with the Vermont water quality standards. For the reasons stated above, EPA approves this delisting.

Stevensville Brook in Underhill (VT07-11) was listed as impaired for aquatic life support based on biological monitoring data from the late 1990s indicating a “fair” rating. Subsequent monitoring from 2000, 2002 and 2007 rated the brook “very good”, “excellent” and “good” respectively, all ratings indicating compliance with the Vermont water quality standards. The cause of the impairment was originally thought to be acidity, but VTDEC now believes the cause was more likely scour of the channel bottom due to severe storm events in the late 1990s. That is because the acidity data indicate compliance with the Vermont water quality standards for all sample years from 1999 through 2007 except the year 2000 (when the pH was 6.09 – just under the specified range of 6.5 to 8.5), and scour was known to be a major factor in the late 1990s. Both potential causes are no longer present in this segment, and the brook now meets the Vermont water quality standards based on both the aquatic life criteria and the pH criteria. For the reasons stated above, EPA approves this delisting.

Rice Brook in Warren (VT08-20) was listed as impaired for aquatic life support due to stormwater. Biological monitoring data from the 1990s indicated “poor” and “fair” ratings at five sampling stations along the brook. Following substantial improvements and retrofits to stormwater management practices in the watershed between 2003 and 2006, biological monitoring results showed steady water quality improvement, culminating in a rating of “very high quality” for 2008 and 2009. For the reasons stated above, EPA approves this delisting.

Folsom Brook in Warren (VT08-20) was listed as impaired for E. coli based on bacteria data collected by the Friends of the Mad River dating back to the 1990s. Following changes to agricultural practices in the watershed (including the closure of one farm for unrelated reasons), monitoring from 2004 through 2008 has indicated no exceedences of the Vermont water quality standards during the most recent year (2008), a pattern of low E. coli readings throughout the four year period (15 out of 18 samples were below WQS), and no exceedences during dry weather. Data from the most recent monitoring year (2008) show no exceedences of the standards. For the reasons stated above, EPA approves this delisting.

The Unnamed Tributary to Joiner Brook (VT08-04) and the tributaries to Dowsville Brook (VTO8-19) were impaired for aquatic life support due to sediment loading associated with poorly managed logging operations (including some clear-cuts) in the mid-1990s. Vermont’s Accepted Management Practices for logging operations were put into place in the late 1990s to remediate the problem, and a few years later all logging ceased in the watersheds. When VTDEC monitored these tributaries again in 2006, 2008 and 2009, both were found to be in compliance with the Vermont water quality standards (ratings ranged from “good-fair” to “excellent” at all sample sites). For the reasons stated above, EPA approves these two delistings.

Soapstone Brook in Ludlow (VT10-14) was listed as impaired for aquatic life support due to metals and sediment based on biomonitoring data from 1993 indicating a “fair” rating. In 2007, the brook was assessed as “excellent,” indicating compliance with the Vermont water quality

standards. The causes of the original impairment were suspected to be metals from the Argonaut mine in the upper watershed, along with sediment (resulting in embeddedness of the cobble). The mine implemented a treatment system to control iron and arsenic in the late 1990s, and the 2007 assessment found that all metals, including iron and arsenic, were at low levels and below criteria. Additional quarterly arsenic monitoring in the stream required by a permit for the mine since 2001 found levels well below criteria on all occasions except two (in 2004 and 2008), and that these two excursions were within the allowable short-term exceedence (specified in Vermont's water quality standards) of once every three years. The 2007 assessment also found sediment embeddedness to be much improved, earning a VTDEC rating of "very good". For the reasons stated above, EPA approves this delisting.

West River below the Ball Mountain Dam (V11-10) was impaired for secondary contact recreation (fishing) in the 1990s. The cause of the impairment was indicated to be both elevated temperatures and sediment releases from the dam. The elevated temperatures remain a concern, but the sediment releases have been addressed, and this delisting applies only to the sediment pollutant listing. The segment remains impaired due to temperature impacts. But the United States Army Corps of Engineers (USACOE) changed its operation of dam in the late 1990s such that sediment releases no longer occur, and the excess accumulated sediment in this reach has since been flushed out of the system. The most recent VTDEC macroinvertebrate assessment of this reach, in 2003, found "excellent" community conditions and recent ongoing Vermont Department of Fish and Wildlife (DF&W) monitoring has found sediment levels comparable to pre-release conditions, and a satisfactory fish community. While the DF&W noted that elevated temperatures continue to impact the fish community, preventing it from being "excellent," sedimentation is no longer a contributing factor. For the reasons stated above, EPA approves the removal of sediment as a cause of this impairment, although the segment will remain listed due to temperature.

