

STATE OF VERMONT

2018

303(d) LIST OF IMPAIRED WATERS

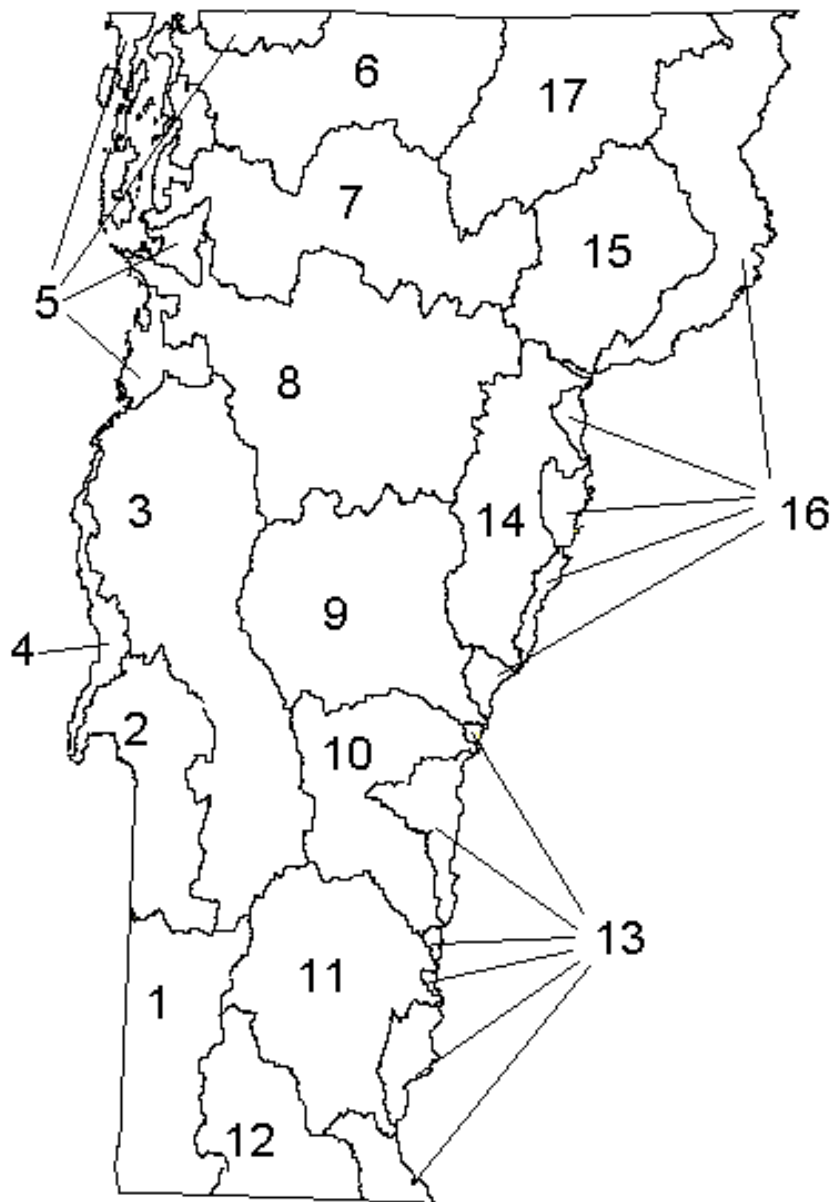
PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

September 2018

(Approved by EPA Region 1 September 5, 2018)

Prepared by:

Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522



Major Vermont River Basins

1. Battenkill
2. Poultney-Mettawee
3. Otter Creek
4. Lower Lake Champlain
5. Upper Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee
11. West
12. Deerfield
13. Lower Connecticut
14. Wells, Waits, Ompompanoosic
15. Passumpsic
16. Upper Connecticut
17. Lake Memphremagog

PART A – IMPAIRED WATERS IN NEED OF A TMDL (303d LIST)

Part A of the 2018 List of Waters identifies impaired surface waters where a total maximum daily load (TMDL) is required. Part A of the List has been prepared in accordance with the Vermont Surface Water Assessment and Listing Methodology, current EPA Guidance and the Environmental Protection Regulations 40 CFR 130.7. A TMDL is deemed necessary for these waters (unless remediation will be completed prior to the scheduled TMDL) in order to establish the maximum limit of a pollutant that may be introduced into the water and still ensure the Water Quality Standards are attained and maintained.

Explanation of Column Headings for Part A

Waterbody ID - An alphanumeric code used to spatially locate designated surface waterbodies. For example, VT01-02 and VT01-03L05 represent a river and a lake waterbody, respectively, located in Vermont river basin #01. River basin #01 includes the Batten Kill, Hoosic and Walloomsac rivers; there are 17 river basins for planning purposes identified in Vermont. A statewide map has been included that names these 17 river basins and identifies their approximate boundaries.

Segment Name/Description - The name of the river/stream segment or lake/pond. Entries denoted by “**” indicate newly identified impairments since the 2016 list.

Pollutant(s) - The pollutant or pollutants that cause a violation of the Vermont Water Quality Standards.

Use(s) Impaired - An indication of which designated or existing uses are impaired. The following conventions are used to represent a specific use:

- | | |
|---|---|
| AES – aesthetics | FC - fish consumption |
| ALS - aquatic life support | DWS - drinking water supply |
| AWS - agricultural water supply | CR - contact recreation (i.e. swimming) |
| 2CR - secondary contact recreation (fishing, boating) | |

Surface Water Quality Problem - A brief description of the problem found in the particular segment.

TMDL Completion Priority - An indication of priority as to when TMDLs will be completed (H=high 1-3 years, M=medium 4-8 years, L=low 8+ years).

| | Lakes and Ponds | Streams and Rivers | Total |
|---|-----------------|--------------------|-------|
| Total number of impairment entries listed in Part A: | 18(4) | 84 (2) | 102 |

Number in parentheses () represents new Part A listings since the 2016 listing cycle.

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|---------------------|--------------------|--|---------------------|------------------------|---|----------------------|
| VT01-02 | 01 | HOOSIC RIVER, ENTIRE 7 MILE LENGTH IN VERMONT | PCBs | FC | ELEVATED LEVELS OF TOXIC CONTAMINANT IN BROWN TROUT | L |
| | 02 | LADD BROOK, MOUTH TO RM 0.4 | SEDIMENT | ALS | INDICATION OF SEDIMENT STRESS; POTENTIAL IMPACTS FROM ERODING GRAVEL ROADS | M |
| VT01-03 | 01 | BARNEY BROOK, MOUTH TO RM 1.5 | SEDIMENT, IRON | ALS, AES | DOWNSTREAM OF LANDFILL, HAZ SITE, AND CONSTRUCTED WETLANDS; SILT AND IRON PRECIPITATE CAUSING FISH/INVERT IMPACTS | M |
| VT01-05 | 01 | LYE BROOK, RM 2.5 TO HEADWATERS (4.5 MILES) | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| VT01-06 | 01 | BRANCH POND BROOK (POND TO ROARING BRANCH) | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| | 02 | FAYVILLE BRANCH, RM 3.7 TO HEADWATERS | ACID | ALS | ACIDIFICATION, ACID DEPOSITION | M |
| VT01-06L04 | | LOST POND (Sunderland) | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| VT02-02 | 01 | HUBBARDTON RIVER, TRIB #7, BELOW WWTF DISCHARGE | NUTRIENTS | ALS | BENSON WWTF, AG RUNOFF POSSIBLE SOURCES; MONITORING & ASSESSMENT REQUIRED | M |
| VT02-03 | 01 | CASTLETON RIVER, FAIR HAVEN | E. COLI | CR | WWTF PUMP STATION OVERFLOWS | L |
| VT02-05 | 02 | UNNAMED TRIB TO INDIAN RIVER | METALS (IRON, ZINC) | ALS | PAWLET LANDFILL LEACHATE, MONITORING TO CONTINUE TO BETTER ID SOURCE LOCATION | L |
| | 04 | METTAWEE RIVER, FLOWER BROOK CONFLUENCE DOWNSTREAM 4.3 MI. | E. COLI | CR | CONSISTENTLY ELEVATED E. COLI | L |
| VT03-01 | 02 | LOWER OTTER CREEK, BELOW VERGENNES WWTF (APPROX 7 MILES) | E. COLI | CR | PERIODIC & RECURRING OVERFLOWS AT PUMP STATIONS WITHIN THE COLLECTION SYSTEM | L |

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| VT03-05 | 01 | OTTER CREEK, VICINITY OF RUTLAND CITY WWTF | E. COLI | CR, AES | RUTLAND CITY WWTF COLLECTION SYSTEM PASSES CSOs | L |
| VT03-12 | 02 | HALNON BROOK, TRIBUTARY #1 | NUTRIENTS | ALS | ELEVATED NUTRIENTS AFFECT AQUATIC BIOTA | M |
| VT03-14 | 01 | EAST CREEK, MOUTH TO 0.2 MI (BELOW CSO DISCHARGE PTS #2 AND #9) | E. COLI | CR, AES | RUTLAND CITY COLLECTION SYSTEM CSO | L |
| | 04 | **TENNEY BROOK, MOUTH TO RM 1.0 | UNDEFINED | ALS | FAILED BIO CRITERIA; STRESSORS INCLUDE TEMPERATURE, NUTRIENTS AND DEVELOPED LAND RUNOFF | L |
| VT04-01L01 | 01, 02, 03, 04 | OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT04-01L02 | 01, 02, 03 | PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT04-02L01 | 01, 02 | SOUTHERN SECTION - LAKE CHAMPLAIN (Bridport) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-01 | 01 | ROCK RIVER - MOUTH TO VT/QUE BORDER (3.6 MILES) | NUTRIENTS, SEDIMENT | AES, AH | ALGAL GROWTH; AGRICULTURAL RUNOFF | M |
| | 02 | ROCK RIVER, UPSTREAM FROM QUE/VT BORDER (APPROX 13 MILES) | NUTRIENTS, SEDIMENT | ALS, AES | AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT | H |
| | 03 | SAXE BROOK (TRIB TO ROCK RIVER) FROM MOUTH UPSTREAM 1 MILE | NUTRIENTS | ALS | AGRICULTURAL RUNOFF | M |
| VT05-04L01 | 01, 02, 03 | NORTHEAST ARM - LAKE CHAMPLAIN (Swanton) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-04L02 | 01, 02 | ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |

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|--------------|-------------|---|------------------------------|-----------------|---|---------------|
| VT05-07 | 01 | RUGG BROOK, FROM MOUTH TO APPROX 3.1 MILES UPSTREAM | NUTRIENTS, SEDIMENT, E. COLI | ALS, CR, AES | AGRICULTURAL RUNOFF | H |
| | 03 | JEWETT BROOK (3.5 MILES) | NUTRIENTS, SEDIMENT | ALS | AGRICULTURAL RUNOFF | H |
| | 04 | MILL RIVER, FROM ST. ALBANS BAY TO 1.8 MILES UPSTREAM | NUTRIENTS, SEDIMENT | ALS | AGRICULTURAL RUNOFF, STREAMBANK EROSION | H |
| | 05 | STEVENS BROOK, MOUTH UPSTREAM 6.5 MILES | NUTRIENTS, SEDIMENT, E. COLI | ALS, CR, AES | AGRICULTURAL RUNOFF; MORPHOLOGICAL INSTABILITY, ST ALBANS CSO | H |
| | 06 | STEVENS BROOK, LASALLE ST DOWNSTREAM 0.5 MI | METALS (Cd, Ba, CN, Zn) | ALS, CR | SED CONTAMINATION FROM ST ALBANS GAS AND LIGHT HAZ WASTE SITE | L |
| VT05-07L01 | 01, 02 | ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-09L01 | 01, 02, 03 | MALLETTS BAY - LAKE CHAMPLAIN (Colchester) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-10L01 | 01, 02, 03 | BURLINGTON BAY - LAKE CHAMPLAIN (Burlington) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-10L02 | 01, 02 | MAIN SECTION - LAKE CHAMPLAIN (South Hero) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT05-11 | 06 | MCCABES BROOK, MOUTH TO RM 1.4 | NUTRIENTS | ALS | INCLUDES ABOVE AND BELOW WWTF; POSSIBLE TOXIC IMPACT BELOW WWTF; UNSTABLE CHANNEL ABOVE | M |
| VT05-11L01 | 01, 02, 03 | SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne) | PCBs | FC | ELEVATED LEVELS OF PCBs IN LAKE TROUT | L |
| VT06-04 | 01 | BERRY BK, MOUTH UP TO AND INCLUDING NO. TRIB (APPROX. 1 MI) | SEDIMENT, NUTRIENTS | ALS, AES | AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS | H |

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| VT06-04 | 02 | GODIN BROOK | NUTRIENTS, SEDIMENT | ALS, AES | AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS | H |
| | 03 | SAMSONVILLE BROOK | NUTRIENTS, SEDIMENT | ALS, AES | AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS | M |
| | 04 | TROUT BROOK, UPSTREAM FROM MOUTH FOR 2.3 MILES | NUTRIENTS | ALS | AGRICULTURAL RUNOFF | H |
| VT06-05 | 02 | WANZER BROOK (MOUTH TO RM 4.0) | NUTRIENTS, SEDIMENT | ALS | AGRICULTURAL RUNOFF | H |
| VT06-08 | 03 | MUD CREEK, FROM VT/QUE BORDER UP TO RM 6.5 (APPROX. 3.2 MILES) | NUTRIENTS, SEDIMENT | ALS, AES | AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT, MACROINVERT IMPACTS | H |
| | 04 | COBURN BROOK (MOUTH TO RM 0.2) | NUTRIENTS | ALS | AGRICULTURAL ACTIVITY AND RUNOFF | H |
| | 05 | BURGESS BROOK, RM 4.9 TO 5.4 | SEDIMENT | ALS, CR, AES | ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS | L |
| | 06 | BURGESS BROOK TRIBUTARY# 11, MOUTH TO RM 0.5 | SEDIMENT | ALS, CR, AES | ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS | L |
| | 09 | SOUTH MOUNTAIN BRANCH (TRIB # 7) (2.2 MI.) | SEDIMENT | ALS | MACROINVERT. IMPACTS; POTENTIAL SEDIMENT FROM ROADS, DEVELOPMENT | M |
| | 10 | ACE BROOK, RM0.7 TO HEADWATERS (1.0 MI.) | SEDIMENT | ALS | APPARENT SEDIMENT DISCHARGES AND HYDRO CHANGE FROM LOGGING ACTIVITY | L |
| VT07-01 | 03 | LAMOILLE RIVER TRIB #4, RM 0.4 TO RM 0.7 | METALS | ALS | MACROINVERT IMPACTS FROM OLD MILTON LANDFILL (Pb, Zn, Cu, Fe) | M |
| VT07-03 | 01 | DEER BROOK, MOUTH TO 2.5 MILES UPSTREAM | SEDIMENT | ALS | EROSION FROM STORMWATER DISCHARGES; CORRODING ROAD CULVERTS; BMPs IMPLEMENTED | M |

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| VT07-03L01 | | **HALFMOON POND (Fletcher) | PHOSPHORUS | AES | EXTREMELY ELEVATED TP; AGRICULTURAL INFLUENCES | L |
| VT07-08 | 01 | RODMAN BROOK, MOUTH TO RM 0.6 | IRON | ALS, AES | IMPACTS FROM LANDFILL LEACHATE; BIO COMMUNITY IMPROVING; MONITORING TO CONTINUE | M |
| VT07-13 | 01 | TRIB #10 TO BREWSTER RIVER (1 MILE) | METALS (IRON) | AES, ALS | IRON SEEPS ON STREAMBANK; BMPs IN PLACE; MACROINVERTS FAIR 2013 | L |
| VT07-15 | 01 | HUTCHINS BROOK, RM 2.0 TO 3.0 | SEDIMENT | ALS, AES, CR | ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS | L |
| | 02 | HUTCHINS BROOK TRIBUTARY #4, MOUTH TO RM 0.3 | SEDIMENT | ALS, AES, CR | ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS | L |
| VT08-01 | 01 | WINOOSKI RIVER, MOUTH TO WINOOSKI DAM (~10.5 MILES) | E. COLI | CR | BURLINGTON CSOs | L |
| VT08-02 | 03 | MUDDY BROOK TRIBUTARY #4 AND TRIB TO TRIB #4 | CHLORIDE | ALS | ELEVATED INSTREAM CHLORIDE LEVELS | L |
| | 08 | SUNNYSIDE BROOK (TRIB #8 TO SUNDERLAND BROOK) (1.2 ML) | CHLORIDE | ALS | CHLORIDE CRITERIA EXCEEDED; IMPACTS TO MACROINVERTS. | H |
| VT08-02L01 | | SHELBURNE POND (Shelburne) | PHOSPHORUS | ALS, CR, 2CR | EXCESSIVE ALGAE AND NATIVE PLANT GROWTH CAUSES PERIODIC LOW D.O./FISH KILLS | L |
| VT08-05 | 01 | WINOOSKI RIVER ABOVE MONTPELIER WWTF DISCHARGE | E. COLI | CR | MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS | L |
| VT08-07 | 01 | WINOOSKI RIVER, PLAINFIELD RM 70.7 TO RM 71.4 | E. COLI | CR | CONSISTENTLY ELEVATED E. COLI | L |
| | 02 | WINOOSKI RIVER, MARSHFIELD, RM 72.8 UP TO CONFLU WITH MOLLYS BROOK | E. COLI | CR | CONSISTENTLY ELEVATED E COLI, IMPAIRMENT CONTINUES UPSTREAM INTO VT08-09 | L |

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| VT08-08 | 02 | **BLANCHARD BROOK, MOUTH TO RM 0.4 | UNDEFINED | ALS | FAILED BIOCRITERIA; STRESSORS INCLUDE TEMPERATURE, CHLORIDE, SEDIMENT, NUTRIENTS AND DEVELOPED LAND RUNOFF | L |
| VT08-09 | 02 | WINOOSKI RIVER, CABOT, CONFLUENCE MOLLYS BROOK UP TO RM 83.8 | E. COLI | CR | CONSISTENTLY ELEVATED E. COLI; CONTINUATION OF DOWNSTREAM IMPAIRMENT FROM VT08-07 | L |
| VT08-11L02 | 02 | WATERBURY RESERVOIR (Waterbury) | SEDIMENT | ALS, AES | SEDIMENTATION, TURBIDITY | L |
| VT08-12 | 01 | INN BROOK, RM 0.3 TO 0.6 | IRON | ALS, AES | IRON SEEPS ORIGINATING FROM DISTURBED SOILS | L |
| VT08-13 | 01 | LOWER NORTH BRANCH, WINOOSKI RIVER (APPROX 1 MILE) | E. COLI | CR | MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS | L |
| VT08-16 | 01 | GUNNER BROOK, BELOW FARWELL ST. DUMP (APPROX 0.5 MILE) | METALS (Cu, Fe), NUTRIENTS, SEDIMENT | AES, ALS, CR | FARWELL ST. LANDFILL LEACHATE, SURFACE RUNOFF FROM DEVELOPED AREA | M |
| VT08-17L01 | | **BEAVER POND (ROXBURY) | ACID | ALS | ATMOSHHERIC DEPOSITION; EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | M |
| VT08-20 | 01 | CLAY BROOK, RM 1.8 TO RM 2.3 | STORMWATER, IRON | ALS, AES | STORMWATER RUNOFF, EROSION FROM CONSTRUCTION ACTIVITIES & GRAVEL PARKING LOT; INCREASED PEAK STORMWATER FLOWS | L |
| VT09-04 | 01 | FIRST BRANCH WHITE RIVER, MOUTH TO RM 15.2 | E. COLI | CR | CONSISTENTLY ELEVATED E.COLI | L |
| VT09-05 | 01 | SECOND BRANCH WHITE RIVER, MOUTH TO RM 9.8 | E. COLI | CR | CONSISTENTLY ELEVATED E. COLI | L |
| VT09-06 | 01 | SMITH BROOK (MOUTH TO RM 0.3) | IRON | ALS, AES | APPARENT LEACHATE FROM ADJACENT OLD DUMP | M |
| | 02 | THIRD BRANCH WHITE RIVER, MOUTH TO RM 4.3 | E. COLI | CR | CONSISTENTLY ELEVATED E. COLI | L |

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|---------------------|--------------------|--|-------------------------|------------------------|---|----------------------|
| VT10-04 | 01 | SMALL STREAM TO OTTAUQUECHEE RIVER (BRIDGEWATER) | METALS (Fe) | ALS, AES | BRIDGEWATER LANDFILL; LEACHATE ENTERING SURFACE WATER | M |
| VT10-06 | 01 | ROARING BROOK, RM 3.5 TO RM 4.2 | STORMWATER | AES, ALS | STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION | L |
| | 02 | E. BRANCH ROARING BROOK, RM 0.1 TO RM 0.6 | STORMWATER, IRON | AES, ALS | STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION | L |
| VT10-11 | 01 | BLACK RIVER; FROM MOUTH TO FELLOWS DAM (~ 4.6 MI.) | E. COLI | CR | COMBINED SEWER OVERFLOWS | L |
| VT11-10 | 01 | WEST RIVER, BELOW BALL MOUNTAIN DAM TO TOWNSHEND DAM (9 MILES) | TEMPERATURE | 2CR | ELEVATED TEMPERATURES AFFECT FISHERY | L |
| VT11-15 | 03 | BALL MOUNTAIN BROOK, ABOVE NORTH BRANCH CONFLUENCE | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| | 04 | BEAR CREEK BROOK, RM 0.7 TO HEADWATERS | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| | 05 | KIDDER BROOK, CONFLUENCE OF SUN BOWL BROOK TO HEADWATERS | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| VT12-03 | 01 | EAST BRANCH DEERFIELD RIVER, BELOW SOMERSET DAM, 5.2 MILES | ACID | ALS | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| VT12-04 | 01 | UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM, 3.6 MILES | ACID | ALS | ATMOSPHERIC DEPOSITION; CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | M |
| VT12-05 | 01 | NO. BRANCH DEERFIELD RIVER, TANNERY BRK RD TO 0.2 MI ABOVE SNOW LAKE | STORMWATER, TEMPERATURE | AES, ALS | STORMWATER RUNOFF, LAND DEVELOPMENT & CONSTRUCTION RELATED EROSION; INCREASED TEMP BELOW POND | L |
| | 03 | IRON STREAM, TRIB TO JACKS BROOK (0.3 MILE) | IRON | ALS | LAND DEVELOPMENT, SOURCE(S) NEED FURTHER ASSESSMENT | M |

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| VT12-05 | 06 | ELLIS BROOK, MOUTH TO RM 0.5 | NUTRIENTS | ALS | POSSIBLE IMPACTS FROM Nbfd WWTF, AG AND CHANNEL ALTERATIONS; HIGH ALGAL COVER | M |
| VT13-06 | 01 | NEAL BROOK, MOUTH TO RM 0.4 | METALS | ALS | MACROINVERT. IMPACTS FROM LANDFILL DRAINAGE | M |
| VT13-10 | 01 | COMMISSARY BROOK TRIB, MOUTH TO RM 0.2 | SEDIMENT | AES, ALS | BANK FAILURE AND EROSION DUE TO PAST CLAY MINING | L |
| VT13-13 | 01 | CROSBY BROOK, MOUTH TO RM 0.7 | SEDIMENT | ALS | HABITAT ALTERATIONS DUE TO SEDIMENTATION, CHANNELIZATION AND BUFFER LOSS | M |
| VT13-16 | 01 | NEWTON BROOK, MOUTH TO RM 2.0 | SEDIMENT, NUTRIENTS | ALS | AGRICULTURAL ACTIVITY | M |
| VT14-02 | 02 | COPPERAS BROOK (1 MILE) | METALS, ACID | AES, ALS, CR, 2CR, FC | HIGH METALS IN DRAINAGE FROM ABANDONED ELIZABETH MINE & FROM TAILINGS PILES | L |
| | 04 | LORDS BROOK, HEADWATER TRIBUTARY #2 AND TRIB 2-TRIB 1 | METALS | ALS | ABANDONED MINE DRAINAGE BELOW "SOUTH CUT" AND "SOUTH MINE" | L |
| VT14-03 | 03 | SCHOOLHOUSE BROOK AND TRIBUTARY | METALS, ACID | AES, ALS | HIGH METALS IN DRAINAGE FROM ABANDONED ELY MINE | M |
| VT14-05 | 01 | PIKE HILL BROOK, FROM MOUTH TO 4 MILES UPSTREAM | METALS | AES, ALS | HIGH METALS IN DRAINAGE FROM ABANDONED PIKE HILL MINE & TAILINGS | M |
| | 02 | TABOR BRANCH TRIBUTARY #6, MOUTH TO RM 0.1 | UNDEFINED | ALS | AGRICULTURAL RUNOFF | M |
| VT14-06 | 01 | COOKVILLE TRIB #4, RM 1.0 TO 1.7 | METALS | ALS | ACID MINE DRAINAGE ASSOCIATED WITH PIKE HILL MINE | L |
| VT15-01 | 01 | PASSUMPSIC RIVER, TREMONT STREET DNWSTRM 5 MILES THROUGH ST J. | E. COLI | CR | ST. JOHNSBURY WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS | L |

Certain local, state and federal regulatory programs refer to impaired segments (or waters draining to those segments) listed on the 303d List of Impaired Waters as part of program operations. Contact the respective regulatory program for details regarding regulated activities in these waters and their watersheds.