The Mettawee River segment from the New York/Vermont border upstream 8.2 miles (VT02-05) was impaired for aquatic life support due to temperature. The original listing was prompted by several fish kills in the late 1970s and 1980s that were believed to be due to poor riparian buffers and associated thermal exposure. A variety of information has been presented in Vermont's 2010 303(d) list submittal that supports the conclusion that the aquatic life use is now protected: First, a comparison of temperature data with the cold water fishery instream upper threshold of 25°C recommended in a site-specific study produced by the Poultney-Mettawee Watershed Partnership¹ reveals that temperatures have improved from 180 hours above 25°C in 1995 to approximately 27 hours above 25°C in 2001 to zero hours above 25°C during continuous summer hourly measurements from 2003 through 2006 (the most recent monitoring data

¹ This instream upper threshold level of 25°C is also consistent with recommendations in studies such as that of Wehrly et al. ("Estimate of Thermal Tolerance Limits for Trout" in Transactions of the American Fishery Society, vol. 136, 2007), the book "Fishes of Vermont" (2006) by R. Langdon, M. Ferguson, and K. Cox, and the extensive New England temperature and fish data collected and analyzed by Dr. Jennifer Jacobs published on the University of New Hampshire's website: <http://unh.edu/unhsc/thermal-impacts>.

available – funding for this monitoring ran out after 2006). In fact, VTDEC reported that temperatures improved such that there were no measurements above 21°C from 2003 through 2006. Second, there have been no fish kills in this segment since the 1980s, so the original reason for listing is no longer a concern. And third, this segment has received the benefit of extensive and effective restoration work over the last decade specifically aimed at restoring riparian cover and improving in-stream temperatures, so there is good reason to conclude that the original source of the temperature impairment is no longer present. Based on the combination of these factors, EPA believes this delisting is reasonable, and approves this delisting.

Sackets Brook in Putney (VT13-12) was impaired for aquatic life support. Biomonitoring results indicated “poor” ratings in 1992, 1995, 1996 and 1998. These poor conditions were believed to have been caused by leakage from a pipe that runs along the edge of the brook and transports treated paper mill waste from the Putney Paper Mill to the Connecticut River. The pipe was subsequently replaced and the leaks have stopped. Biomonitoring results from 2003 and 2008 found conditions to be “very good,” indicating compliance with Vermont’s water quality standards. For the reasons stated above, EPA approves this delisting.

Consistent with EPA’s regulations and EPA’s Guidance for Assessment, Listing and Reporting Requirements, Vermont did not include on the §303(d) list, 5 water impairments for which TMDLs have been approved by EPA. These 5 include 3 stormwater TMDLs and 2 lake phosphorus TMDLs. The stormwater TMDLs are for Moon Brook (Rutland)², Rugg Brook (St. Albans), and Stevens Brook (St. Albans). The lake phosphorus TMDLs include Lake Carmi (Franklin) and Ticklenaked Pond (Ryegate). EPA approves these delistings for the specified impairment causes (3 for stormwater, 2 for phosphorus). Some of these segments are still listed for other impairments.

Water Impairment Removed from EPA Category 4b and Vermont’s Part B (impaired but no TMDL needed) to EPA category 4c, Vermont’s Part F (surface waters altered by flow regulation).