Part A. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards according to the methodology described in the Vermont Surface Water Assessment and Listing Methodology. Required or needed pollution controls have yet to be fully implemented and further pollutant loading determinations (i.e. TMDLs) are necessary - unless remediation will be completed prior to the scheduled TMDL.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) | TMDL Priority |
|---------------------|--------------------|---------------------------------------|---------------------|------------------------|--|----------------------|
| VT15-04 | 01 | LOWER SLEEPERS RIVER IN ST. JOHNSBURY | E. COLI | CR | ST. JOHNSBURY WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS | L |
| VT16-13L04 | | UNKNOWN POND (Ferdinand) | ACID | ALS | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | M |
| VT17-02 | 01 | STEARNS BROOK TRIBUTARY (HOLLAND) | NUTRIENTS | ALS | AGRICULTURAL RUNOFF | M |
| VT17-08 | 01 | ROARING BROOK, MOUTH TO RM 2.4 | NUTRIENTS | ALS | MACROINVERT. IMPACTS FROM POSSIBLE AG RUNOFF | M |
| VT17-09L01 | | **WALKER POND (Coventry) | PHOSPHORUS | AES | EXTREMELY ELEVATED TP; AGRICULTURAL INFLUENCES | L |
| VT17-10L02 | | **MUD POND (Craftsbury) | PHOSPHORUS | AES | EXTREMELY ELEVATED TP; AGRICULTURAL INFLUENCES | L |

Certain local, state and federal regulatory programs refer to impaired segments (or waters draining to those segments) listed on the 303d List of Impaired Waters as part of program operations. Contact the respective regulatory program for details regarding regulated activities in these waters and their watersheds.

STATE OF VERMONT

2018

LIST OF PRIORITY SURFACE WATERS

PART B. IMPAIRED SURFACE WATERS - NO TOTAL MAXIMUM DAILY LOAD DETERMINATION REQUIRED

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main 2
Montpelier, VT 05620-3522

www.watershedmanagement.vt.gov

Overview

All waters listed in **Part B** are assessed as “impaired” and do not require development of a TMDL as described in 40 CFR 130.7. Impaired waters that do not need a TMDL are those where other pollution control requirements (such as best management practices) required by local, state or federal authority are expected to address all water-pollutant combinations and the Water Quality Standards are expected to be attained in a reasonable period of time. These waters correspond to Category 4b of EPA’s Consolidated Assessment Listing Methodology.

Explanation of Column Headings

Waterbody ID - An alphanumeric code used to spatially locate designated surface waterbodies. For example, VT01-02 and VT01-03L05 represent a river and a lake waterbody, respectively, which are located in Vermont river basin #01. River basin #01 includes the Batten Kill, Hoosic and Walloomsac rivers; there are 17 river basins for planning purposes identified in Vermont. A statewide map has been included that names these 17 river basins and identifies their approximate boundaries.

ADB Code(s) – Assessment Database segment code used for EPA tracking purposes. If blank, Waterbody ID represents entire ADB code.

Segment Name/Description - The name of the river/stream segment or lake/pond.

Pollutant(s) - The pollutant or pollutants that cause a violation of the Vermont Water Quality Standards (VTWQS).

Use(s) Impaired - An indication of which designated or existing uses are impaired. The following conventions are used to represent a specific use:

AES - aesthetics

ALS or AH - aquatic life (biota and/or habitat) support

AWS - agricultural water supply

2CR - secondary contact recreation (fishing, boating)

FC - fish consumption

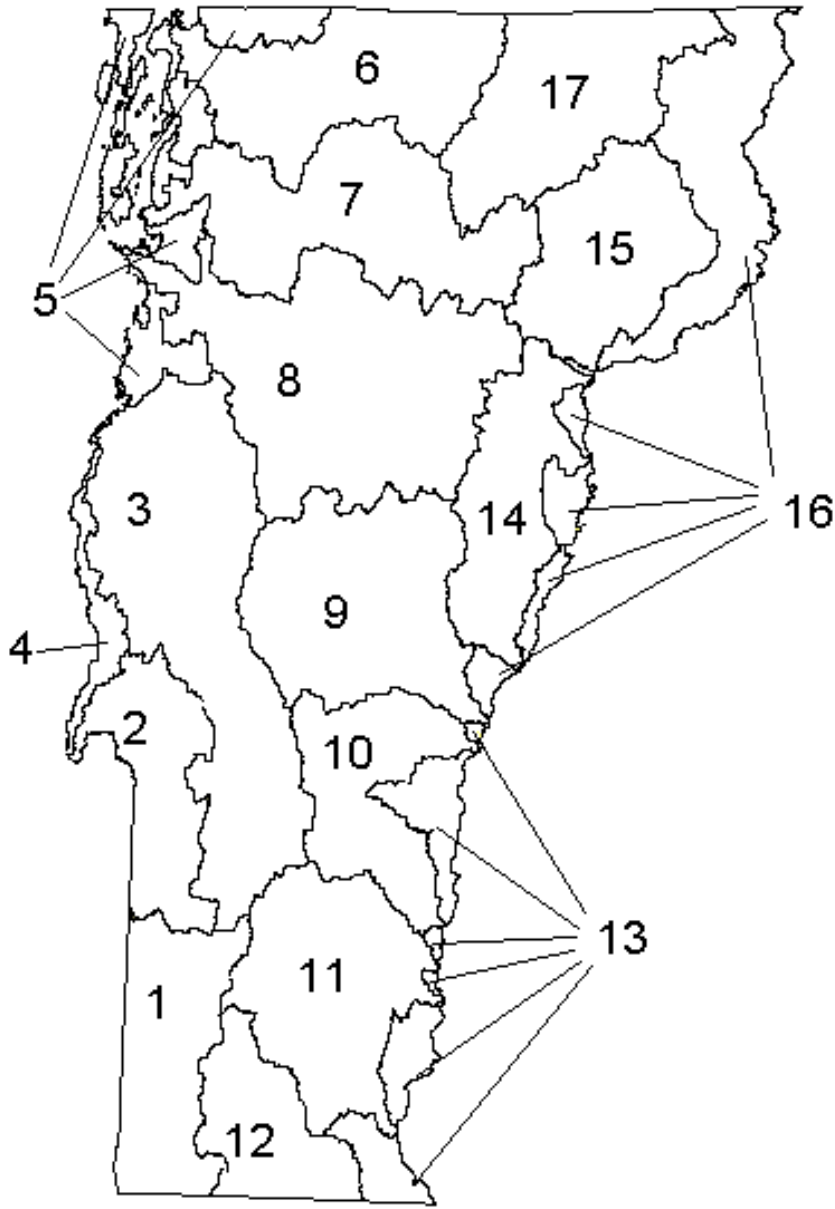
DWS - drinking water supply

CR - contact recreation (i.e. swimming)

Surface Water Quality Problem(s) - A brief description of the problem found in the particular segment.

Rationale - A narrative summary explaining why a TMDL determination is not needed to correct the specific impairment

Major Vermont River Basins



1. Battenkill
2. Poultney-Mettawee
3. Otter Creek
4. Lower Lake Champlain
5. Upper Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee
11. West
12. Deerfield
13. Lower Connecticut
14. Wells, Waits, Ompompanoosic
15. Passumpsic
16. Upper Connecticut
17. Lake Memphremagog

Part B. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards. However, according to USEPA Listing Guidance, these waters do not require a TMDL because other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) |
|---------------------|--------------------|--|--|------------------------|---|
| VT05-10L01 | 04 | BURLINGTON BAY - LAKE CHAMPLAIN - PINE STREET BARGE CANAL (Burlington) | PRIORITY & NONPRIORITY ORGANICS, METALS, OIL, GREASE, PCBs | ALS, CR, 2CR | CONTAM'N FROM COAL TAR IN SEDIMENTS OF PINE ST BARGE CANAL (SITE #770042) |

No TMDL is necessary for this impairment as authority and legal means are available and in place to address the source of impairment. The authority and legal means that are available to DEC and the US EPA are considered sufficient to attain Water Quality Standards in the future. DEC authority is under 10 VSA 6603 and 6610a. US EPA authority is CERCLA (42 USC section 9601 - 9675).

The Pine Street Barge Canal Coordinating Council (PSBC Council) is overseeing implementation of the May 1998 Cleanup Plan. Cleanup Plan was reviewed and approved by EPA. Personnel from DEC's Hazardous Materials Division participate with and serve on the Council.

This is an EPA Superfund site designated under CERCLA. There are legal requirements in place that apply to the source of the pollutants contributing to the impairment. The performance standards identified in the Statement of Work are sufficient to remediate the problem and are consistent with VT Water Quality Standards when implementation of the remediation/clean-up plan is complete.

An extensive water quality monitoring plan is in-place to track effectiveness of pollution controls implemented and compliance with VT Water Quality Standards.

Part B. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards. However, according to USEPA Listing Guidance, these waters do not require a TMDL because other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) |
|--------------|-------------|---|--------------|-----------------|---|
| VT06-08 | 07 | SOUTH MOUNTAIN BRANCH, TRIBUTARY #3 (MOUTH TO RM 0.5) | SEDIMENT | ALS | EROSION FROM PARKING AREAS AND ON-MOUNTAIN ACTIVITIES |

No TMDL is necessary as DEC has the authority and legal means available to eliminate the sources causing this impairment. The authority and legal means that are available to DEC are sufficient to attain WQS and enable DEC to utilize enforcement authority as it exists under 10 VSA 1272.

The South Mountain Branch is a tributary Jay Branch and is located in the town of Jay. The streams within the watershed are managed as Class B waters, with cold water fishery. South Mountain Branch, Tributary #3 enters the South Mountain Branch at about RM 2.3, and drains the south side of Jay Peak mountain and portions of the Stateside lodge and parking area.

Based on biomonitoring conducted by Jay Peak Resort (JPR) and VTDEC that was initiated in 2011, Tributary #3 to South Mountain Branch shows noncompliance with VTWQS biocriteria. Indications from habitat assessments and water quality monitoring, impacts due to sediment appear to be the primary stressor. As reported in the 2012 update of the water quality remediation plan prepared for JPR, multiple problematic sediment sources have been identified as potential sites for remedial measures.

VTDEC issued a follow-up §1272 Order in 2014 to have JPR revisit the original WQRP and identify, prioritize and implement an additional suite of remedial actions to be completed in two years. Additionally, as a result of private party appeals of several stormwater permits in 2014, JPR entered into a settlement agreement that establishes WQS compliance dates with interim targets, a mechanism by which additional BMPs are implemented and a monitoring plan.

Watershed BMP implementation has continued in this watershed over the past several years, but the biomonitoring conducted in 2016 and 2017 failed to show compliance with the VTWQS. Tributary #3 to South Mountain Branch continues to remain impaired. According to the WQRP, large-scale BMPs will be scheduled to be implemented in the watershed and biomonitoring will continue for the next several years to track the stream condition.

| | | | | | |
|---------|----|--|----------|-----|---|
| VT07-01 | 01 | LOWER LAMOILLE RIVER FROM CLARKS FALLS DAM TO ROUTE 2 BRIDGE (6 MILES) | LOW D.O. | ALS | 3 DAMS (CLARKS, MILTON, PETERSON) CREATE D.O. PROBLEMS DOWNSTREAM |
|---------|----|--|----------|-----|---|

No TMDL is necessary for this impaired segment as DEC has the authority and legal means available to address the dissolved oxygen (D.O.) problem found below the Clarks Falls hydroelectric facility. The authority and legal means that are available to DEC are sufficient to attain Water Quality Standards in the near future.

A new federal license for the Lamoille River Hydroelectric Project was issued in June 2005. Articles 407 and 408 address post-licensing water quality monitoring and D.O. enhancement, respectively. The new license provides for conservation flows that may improve the D.O. regime sufficiently to obviate the need for specific mechanical enhancements, such as turbine aspiration. FERC approved the licensee's water quality monitoring and dissolved oxygen enhancement plan on December 5, 2006, although the licensee elected to initiate sampling in Summer 2006. Because of higher than normal flows in 2006, sampling continued in 2007. Conditions were again somewhat atypical in 2007 because the Milton Station was off line, resulting in highly reoxygenated flows entering Peterson impoundment. Consequently, the Department has asked CVPS to continue sampling in summer 2008 before it determines whether there is sufficient data to conclude that the post-licensing operational changes have achieved compliance with the Water Quality Standards. If the data indicates that standards are not being met, the licensee must propose and implement enhancement measures.

Currently, sufficient data has not been collected to make a final WQS determination; however, the operational changes have occurred to address the potential low dissolved oxygen condition.

Part B. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards. However, according to USEPA Listing Guidance, these waters do not require a TMDL because other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) |
|---------------------|--------------------|----------------------------------|---------------------|------------------------|---|
| VT08-02 | 07 | UNNAMED TRIB TO WINOOSKI RIVER | METALS (Fe) | ALS | SO. BURLINGTON LANDFILL LEACHATE ENTERING SURFACE WATER |

No TMDL is necessary for this impairment as DEC has the authority and legal means available to address the source causing this particular impairment. The authority and legal means that are available to DEC are sufficient to attain Water Quality Standards.

This is a small stream that is pumped around the South Burlington Landfill. Leachate-contaminated seeps at the base of the landfill have in the past drained into a wetland area connected to the stream. Currently, curtain drains are in place and leachate is pumped, collected and transported to a permitted wastewater treatment facility. The landfill facility was ordered by DEC to be closed with capping. Capping occurred in 1992. The facility has a post-closure court order requiring water quality monitoring and maintenance of the site. Water quality sampling is conducted semiannually to determine effectiveness of treatment. Water quality improvement is expected over time as water quality treatment and site management continues. Through 2017, surface water quality sampling locations indicate that iron concentrations remain above the VTWQS for the protection of aquatic biota.

| | | | | | |
|---------|----|------------------------|-------------|-----|--|
| VT08-08 | 01 | MUDDY BROOK (0.1 MILE) | METALS (Fe) | ALS | CV LANDFILL: LEACHATE ENTERING SURFACE WATER |
|---------|----|------------------------|-------------|-----|--|

No TMDL is necessary for this impairment as DEC has the authority and legal means available to address the source causing this particular impairment. The authority and legal means available to DEC are sufficient to attain Water Quality Standards and have been implemented.

This is a small stream that flows around the Central Vermont Landfill. Until summer 2001, leachate had entered the stream from seeps located along the side slopes of the landfill. The Landfill was ordered by DEC to be closed and capped in 1993. Due to the slumping of the capping soils in 2001, the original clay cap was removed, the landfill was re-graded and a synthetic cap was installed along with a new toe drain and gas collection system. The landfill facility has a post-closure court order requiring water quality monitoring and maintenance of the site. Currently the amount of water collected in the drains is significantly less than previously reported. Through October 2015, monitoring data continues to show sporadic but inconsistent compliance with the VTWQS. However, of the four samples collected in 2016 and 2017, iron only exceed the WQS criteria once.

Part B. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards. However, according to USEPA Listing Guidance, these waters do not require a TMDL because other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) |
|--------------|-------------|---|--------------|-----------------|--|
| VT08-12 | 04 | WEST BRANCH LITTLE RIVER, RM 7.5 TO 8.0 | UNDEFINED | ALS | IMPACTS TO MACROINVERT. COMMUNITY; POTENTIAL SOURCES INCLUDE HYDROLOGIC MODIFICATION, SEDIMENT, LOW pH |

No TMDL is necessary for this impairment as VTDEC has the authority and legal means available to address the source causing this particular impairment. The authority and legal means that are available to DEC are sufficient to attain Water Quality Standards.

The mid-upper reaches of the West Branch Little River, located in the town of Stowe, Vermont, is a small, cold water, Class B stream and drains the eastern reaches of Mt Mansfield. Much of the mid-upper reaches of the stream receive, either directly or through tributaries, runoff from the developed areas of the Stowe Mountain Resort (SMR).

The Agency placed the reach between rivermile (RM) 7.5 and 8.0 of West Branch Little River on Part C of the 2002 Vermont List of Priority Waters, thereby identifying it as in need of further assessment to determine compliance with the VTWQS. The site has been re-evaluated with each subsequent biennial listing cycle, with consistently marginal attainment. In 2012, based on biomonitoring data collected between 2008 - 2011, the Agency determined that the West Branch Little River from RM7.5 to RM8.0 was no longer in compliance with the VTWQS for aquatic life support due to undefined stresses.

Through comments submitted during the draft 303(d) List comment period, SMR proposed it take a series of steps to: 1) investigate potential sources contributing to the impairment, 2) develop and prioritize actions to remediate the problematic areas, and 3) implement the necessary actions to remediate the water quality impairment. On May 3, 2012, DEC issued an order pursuant to 10 V.S.A. §1272 ordering SMR to: 1) by May 30, 2012, conduct a field investigation, develop or improve existing hydrologic models and submit recommendations to eliminate the identified impairment, and 2) by September 30, 2012, complete approved remediation measures and submit proposed monitoring plan for approval.

In late 2012, all agreed upon BMP measures were completed by SMR and biomonitoring results from 2012 also indicated compliance with the VTWQS for a single year. However, subsequent biomonitoring in 2014 revealed a slight decrease in water quality from 2012 to just below levels of compliance. Monitoring continued in 2015 and 2016 with similar results at both RM 7.5 and RM 8.0 and that sediment and possibly hydrologic stress (high flows) continue to limit the aquatic biota from attaining compliance. Additional assessments to identify potential new BMPs should be considered in light of the most recent monitoring results.

Part B. Waters appearing below have documentation and data indicating impairment and do not meet VT Water Quality Standards. However, according to USEPA Listing Guidance, these waters do not require a TMDL because other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

| Waterbody ID | ADB Code(s) | Segment Name/ Description | Pollutant(s) | Use(s) Impaired | Surface Water Quality Problem(s) |
|---------------------|--------------------|--|---------------------|------------------------|---|
| VT08-16 | 02 | TRIB (#23) TO STEVENS BR, BELOW WILLIAMSTOWN WWTF OUTFALL (0.5 MI) | NUTRIENTS | ALS | TREATED EFFLUENT DISCHARGE TO SMALL REC'ING WATER |

No TMDL is necessary as DEC has the authority and legal means available to address the municipal source causing this impairment. The authority and legal means that are available to DEC are sufficient to attain WQS. DEC has NPDES discharge permitting authority under the delegation agreement with EPA. Delegation of NPDES permitting authority means that DEC has adequate authority and legal mechanisms to execute enforcement. Authority to order correction resides within 10 VSA 1272.

Recent biological monitoring downstream of the discharge in 2002 and 2005 indicates considerably improved invertebrate and fish communities, at times exceeding minimum criteria. Sampling in 2010 showed a slight decline in macroinvertebrate community composition as compared to immediately upstream. However, as a result of a VTDEC wastewater facility inspection in 2009, a project to remove sludge in the lagoon and completely replace the aerations systems was scheduled. The project work was completed after the 2010 biomonitoring. Future biomonitoring will indicate the effectiveness of the lagoon upgrade work.

In 2015 and 2016, planning at the Williamstown WWTF proposes to move the discharge outfall out of the small tributary (#23) to the larger Stevens Branch directly. This redirection of the outfall should eliminate the impairment in the tributary while maintaining water quality in the Stevens Branch. The outfall relocation occurred in December 2016. Follow-up monitoring will need to be conducted to verify that the impairment has been eliminated; however, biomonitoring conducted in 2015 (pre-outfall relocation) showed compliance with the biocriteria so there is high confidence that post-relocation monitoring will show consistently improving water quality and compliance with the WQS.

| | | | | | |
|---------|----|---|-----------|-----|---|
| VT11-15 | 06 | NO. BRANCH, BALL MTN BROOK, STRATTON LAKE TO KIDDER BROOK | MANGANESE | AES | CONTRIBUTIONS/RELEASES OF REDUCED Mn FROM RESERVOIR SEDIMENT COATING STREAM SUBSTRATE ("BLACK ROCKS") |
|---------|----|---|-----------|-----|---|

Conditions created by the installed diversion around the pond have resulted in an elimination of the problematic Mn discharge. Staining of the substrate is no longer occurring. Historical staining from previous Mn discharge remains but no further remediation actions are necessary or planned.

STATE OF VERMONT

2018

LIST OF PRIORITY SURFACE WATERS

PART D. IMPAIRED SURFACE WATERS WITH COMPLETED AND APPROVED TMDLs

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main 2
Montpelier, VT 05620-3522

www.watershedmanagement.vt.gov

Overview

All waters identified on **Part D** are assessed as impaired and have completed and approved TMDLs in place. If future assessments show the impairment has been eliminated, the water will no longer be tracked on Part D. These waters correspond to Category 4a of EPA's Consolidated Assessment Listing Methodology.

Explanation of Column Headings

Waterbody ID - An alphanumeric code used to spatially locate designated surface waterbodies. For example, VT01-02 and VT01-03L05 represent a river and a lake waterbody, respectively, that is located in Vermont river basin #01. River basin #01 includes the Batten Kill, Hoosic and Walloomsac rivers; there are 17 river basins for planning purposes identified in Vermont. A statewide map has been included that names these 17 river basins and identifies their approximate boundaries.

Name - The name of the river/stream segment or lake/pond.

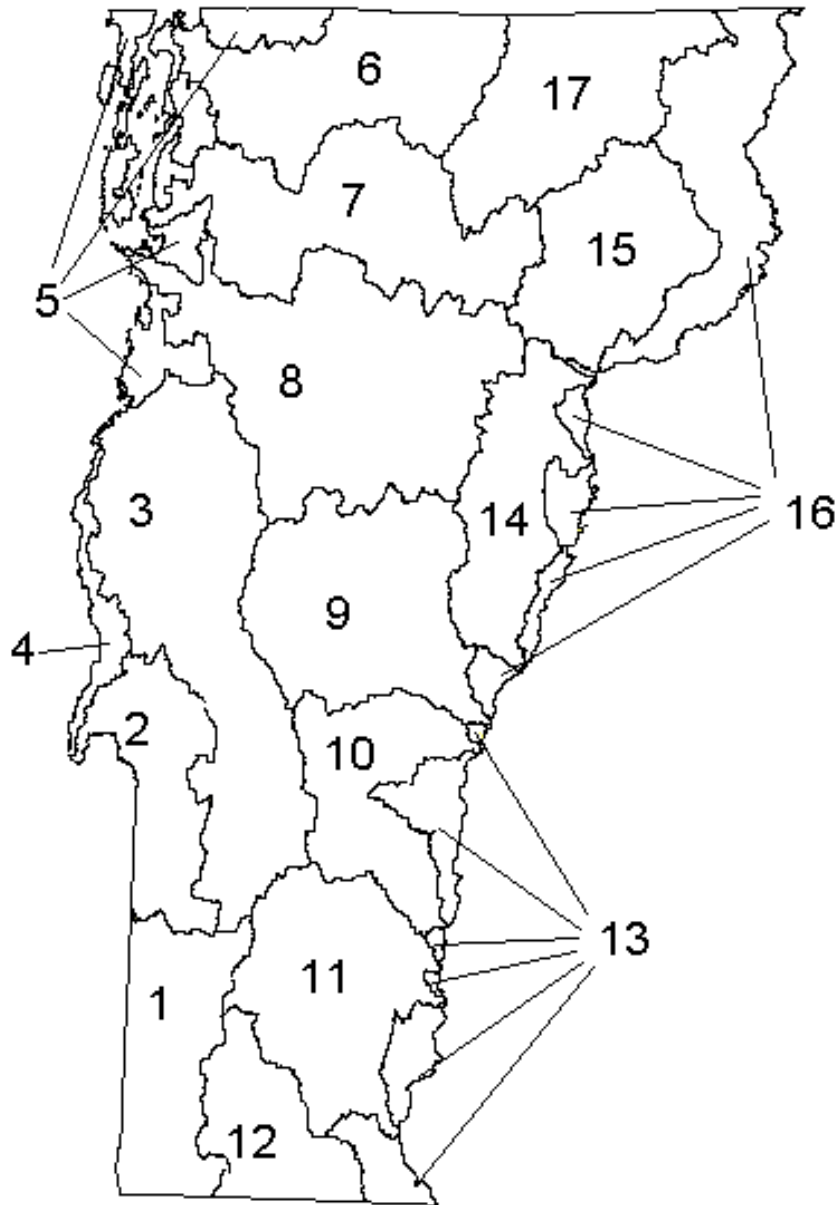
ADB Code(s) – Assessment Database segment code used for EPA tracking purposes. If blank, Waterbody ID represents entire ADB code.

Pollutant - The pollutant for which the TMDL was completed.

Previously Identified Problem - A brief description of the water quality problem associated with the particular segment.

Status – Gives the TMDL information and the date of EPA approval.