In 2008, Lower Deerfield River (VT12-01) was included on Part B (EPA Category 4b) of Vermont’s list. Generally, waters on the Category 4b list are expected to achieve attainment with WQS within a reasonable period of time through implementation of measures that obviate the need for a TMDL. If they do not achieve attainment within a reasonable time, they are

² In its comments on the draft § 303(d) list, the City of Rutland expressed its disagreement with the State’s determination that Moon Brook is impaired for stormwater and with certain aspects of the approved Moon Brook TMDL, and also requested that a use attainability analysis be conducted to change the designated uses of Moon Brook before any actions to implement the TMDL are required. Because there is an EPA approved TMDL for Moon Brook, it is appropriate for the State to remove the Brook from the § 303(d) list and we approve the State’s decision on that basis. Issues related to the TMDL and water quality standards are best addressed in other forums, but we note that DEC has provided very thorough and reasonable responses to the City’s comments.

returned to EPA Category 5 (impaired for which a TMDL is needed). For 2010, Vermont is moving this water segment to EPA Category 4c (Vermont's Part F list -- surface waters altered by flow regulation). The impairment for aquatic life support is caused by cold hypolimnetic releases from Harriman Reservoir. Because the impairment is not caused by a pollutant, but rather by a condition caused by the way flow is regulated at the dam, this water is more appropriately included in EPA Category 4c. For the reasons stated above, EPA approves Vermont's relocation of this segment from the State's Part B list onto the State's Part F list.

Water Impairment Placed into EPA Category 4b, Vermont's Part B (impaired but no TMDL needed).

The State's decision not to include the following water (described below) on its 2010 Section 303(d) list is consistent with EPA regulations at 40 CFR §130.7(b)(1) and EPA's Guidance for 2010 Assessment, Listing and Reporting Requirements. This water was not identified on the State's 2008 Section 303(d) list because it was determined to be impaired after the 2008 list was completed. Under 40 CFR §130.7(b)(1), States are not required to list WQLSs still requiring TMDLs where effluent limitations required by the CWA, more stringent effluent limitations required by state or local authority, or other pollution control requirements required by state, local, or federal authority, are stringent enough to implement applicable water quality standards. The regulation does not specify the time frame in which these various requirements must implement applicable water quality standards to support a State's decision not to list particular waters.

Monitoring should be scheduled for this water to verify that the water quality standard is attained as expected in a reasonable time frame. Where standards will not be attained through implementation of the requirements listed in 40 CFR §130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls and progress towards compliance with applicable standards is tracked. If it is determined that the water is meeting applicable standards when the next Section 303(d) list is developed, it would be appropriate for the State to remove the water from the list at that time.

Vermont has proposed that Big Spruce Brook (VT08-12) not be listed on the Section 303(d) list based on the criteria described in §130.7(b)(1)(ii) or (iii) and EPA's Guidance for 2010 Assessment, Listing and Reporting Requirements. The State has demonstrated that there are other pollution control requirements required by state, local or federal authority that will result in attainment of water quality standards for aquatic life support within a reasonable time. VTDEC determined that Big Spruce Brook was solely impaired by sediment and iron discharges associated with a groundwater seep and an improperly functioning sediment basin. VTDEC issued an enforcement order on May 6, 2010 requiring Stowe Mountain Resort to develop a remediation plan addressing these two sources, and, following VTDEC approval of the plan, to implement the corrective actions within 90 days. VTDEC subsequently approved a remediation and monitoring plan, and the corrective actions were completed by October, 2010. Now that the sources of the impairment have been addressed, VTDEC believes Vermont's water quality standards will be met in a reasonable period of time. If monitoring does not confirm an

improving trend, this water may be placed on the Section 303(d) list in future listing cycles.

EPA concurs with VTDEC's decision to not list Big Spruce Brook on Vermont's 2010 Section 303(d) list, and to instead place this water on its "Part B list" (impaired surface waters – no TMDL required) consistent with EPA regulations at 40 CFR §130.7(b)(1) and EPA's Guidance for 2010 Assessment, Listing and Reporting Requirements.

Waters impaired by nonpoint sources of pollution

The State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In 'Pronsolino v. Marcus,' the District Court for Northern District of California held that Section 303(d) of the Clean Water Act authorizes EPA to identify and establish total maximum daily loads for waters impaired by nonpoint sources. Pronsolino v. Marcus, 91 F. Supp. 2d 1337, 1347 (N.D.Ca. 2000). This decision was affirmed by the 9th Circuit court of appeals in Pronsolino v. Natri, 291 F.3d 1123 (9th Cir. 2002). See also EPA's Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act – EPA Office of Water-- July 29, 2005.