Major Vermont River Basins



1. Battenkill
2. Poultney-Mettawee
3. Otter Creek
4. Lower Lake Champlain
5. Upper Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee
11. West
12. Deerfield
13. Lower Connecticut
14. Wells, Waits, Ompompanoosic
15. Passumpsic
16. Upper Connecticut
17. Lake Memphremagog

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|----------------------------|------------------|--|--------------------------------------|
| VT01-05L01 | | BOURN POND (Sunderland) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT01-05L10 | | LITTLE MUD (Winhall) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |
| VT01-05L11 | | LYE BROOK - N (Sunderland) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT01-05L12 | | LYE BROOK - S (Sunderland) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT01-06L01 | | BRANCH POND (Sunderland) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT01-06L02 | | BEEBE POND (Sunderland) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|--|
| VT02-01 | 01, 02 | POULTNEY RIVER, MOUTH UPSTRM TO CARVERS FALLS (10.4 MILES) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT02-05 | 03 | FLOWER BROOK, MOUTH TO RM 0.5 | E. COLI | ELEVATED E. COLI MONITORING RESULTS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-01 | 01 | OTTER CREEK, MOUTH OF MIDDLEBURY RIVER TO PULP MILL BRIDGE (4.0 MI) | E. COLI | AGRICULTURAL RUNOFF, POSSIBLE FAILED SEPTIC SYSTEMS, MIDDLEBURY CSOs | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-01 | 02 | LOWER OTTER CREEK, MOUTH UPSTREAM TO VERGENNES DAM (APPROX 7.6 MILES) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT03-06 | 01 | MOON BROOK, MOUTH TO RM 2.9 (INCLUDING MUSSEY BROOK) | STORMWATER | STORMWATER RUNOFF; EROSION | EPA APPROVED TMDL FEBRUARY 19, 2009 |
| VT03-06 | 01 | MOON BROOK, RM 1.8 TO RM 2.9 | TEMPERATURE | ELEVATED INSTREAM TEMPERATURES; IMPOUNDMENTS AND LACK OF SHADING | Thermal TMDL completed by VTDEC and approved by EPA Region 1, May 2018 |
| VT03-06 | 02 | MUSSEY BROOK, UPSTREAM FROM MOUTH TO RM1.2 | STORMWATER | STORMWATER RUNOFF; EROSION | EPA APPROVED TMDL (as part of Moon Bk. TMDL) FEBRUARY 19, 2009 |
| VT03-06 | 02 | MUSSEY BROOK, RM 0.1 TO RM 0.5 | TEMPERATURE | ELEVATED INSTREAM TEMPERATURES. TROUT AVOIDANCE OF STREAM REACHES | Thermal TMDL completed by VTDEC and approved by EPA Region 1, May 2018 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|--|------------------|--|---|
| VT03-07 | 01 | LITTLE OTTER CREEK, MOUTH UPSTRM TO FALLS/LEDGE WEST RT 7 (CIRCA 1 MI) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE; FISH PRESENT ONLY SEASONALLY; EXTREMELY LOW #s | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT03-07 | 01, 03 | LITTLE OTTER CREEK, MOUTH TO RM 7.8 | E. COLI | ELEVATED E. COLI MONITORING RESULTS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-07 | 02 | LITTLE OTTER CREEK, RM 15.4 TO RM 16.4 | E. COLI | AGRICULTURAL RUNOFF | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-08 | 01 | LEWIS CREEK, PARSONAGE BRIDGE RD (LCR19.5) TO COVERED BRDG (LCR7.3) | E. COLI | AGRICULTURAL RUNOFF | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-08 | 02 | POND BROOK, FROM LEWIS CREEK CONFLUENCE UPSTREAM (1.5 MILES) | E. COLI | AGRICULTURAL RUNOFF | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-09 | 01 | LOWER DEAD CREEK, FROM MOUTH UPSTREAM (APPROX 3 MILES) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT03-11L01 | | NORTH POND (Bristol) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT03-11L02 | | GILMORE POND (Bristol) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT03-12 | 01 | MIDDLEBURY RIVER, FROM MOUTH UPSTREAM 2 MILES | E. COLI | AGRICULTURAL RUNOFF, LIVESTOCK, POSSIBLE FAILED SEPTIC SYSTEMS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT03-14L03 | | CHITTENDEN RESERVOIR (Chittenden) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT03-18L02 | | GRIFFITH LAKE (Peru) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT03-18L03 | | BIG MUD POND (Mt. Tabor) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT03-18L06 | | LONG HOLE (Mt. Tabor) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT03-18L07 | | LITTLE MUD (Mt. Tabor) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT04-01L01 | 01, 02, 03, 04 | OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT04-01L01 | 01, 02, 03, 04 | OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT04-01L02 | 01, 02, 03 | PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT04-01L02 | 01, 02, 03 | PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT04-02L01 | 01, 02 | SOUTHERN SECTION (A) - LAKE CHAMPLAIN (Bridport) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT04-02L01 | 01, 02 | SOUTHERN SECTION - LAKE CHAMPLAIN (Bridport) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT04-04L05 | 01, 02 | SOUTHERN SECTION (B) - LAKE CHAMPLAIN (Bridport) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|--|------------------|---------------------------------------|---|
| VT05-01L01 | 01, 02 | MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-01L01 | 01, 02 | MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-02L01 | 01, 02, 03, 04 | LAKE CARMi (Franklin) | PHOSPHORUS | ALGAE BLOOMS | EPA APPROVED TMDL APRIL 13, 2009 |
| VT05-04L01 | 01, 02, 03 | NORTHEAST ARM - LAKE CHAMPLAIN (Swanton) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-04L01 | 01, 02, 03 | NORTHEAST ARM - LAKE CHAMPLAIN (Swanton) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-04L02 | 01, 02 | ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-04L02 | 01,02 | ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-07 | 02 | RUGG BROOK, RM 3.1 TO RM 5.3 | STORMWATER | STORMWATER RUNOFF | EPA APPROVED TMDL FEBRUARY 19, 2009 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|--|------------------|--|---|
| VT05-07 | 07 | STEVENS BROOK, RM 6.5 (PEARL ST) TO RM 9.3 | STORMWATER | STORMWATER RUNOFF, EROSION/SEDIMENTATION, MORPHOLOGICAL INSTABILITY | EPA APPROVED TMDL FEBRUARY 19, 2009 |
| VT05-07L01 | 01, 02 | ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-07L01 | 01, 02 | ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-09 | 01 | INDIAN BROOK, RM 5.8 (SUZIE WILSON RD) TO RM 9.8 | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION | EPA APPROVED TMDL AUGUST 21, 2008 |
| VT05-09 | 02 | DIRECT SMALLER DRAINAGES TO INNER MALLETT'S BAY | E. COLI | URBAN RUNOFF, POTENTIAL FAILED/FAILING SEPTIC SYSTEMS; INCLUDES SMITH HOLLOW BROOK & CROOKED CREEK | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT05-09L01 | 01, 02, 03 | MALLETT'S BAY - LAKE CHAMPLAIN (Colchester) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-09L01 | 01, 02, 03 | MALLETT'S BAY - LAKE CHAMPLAIN (Colchester) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-10 | 01 | ENGLESBY BROOK | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT05-10 | 01 | ENGLESBY BROOK, MOUTH TO RM 1.3 | STORMWATER | STORMWATER RUNOFF, BLANCHARD BEACH CLOSURE | EPA APPROVED TMDL SEPTEMBER 30, 2007 |
| VT05-10L01 | 01, 02, 03 | BURLINGTON BAY - LAKE CHAMPLAIN (Burlington) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-10L01 | 01, 02, 03, 04 | BURLINGTON BAY - LAKE CHAMPLAIN (Burlington) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-10L02 | 01, 02 | MAIN SECTION - LAKE CHAMPLAIN (South Hero) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-10L02 | 01, 02 | MAIN SECTION - LAKE CHAMPLAIN (South Hero) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-11 | 01 | MUNROE BROOK, MOUTH TO RM 2.8 (INCLUDING NORTH TRIB.) | STORMWATER | STORMWATER RUNOFF, EROSION, LAND DEVELOPMENT | EPA APPROVED TMDL AUGUST 21, 2008 |
| VT05-11 | 02 | BARTLETT BROOK, MOUTH TO RM 0.7 | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION | EPA APPROVED TMDL SEPTEMBER 30, 2007 |
| VT05-11 | 03 | POTASH BROOK | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|--|------------------|--|---|
| VT05-11 | 03, 07 | POTASH BROOK, MOUTH TO RM 5.2 | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION | EPA APPROVED TMDL DECEMBER 19, 2006 |
| VT05-11 | 04 | LAPLATTE RIVER, AT MOUTH | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT05-11 | 04, 08 | LAPLATTE RIVER FROM HINESBURG TO MOUTH (10.5 MILES) | E. COLI | AGRICULTURAL RUNOFF | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT05-11 | 05 | MUD HOLLOW BROOK, FROM MOUTH TO 3 MILES UPSTREAM | E. COLI | AGRICULTURAL RUNOFF, STREAMBANK EROSION | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT05-11L01 | 01, 02, 03 | SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne) | PHOSPHORUS | P ENRICHMENT | EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL JUNE 2016 |
| VT05-11L01 | 01, 02, 03 | SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT06-01 | 01 | MISSISQUOI RIVER, MOUTH UPSTRM TO SWANTON DAM (APPROX 8 MILES) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT06-04 | 01 | BERRY BROOK, MOUTH UP TO AND INCLUDING N. TRIB (APPROX. 1 MILE) | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT06-04 | 02 | GODIN BROOK | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT06-04 | 03 | SAMSONVILLE BROOK | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT06-06L01 | | KINGS HILL POND (Bakersfield) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT07-01 | 01, 02 | LAMOILLE RIVER, MOUTH TO CLARKS FALLS DAM (8.5 MILES) | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT07-03L03 | 01, 02 | ARROWHEAD MOUNTAIN LAKE (Milton) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT07-13L02 | | LAKE-OF-THE-CLOUDS (Cambridge) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|---|---|
| VT08-01 | 01 | WINOOSKI RIVER, MOUTH TO WINOOSKI DAM | MERCURY | ELEVATED LEVELS OF Hg IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT08-02 | 01 | ALLEN BROOK | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT08-02 | 01 | ALLEN BROOK, RM 2.4 TO RM 5.0 (Talcott Rd) | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION | EPA APPROVED TMDL AUGUST 21, 2008 |
| VT08-02 | 04 | SUNDERLAND BROOK, RM 3.5 (RT. 7) TO RM 5.3 | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION | EPA APPROVED TMDL AUGUST 21, 2008 |
| VT08-02 | 05 | CENTENNIAL BROOK, MOUTH TO RM 1.2 | STORMWATER | STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION | EPA APPROVED TMDL SEPTEMBER 30, 2007 |
| VT08-02 | 06 | MOREHOUSE BROOK, MOUTH TO RM 0.6 | STORMWATER | STORMWATER RUNOFF, EROSION | EPA APPROVED TMDL SEPTEMBER 30, 2007 |
| VT08-09 | | WINOOSKI RIVER - CABOT VILLAGE | E. COLI | RESIDENTIAL DIRECT DISCHARGES &/OR FAILED SEPTIC SYSTEMS | EPA APPROVED TMDL MARCH 8, 2001 |
| VT08-10 | 01 | HUNTINGTON RIVER, VICINITY OF BRIDGE STREET IN HUNTINGTON | E. COLI | ELEVATED E. COLI LEVELS DETECTED AT SEVERAL SAMPLING STATIONS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|--|------------------|--|--------------------------------------|
| VT08-18 | 01 | MAD RIVER, MOUTH TO MORETOWN (6.2 MILES) | E. COLI | POSSIBLE FAILING SEPTIC SYSTEMS AND OTHER UNKNOWN SOURCES; ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT09-07L01 | | SKYLIGHT POND (Ripton) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |
| VT11-08L01 | | SUNSET LAKE (Marlboro) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT11-15 | 02 | STYLES BROOK (2 MILES) | SEDIMENT | LAND DEVELOPMENT, HYDROLOGIC MODIFICATION | EPA APPROVED TMDL JUNE21, 2002 |
| VT11-15L01 | | FORESTER POND (Jamaica) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT11-15L02 | | LITTLE POND (Winhall) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT11-16L01 | | STRATTON POND (Stratton) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT11-17 | 01 | WEST RIVER, APPROX 1 MILE BELOW TO 0.5 MILE ABOVE SOUTH LONDONDERRY | E. COLI | POSSIBLE SEPTIC SYSTEM DISCHARGES | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT11-18L06 | | MOSES (Weston) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-01L01 | | HARRIMAN RESERVOIR (Whitingham) | MERCURY | ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-01L04 | | SHERMAN RESERVOIR (Whitingham) | MERCURY | ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-02L02 | | HOWE POND (Readsboro) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-02L03 | | STAMFORD POND (Stamford) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT12-03 | 01 | EAST BRANCH DEERFIELD RIVER, BELOW SOMERSET DAM | MERCURY | ELEVATED LEVELS OF Hg IN ALL FISH | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-03L01 | | GROUT POND (Stratton) | MERCURY | ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-03L01 | | GROUT POND (Stratton) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-03L02 | | SOMERSET RESERVOIR (Somerset) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-03L02 | | SOMERSET RESERVOIR (Somerset) | MERCURY | ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-04 | 01 | UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM | MERCURY | ELEVATED LEVELS OF Hg IN ALL FISH | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-04L01 | | ADAMS RESERVOIR (Woodford) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT12-04L02 | | LOST POND (Glastenbury) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |
| VT12-04L04 | | LITTLE POND (Woodford) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-04L05 | | SEARSBURG RESERVOIR (Searsburg) | MERCURY | ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT12-05 | 02 | NO. BRANCH, DEERFIELD RIVER, VICINITY OF WEST DOVER | E. COLI | HIGH E.COLI LEVELS; CAUSE(S) & SOURCE(S) UNKNOWN; NEEDS ASSESSMENT | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT12-05L01 | | HAYSTACK POND (Wilmington) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT12-07L01 | | SOUTH POND (Marlboro) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT13-14 | 01 | WHETSTONE BROOK - BRATTLEBORO | E. COLI | SOURCES UNKNOWN, POTENTIALLY FAULTY SEWER LINE/SEPTIC SYSTEM | EPA APPROVED TMDL SEPTEMBER 30, 2011 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|---|------------------|--|---|
| VT13-16L01 | | LILY POND (Vernon) | ACID | ATMOSPHERIC DEPOSITION; EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | TMDL APPROVED BY USEPA REGION 1 ON SEPTEMBER 27, 2012 |
| VT14-03 | 01 | OMPOMPANOOSUC RIVER, USACOE BEACH AREA TO BRIMSTONE CORNER (9.8 MI) | E. COLI | ELEVATED E. COLI LEVELS | EPA APPROVED TMDL SEPTEMBER 30, 2011 |
| VT14-07L01 | | LEVI POND (Groton) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 20, 2004 |
| VT14-07L02 | | TICKLENAKED POND (Ryegate) | PHOSPHORUS | ALGAE BLOOMS, HIGH pH, LOW D.O.; MANURE RUNOFF | EPA APPROVED TMDL NOVEMBER 30, 2009 |
| VT16-04L01 | | MOORE RESERVOIR (Waterford) | MERCURY | ELEVATED LEVELS OF MERCURY IN ALL FISH | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT16-05L01 | | COMERFORD RESERVOIR (Barnet) | MERCURY | ELEVATED LEVELS OF MERCURY IN ALL FISH | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |
| VT16-11L01 | | UNKNOWN POND (Averys Gore) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |

Part D. Waters in this section are assessed as impaired and have completed and EPA-approved TMDLs.

| Waterbody ID | ADB Code(s) | Name | Pollutant | Previously Identified Problem | Status |
|---------------------|--------------------|-----------------------------|------------------|--|---|
| VT17-01L01 | 01, 02 | LAKE MEMPHREMAGOG (Newport) | PHOSPHORUS | EXCESSIVE ALGAE GROWTH, NUTRIENT ENRICHMENT | Total phosphorus TMDL was completed by VTDEC and approved by EPA Region 1, September 2017 |
| VT17-02L06 | | DUCK POND (Holland) | ACID | ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT17-03L03 | | HALFWAY POND (Norton) | ACID | ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION | EPA APPROVED TMDL SEPTEMBER 30, 2003 |
| VT17-04L04 | 01, 02, 03 | LAKE SALEM (Derby) | MERCURY | ELEVATED LEVELS OF MERCURY IN WALLEYE | EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007 |

STATE OF VERMONT

2018

LIST OF PRIORITY SURFACE WATERS

PART E. SURFACE WATERS ALTERED BY AQUATIC INVASIVE SPECIES

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main 2
Montpelier, VT 05620-3522

www.watershedmanagement.vt.gov

Overview

Waters appearing in **Part E** are assessed as “altered.” They represent situations to be given priority for management where aquatic habitat and/or other designated uses are not supported due to the presence of invasive aquatic species. These waters correspond to Category 4c of EPA’s Consolidated Assessment Listing Methodology.

Explanation of Column Headings

Waterbody ID - An alphanumeric code used to spatially locate designated surface waterbodies. For example, VT01-02 and VT01-03L05 represent a river and a lake waterbody, respectively, which are located in Vermont river basin #01. There are 17 river basins for planning purposes identified in Vermont. A statewide map has been included that names these 17 river basins and identifies their approximate boundaries.

Segment Name/Description - The name of the river/stream segment or lake/pond.

Use(s) Impacted - An indication of which designated or existing uses are impacted by invasive aquatic species. The following conventions are used to represent a specific use:

AES - aesthetics

ALS or AH - aquatic life (biota and/or habitat) support

AWS - agricultural water supply

2CR - secondary contact recreation (fishing, boating)

FC - fish consumption

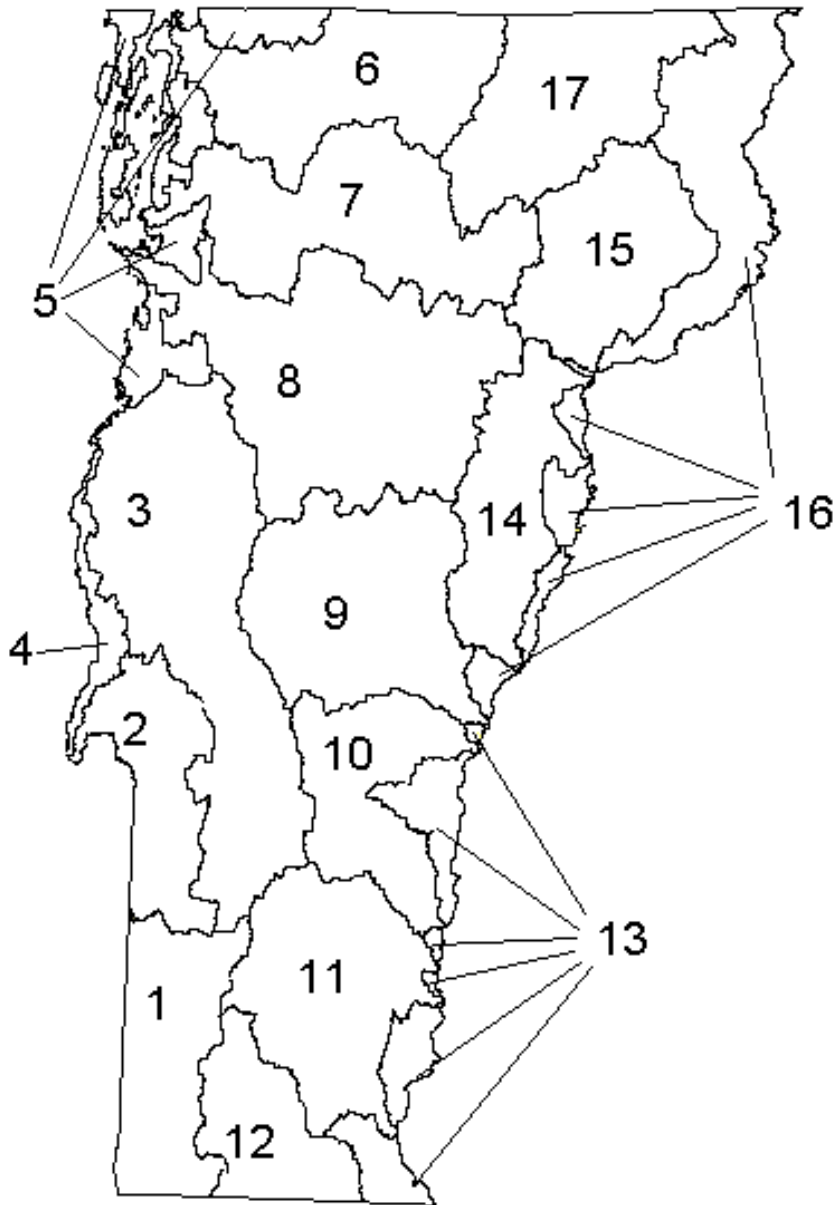
DWS - drinking water supply

CR - contact recreation (i.e. swimming)

Surface Water Quality Problem - A brief description of the type of invasive aquatic species affecting the segment.

Current Status/Management or Control Activity - An indication of the current status of the problem and/or any recent or on-going management or control efforts.

Major Vermont River Basins



1. Battenkill
2. Poultney-Mettawee
3. Otter Creek
4. Lower Lake Champlain
5. Upper Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee
11. West
12. Deerfield
13. Lower Connecticut
14. Wells, Waits, Ompompanoosic
15. Passumpsic
16. Upper Connecticut
17. Lake Memphremagog

Part E. Waters appearing below are altered by aquatic invasive species. These are priority waters for management action.

| Waterbody ID | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status/Management or Control Activity |
|---------------------|----------------------------------|------------------------|--|--|
| VT01-03L05 | PARAN, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-01 | LOWER POULTNEY RIVER | AES, ALS, CR, 2CR | LOCALLY ABUNDANT WC GROWTH. | |
| VT02-02L04 | BURR POND (SUDBURY) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-02L05 | HORTONIA, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-02L06 | BLACK POND (HUBBARDTON) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-03L01 | ECHO LAKE (HUBBARDTON) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-03L02 | BEEBE POND (HUBBARDTON) | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | |
| VT02-03L05 | BOMOSEEN, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH, ZM AND AC ALSO PRESENT. | |
| VT02-05L01 | LILY POND (POULTNEY) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-05L02 | LITTLE POND (WELLS) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT02-05L03 | ST. CATHERINE, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT03-04L04 | FERN LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT03-04L05 | DUNMORE, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | |
| VT03-06L01 | BEAVER POND (Proctor) | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT03-07L01 | VERGENNES WATERSHED (Bristol) | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT03-08L02 | CEDAR LAKE | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT03-10L01 | RICHVILLE POND | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT03-17L01 | STAR LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |

Part E. Waters appearing below are altered by aquatic invasive species. These are priority waters for management action.

| Waterbody ID | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status/Management or Control Activity |
|---------------------|----------------------------------|------------------------|--------------------------------------|--|
| VT04-01L01 | CHAMPLAIN, LAKE - OTTER CREEK | AES, ALS, CR, 2CR | EWM, ZM, AND WC INFESTATION. | ACTIVE HAND-PULLING EFFORTS FOR WATER CHESTNUT. ZM ARE UBIQUITOUS. |
| VT04-01L02 | CHAMPLAIN, LAKE - PORT HENRY | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |
| VT04-02 | WHITNEY CREEK | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM AND WC GROWTH. | ACTIVE HAND-PULLING EFFORTS FOR WATER CHESTNUT. |
| VT04-02L01 | CHAMPLAIN, LAKE - SOUTH LAKE | AES, ALS, CR, 2CR | EWM, ZM, AND WC INFESTATION. | ACTIVE MECHANICAL HARVESTING AND HAND-PULLING EFFORTS FOR WATER CHESTNUT. ZM ARE UBIQUITOUS. |
| VT04-03 | EAST CREEK, ORWELL | AES, ALS, CR, 2CR | LOCALLY ABUNDANT WC GROWTH. | ACTIVE HAND-PULLING EFFORTS FOR WATER CHESTNUT. |
| VT05-01L01 | CHAMPLAIN, LAKE - MISSISQUOI BAY | AES, ALS, CR, 2CR | EWM, VLM, ZM, AND WC INFESTATION. | ACTIVE HAND-PULLING EFFORTS FOR WATER CHESTNUT. ZM ARE UBIQUITOUS. |
| VT05-02L01 | CARMI, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES MECHANICAL HARVESTING EFFORTS. |
| VT05-04L01 | CHAMPLAIN, LAKE - NORTHEAST ARM | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |
| VT05-04L02 | CHAMPLAIN, LAKE - ISLE LAMOTTE | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | SOME MECHANICAL HARVESTING OF ALL NUISANCE VEGETATION. ZM ARE UBIQUITOUS. |
| VT05-07L01 | CHAMPLAIN, LAKE - ST. ALBANS BAY | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | SOME MECHANICAL HARVESTING OF ALL NUISANCE VEGETATION. ZM ARE UBIQUITOUS. |
| VT05-09L01 | CHAMPLAIN, LAKE - MALLETS BAY | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |
| VT05-09L02 | INDIAN BROOK RESERVOIR (ESSEX) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | HERBICIDES PREVIOUSLY USED TO CONTROL EWM. |
| VT05-10L01 | CHAMPLAIN, LAKE - BURLINGTON BAY | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |

Part E. Waters appearing below are altered by aquatic invasive species. These are priority waters for management action.

| Waterbody ID | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status/Management or Control Activity |
|---------------------|--|------------------------|--------------------------------------|---|
| VT05-10L02 | CHAMPLAIN, LAKE - MAIN LAKE | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |
| VT05-11L01 | CHAMPLAIN, LAKE - SHELBURNE BAY | AES, ALS, CR, 2CR | EWM AND ZM INFESTATION. | NO ACTIVE MANAGEMENT. ZM ARE UBIQUITOUS. |
| VT05-11L02 | IROQUOIS, LAKE | AES, ALS, CR, 2CR | ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES HERBICIDES, DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT06-05L01 | METCALF POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT06-05L02 | FAIRFIELD SWAMP POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT06-05L03 | FAIRFIELD POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT07-03L03 | ARROWHEAD MOUNTAIN LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | LOCALLY ABUNDANT GROWTH. NO ACTIVE MANAGEMENT. |
| VT07-08L02 | ELMORE, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT08-02L01 | SHELBURNE POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT10-01L01 | DEWEYS MILL POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES BENTHIC BARRIERS AND HAND-PULLING. |
| VT10-02L03 | PINNEO, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | MANAGEMENT PLAN PROPOSED THAT INCLUDES HERBICIDES. |
| VT12-01L02 | SADAWGA POND | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT13-02 | CONNECTICUT RIVER (HOYT'S LANDING, WILDER DAM, TRANSCANADA LAUNCH) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |
| VT13-08L01 | MILL POND (WINDSOR) | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | NO ACTIVE MANAGEMENT. |

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| Waterbody ID | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status/Management or Control Activity |
|---------------------|----------------------------------|------------------------|--------------------------------------|---|
| VT14-03L01 | FAIRLEE, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES HERBICIDES, DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT16-20L01 | MOREY, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES HERBICIDES, DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT17-04L05 | DERBY LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT17-07L01 | WILLOUGHBY, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |
| VT17-10L01 | ELIGO, LAKE | AES, ALS, CR, 2CR | LOCALLY ABUNDANT EWM GROWTH. | ONGOING MANAGEMENT PLAN THAT INCLUDES DOSH, BENTHIC BARRIERS, AND HAND-PULLING. |

STATE OF VERMONT

2018

LIST OF PRIORITY SURFACE WATERS

PART F. SURFACE WATERS ALTERED BY FLOW REGULATION

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main 2
Montpelier, VT 05620-3522

www.watershedmanagement.vt.gov

Overview

Waters appearing in **Part F** of the Vermont Priority Waters List are assessed as “altered.” They represent priority management situations where aquatic habitat and/or other designated uses have been altered by flow regulation. Alterations arise from flow fluctuation, obstructions, or other manipulations of water levels that originate from hydroelectric facilities, dam operations or water withdrawals for industrial or municipal water supply or snowmaking purposes. These waters correspond to Category 4c of EPA’s Consolidated Assessment Listing Methodology.

Explanation of Column Headings

Waterbody ID - An alphanumeric code used to spatially locate designated surface waterbodies. For example, VT01-02 and VT01-03L05 represent a river and a lake waterbody, respectively, which are located in Vermont river basin #01. There are 17 river basins for planning purposes identified in Vermont. A statewide map that names these 17 river basins and identifies their approximate boundaries has been referenced earlier.

Segment Name/Description - The name of the river/stream segment or lake/pond.

Use(s) Impacted - An indication of which designated or existing uses are impacted by flow alteration. The following conventions are used to represent a specific use:

AES - aesthetics

ALS or AH - aquatic life (biota and/or habitat) support

AWS - agricultural water supply

2CR - secondary contact recreation (fishing, boating)

FC - fish consumption

DWS - drinking water supply

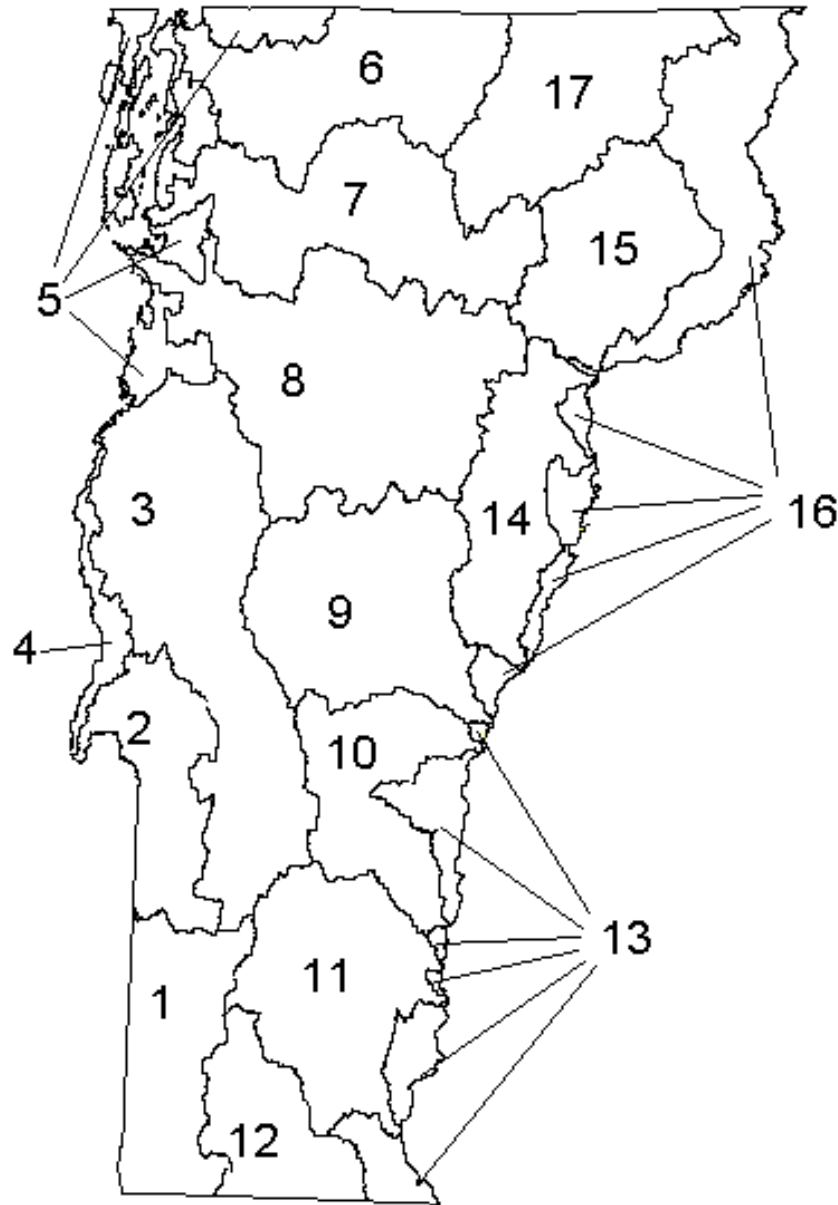
CR - contact recreation (i.e. swimming)

Surface Water Quality Problem - A brief description of the type of flow regulation problem affecting the segment. Situations with a threat to water quality are so noted.

Current Status/Management or Control Activity - An indication of current situation and/or recent or on-going management or control efforts.

Projected WQS Compliance Year - For those entries altered by flow regulation and that are associated with hydropower production, the year of facility compliance with the Vermont Water Quality Standards is provided as a projection (estimate). .

Major Vermont River Basins



1. Battenkill
2. Poultney-Mettawee
3. Otter Creek
4. Lower Lake Champlain
5. Upper Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee
11. West
12. Deerfield
13. Lower Connecticut
14. Wells, Waits, Ompompanoosic
15. Passumpsic
16. Upper Connecticut
17. Lake Memphremagog

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|--|------------------------|---|---|--------------------------------------|
| VT01-03 | 02 | BASIN BROOK | ALS | POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT | WSID #5017 - NORTH BENNINGTON WATER DEPT; SERVES AS BACK UP SUPPLY SOURCE TO GRAVEL WELL FIELD. PERMIT DOWN TO 3.0 MGD FROM 4.0 MGD | |
| | 03 | BOLLES BROOK/ROARING BRANCH, INTAKE TO CITY STREAM CONFLUENCE | ALS | POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT | WSID #5016 - BENNINGTON WATER DEPT; ASSESSMENT OF WATER WITHDRAWAL IMPACT DIFFICULT GIVEN LOW PRODUCTIVITY & LOW pH | |
| VT01-05 | | HOPPER BROOK | ALS | ARTIFICIAL FLOW REGIME AND CONDITION BY HYDRO OPERATIONS MAY ALTER AQUATIC HABITAT | UNLICENSED HYDROELECTRIC PROJECT | 2022 |
| VT01-05L02 | | LAKE MADELEINE | ALS | WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT | UNLICENSED HYDRO FACILITY | 2022 |
| VT02-03 | 02 | LAKE BOMOSEEN OUTLET STREAM (0.4 MI) | ALS | FLOW FLUCTUATION AND NO MINIMUM FLOW BELOW THE LAKE BOMOSEEN DAM USED TO MANAGE WATER LEVEL | WATER LEVELS REQUIRED BY WATER RESOURCES BOARD ISSUED MAY 1983 | |
| VT03-04 | 01 | LEICESTER RIVER, FROM DAM ON LAKE DUNMORE TO 1.0 MILE DOWNSTREAM | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO | UNLICENSED FACILITY | 2019 |
| | 01 | LEICESTER RIVER, FROM SALISBURY DAM TO 5 MILES DOWNSTREAM | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO | UNLICENSED FACILITY | 2019 |
| | 01 | | ALS | POSSIBLE DOWNSTREAM FISH PASSAGE PROBLEM AT DAM (THREAT) | UNLICENSED FACILITY | 2019 |
| VT03-04L05 | | LAKE DUNMORE (Salisbury) | ALS | WATER LEVEL MGMT BY HYDRO ALTERS AQUATIC BIOTA | LAKE ASSOC. HAS WATER LEVEL AGREEMENT W/GMP | 2019 |
| VT03-12 | 03 | SOUTH BRANCH, MIDDLEBURY RIVER (1.4 MILES) | ALS | ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW SNOW BOWL SNOWMAKING WATER WITHDRAWAL | PARTIAL SUPPORT 1.4 MI (6.0 MI TOTAL LENGTH) | |
| VT03-14 | 02 | EAST CREEK, CHITTENDEN RESERVOIR TO 4 MILES DOWNSTREAM | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY DAM; ONLY LOCAL DRAINAGE BELOW | UNLICENSED FACILITY | 2020 |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|--|------------------------|---|--|--------------------------------------|
| VT03-14 | 02 | EAST CREEK, FROM GLEN DAM TO 3.0 MILES DOWNSTREAM | ALS | POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT) | UNLICENSED FACILITY | 2020 |
| | 02 | | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO | UNLICENSED FACILITY | 2020 |
| | 02 | EAST CREEK, FROM PATCH DAM TO 2.4 MILES DOWNSTREAM | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO | UNLICENSED FACILITY | 2020 |
| | 02 | | ALS | POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT) | UNLICENSED FACILITY | 2020 |
| | 03 | MENDON BROOK (3.3 MILES) | ALS | ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW PICO SNOWMAKING WATER WITHDRAWAL | PARTIAL SUPPORT 3.3 MI (6.9 MI TOTAL LENGTH) | 2021 |
| | | TRIB TO EAST CREEK, HYDRO FACILITY TO EAST CK CONFLUENCE | ALS | LOW DO DOWNSTREAM OF HYDRO FACILITY | UNLICENSED FACILITY | 2020 |
| VT03-14L03 | | CHITTENDEN RESERVOIR (Chittenden) | ALS | WATER LEVEL FLUCTUATION BY HYDRO ALTERS AQUATIC BIOTA & WETLANDS | UNLICENSED FACILITY | 2020 |
| VT03-14L05 | | PATCH POND (Rutland) | ALS | WATER LEVEL FLUCTUATIONS MAY ALTER AQUATIC BIOTA | UNLICENSED FACILITY | 2020 |
| VT06-01 | 03 | MISSISQUOI RIVER, BELOW HIGATE FALLS TO LOWER SWANTON DAM (7.3 MI) | ALS | ARTIFICIAL FLOW FLUCTUATING AND CONDITION BY HYDROPOWER PRODUCTION | FERC LICENSE EXPIRES IN 2024 | |
| | 02, 03 | MISSISQUOI RIVER, SHELDON SPRINGS PROJECT TO LOWR SWANTON DAM (15.5MI) | ALS, 2CR | ARTIFICIAL FLOW FLUCTUATING AND CONDITION BY HYDROPOWER PRODUCTION | FERC LICENSE EXPIRES 2024 | |
| VT06-02 | 01 | MISSISQUOI RIVER, BELOW ENOSBURG FALLS DAM (0.1 MILE) | ALS | ARTIFICIAL FLOW REGULTATION & CONDITION BY HYDRO | FERC LICENSE EXPIRES IN 2023 | 2023 |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|---|------------------------|---|---|--------------------------------------|
| VT06-04 | | STANHOPE BROOK | ALS | POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT | RICHFORD WATER SUPPLY | |
| VT06-08 | 08 | JAY BRANCH (4.7 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW JAY PEAK SNOWMAKING WATER WITHDRAWAL | PARTIAL SUPPORT 4.7 MI (8.7 MI TOTAL LENGTH); JAY PEAK EVALUATING EXPANSION/ALTERNATIVES | |
| VT07-04 | 01 | MID-LAMOILLE RIVER, IMMEDIATELY BELOW CADYS FALLS DAM (0.3 MILES) | AES | ARTIFICIAL DEWATERING OF FALLS BY HYDRO | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| | 01 | | ALS | POSSIBLE FISH PASSAGE PROBLEM AT DAM; LACK OF FLOWS TO SUPPORT AQUATIC HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| VT07-07 | | LAMOILLE RIVER - HARDWICK LAKE TO LAKE LAMOILLE IN MO'VILLE (15.7 MI) | AES, ALS | WOLCOTT DAM: IMPOUNDMENT WATER LEVEL FLUCTUATION BY HYDRO IMPAIRS AQUATIC HABITAT; EROSION (THREAT) | UNLICENSED FACILITY | 2024 |
| | | | ALS | WOLCOTT DAM: POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT) | UNLICENSED FACILITY | 2024 |
| | | | ALS | POSSIBLE FISH PASSAGE PROBLEM AT DAMS (THREAT) | | 2024 |
| | | | AES, ALS, 2CR | HARDWICK LAKE DAM: ARTIFICIAL FLOW REGIME DOWNRIVER | | 2024 |
| | | | AES, ALS, 2CR | BELOW MORRISVILLE DAM: NO FLOW IN BYPASS IMPAIRS AESTHETICS, RECREATION, HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| | | | AES, ALS, 2CR | WOLCOTT DAM: ARTIFICIAL & POOR FLOW REGIME DOWNSTREAM (THREAT) | UNLICENSED FACILITY | 2024 |
| VT07-07L01 | | LAKE LAMOILLE (Morristown) | ALS | WATER LEVEL FLUCT'N BY HYDRO MAY ALTER AQUATIC HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| VT07-08 | 02 | ELMORE POND BROOK-FROM DAM TO 2.2 MILES DOWNSTREAM | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BY DAM | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|---|------------------------|---|--|--------------------------------------|
| VT07-08L02 | | LAKE ELMORE (Elmore) | ALS | WATER LEVEL FLUCT'N BY HYDRO MAY ALTER AQUATIC HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| VT07-13 | 02 | UNNAMED BROOK, TRIB TO BREWSTER RIVER (1 MILE) | ALS | ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW MORSE RESERVOIR, USED FOR DOMESTIC WATER | NON-SUPPORT 1.0 MI (2.7 MI TOTAL LENGTH); DOMESTIC WATER USE | |
| VT07-18 | 01 | GREEN RIVER, DOWNSTREAM FROM RESERVOIR 4.7 MILES | ALS | ARTIFICIAL FLOW REGIME AND CONDITION BY HYDRO OPERATIONS ALTERS AQUATIC HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| VT07-18L03 | | GREEN RIVER RESERVOIR | ALS | WATER LEVEL FLUCTUATION AND WINTER DRAWDOWN ALTERS AQUATIC HABITAT | APPLICANT APPEALED SECTION 401 WQ CERT.; ENVIRONMENTAL COURT HEARING SCHEDULED FOR EARLY 2018 | 2018 |
| VT07-21L05 | | HARDWICK LAKE (Hardwick) | AES, ALS, 2CR | WATER LEVEL FLUCT'N BY HYDRO ALTERS AQUATIC HABITAT & WETLANDS | NO LONGER MANAGED FOR HYDRO; LAKE DRAINED DURING FALL WINTER FOR ICE CONTROL | 2024 |
| VT08-04 | 01 | JOINER BROOK (2.9 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW BOLTON VALLEY SNOWMAKING WATER WITHDRAWAL | NON-SUPP 2.9 MI (5.7 MI TOTAL LENGTH) | |
| VT08-05 | 02 | WINOOSKI RIVER AT MIDDLESEX #2 DAM | AES | ARTIFICIAL DEWATERING OF BYPASS BY HYDRO | UNLICENSED FACILITY | 2022 |
| | 02 | WINOOSKI RIVER, IMPOUNDMENT OF MIDDLESEX #2 HYDRO (2 MILES) | AES, ALS | WATER LEVEL FLUCTUATION BY HYDRO CAUSES IMPOUNDMENT STREAMBANK EROSION | UNLICENSED FACILITY | 2022 |
| VT08-06 | 01 | TYLER BRK (0.1 MI) & MERRIAM BRK (0.1 MI), THATCHER BROOK TRIBS | ALL USES | ARTIFICIAL & INADEQUATE FLOW CONDITION BELOW WATERBURY VILLAGE PUBLIC WATER SUPPLY WITHDRAWAL POINT | WSID #5284 - WATERBURY VILLAGE WATER | |
| VT08-09 | 01 | MOLLYS FALLS BROOK (2 MILES) | ALL USES | ARTIFICIAL FLOW CONDITION CREATED BY HYDRO; BYPASSES ONE OF VT'S HIGHEST WATERFALLS. ELEVATED DOWNSTREAM TEMPS. | UNLICENSED FACILITY; OWNER FILING APPLICATION FOR CERTIFICATE OF PUBLIC GOOD WITH PUC IN EARLY 2018 TO REPAIR SPILLWAY AT THE MOLLYS FALLS DAM | 2018 |
| | 01 | SUCKER BROOK BELOW PEACHAM POND (1 MILE) | ALL USES | ARTIFICIAL FLOW REGULATION & CONDITION BELOW HYDRO DAM | UNLICENSED FACILITY; OWNER FILING APPLICATION FOR CERTIFICATE OF PUBLIC GOOD WITH PUC IN EARLY 2018 TO REPAIR SPILLWAY AT THE MOLLYS FALLS DAM | 2018 |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|---|------------------------|--|--|--------------------------------------|
| VT08-09L03 | | PEACHAM POND (Peacham) | ALS | WATER LEVEL FLUCT'N BY HYDRO-RELATED DAM MAY ALTER AQUATIC HABITAT | UNLICENSED FACILITY; OWNER FILING APPLICATION FOR CERTIFICATE OF PUBLIC GOOD WITH PUC IN EARLY 2018 TO REPAIR SPILLWAY AT THE MOLLYS FALLS DAM | 2018 |
| VT08-09L05 | | MOLLYS FALLS RESERVOIR (Cabot) | ALS, CR, 2CR | WATER LEVEL FLUCT'N BY HYDRO ALTERS AQUATIC HABITAT & RECREATION | UNLICENSED FACILITY; OWNER FILING APPLICATION FOR CERTIFICATE OF PUBLIC GOOD WITH PUC IN EARLY 2018 TO REPAIR SPILLWAY AT THE MOLLYS FALLS DAM | 2018 |
| VT08-11 | 01 | LOWER LITTLE RIVER BELOW HYDRO DAM (2.6 MILES) | ALL USES | ARTIFICIAL FLOW REGIME IN THE WINTER | NEW TURBINE RUNNER AND BYPASS FLOW VALVE WILL BE OPERATIONAL IN MAY 2018; WINTER DRAWDOWN WILL CONTINUE UNTIL TANNER GATES ARE REPLACED | 2022 |
| VT08-11L02 | | WATERBURY RESERVOIR (Waterbury) | ALL USES | WINTER DRAWDOWN ALTERS ALL USES | NEW TURBINE RUNNER AND BYPASS FLOW VALVE WILL BE OPERATIONAL IN MAY 2018; WINTER DRAWDOWN WILL CONTINUE UNTIL TANNER GATES ARE REPLACED | 2022 |
| VT08-16 | 03 | BENJAMIN FALLS BROOK (POND BROOK) FROM BERLIN POND TO MOUTH | ALS, AES | ARTIFICIAL DEWATERING OF BROOK BY MONTPELIER & BERLIN WATER SUPPLY WITHDRAWALS | WSID #5272 | |
| VT08-20 | 02 | MILL BROOK (2.1 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW MAD RIVER GLEN SNOWMAKING WATER WITHDRAWAL | PARTIAL SUPPORT 2.1 MI (5.9 MI TOTAL LENGTH) | |
| | 03 | SLIDE BROOK (0.8 MILE) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW MT. ELLEN SNOWMAKING WATER WITHDRAWAL | NON-SUPPORT 0.8 MI (3.4 MI TOTAL LENGTH) | |
| VT09-06 | 03 | LOWER FLINT BROOK | ALS | ARTIFICIAL FLOW REGULATION; POSSIBLE LACK OF MINIMUM FLOW BELOW FISH HATCHERY WITHDRAWAL | ACOE 404 AND SECTION 401 WQ CERT NEEDED FOR HATCHERY INTAKE. FLOW STUDY UNDERWAY. | |
| VT10-01 | 01 | LOWER OTTAUQUECHEE RIVER, BELOW NO. HARTLAND DAM (0.9 MILE) | AES, ALS, 2CR | ARTIFICIAL FLOW REGULATION & CONDITION | FLOW REGULATION LARGELY CONTROLLED BY HYDRO FACILITY. FERC LICENSE EXPIRES IN 2021 | 2021 |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|---|------------------------|--|--|--------------------------------------|
| VT10-01 | 02 | LOWER OTTAUQUECHEE RIVER, BELOW OTTAUQUECHEE WOOLEN MILL DAM (0.1 MI) | AES | ARTIFICIAL FLOW CONDITION, DEWATERING OF FALLS BY HYDRO | | 2032 |
| VT10-02L01 | | NORTH HARTLAND RESERVOIR (Hartland) | ALS, 2CR | ANNUAL WATER LEVEL FLUCTUATIONS ALTER AQUATIC HABITAT | DAM NOW USED FOR HYDROPOWER; OPERATED UNDER FERC LICENSE EXPIRING IN 2021 | 2021 |
| VT10-13 | 01 | BLACK RIVER, BELOW NORTH SPRINGFIELD RESERVOIR (3.7 MILES) | ALS | ARTIFICIAL FLOW REGULATION & CONDITION BY DAM | USACOE DAM; NO CONSERVATION FLOW BASED ON ANY BIOLOGICAL/WQ CRITERIA | |
| VT10-13L02 | | NORTH SPRINGFIELD RESERVOIR (Springfield) | ALS | WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT | USACOE DAM; NO CONSERVATION FLOW BASED ON ANY BIOLOGICAL/WQ CRITERIA | |
| VT10-16L03 | | STOUGHTON POND (Weathersfield) | ALS | WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT | USACOE DAM; NO CONSERVATION FLOW BASED ON ANY BIOLOGICAL/WQ CRITERIA | |
| VT11-07 | 02, 07 | WEST RIVER, MOUTH TO GRASSY BROOK (12 MILES) | AH, 2CR | WIDE SHALLOW CHANNEL, LOSS OF RIPARIAN VEGETATION, USACOE DAM OPERATION | | |
| VT11-08 | 01 | STICKNEY BROOK (2.5 MILES) | ALS, 2CR | ARTIFICIAL FLOW CONDITION, SEASONALLY DEVOID OF FLOW BELOW DIVERSION DAM; DREDGING | WSID # 5290 - BRATTLEBORO WATER DEPT; WATER SUPPLY RESERVOIR ABOVE DAM | |
| VT11-10 | 01 | WEST RIVER, BELOW BALL MTN DAM TO TOWNSHEND DAM IMPOUNDMENT (9 MILES) | ALL USES | ARTIFICIAL FLOW REGIME AT DAM | NO MINIMUM FLOW BY USACE BASED ON ANY BIOLOGICAL/WQ CRITERIA. STRUCTURAL STUDY COMPLETE, NO ACTION PLANNED | |
| | 02 | WEST RIVER, TOWNSHEND DAM TO GRASSY BROOK | AH, 2CR | USACE DAM OPERATION, IMPOUNDED WATERS RELEASE RESULTS IN ELEVATED TEMPS | | |
| VT11-10L01 | | BALL MOUNTAIN RESERVOIR (Jamaica) | AES, ALS | WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT | NO MINIMUM FLOW BY USACE BASED ON ANY BIOLOGICAL/WQ CRITERIA. STRUCTURAL STUDY COMPLETE, NO ACTION PLANNED | |

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| Waterbody ID | ADB Code(s) | Segment Name/ Description | Use(s) Impacted | Surface Water Quality Problem | Current Status or Control Activity | Projected WQS Compliance Year |
|---------------------|--------------------|--|------------------------|--|--|--------------------------------------|
| VT11-10L01 | | BALL MOUNTAIN RESERVOIR (Jamaica) | ALS | UP & DOWNSTREAM FISH PASSAGE AT DAM - ESP. DIADROMOUS | DOWNSTREAM PASSAGE PROVIDED THROUGH FISH PASSAGE FACILITIES; UPSTREAM PASSAGE NOT PROVIDED; ACOE NOT OPERATING TRAP AT TOWNSHEND DAM | |
| VT11-10L02 | | TOWNSHEND RESERVOIR (Townshend) | ALS | WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT | USACOE DAM; NO CONSERVATION FLOW BASED ON ANY BIOLOGICAL/WQ CRITERIA | |
| VT11-16 | 02 | MILL BROOK (1.6 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW BROMLEY SNOWMAKING WATER WITHDRAWAL | PARTIAL SUPPORT 1.6 MI (8 MI TOTAL LENGTH) | |
| | 03 | TRIB TO MILL BROOK (2.2 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW BROMLEY SNOWMAKING WATER WITHDRAWAL | NON-SUPPORT 0.7 MI, PARTIAL SUPPORT 1.5 MI (2.5 MI TOTAL LENGTH). | |
| VT11-18L01 | | HAPGOOD POND (Peru) | ALS | ANNUAL DRAWDOWNS ALTER AQUATIC HABITAT | | |
| VT12-01 | 01 | LOWER DEERFIELD RIVER BELOW HARRIMAN RESERVOIR (3.5 MILES) | ALS | LOW TEMPERATURE HYPOLIMNETIC WATER RELEASE FROM RESERVOIR | 401 CERTIFICATION ISSUED (1/95); FERC LICENSE ISSUED (4/97); DFW EVALUATING THE EFFECTS OF RELEASE | |
| VT12-05 | 07 | COLD BROOK (0.58 MILES) | ALS | ARTIFICIAL & INSUFFICIENT FLOW BELOW HERMITAGE SNOWMAKING WITHDRAWAL | COMPLIANCE SCHEDULE ESTABLISHED AS PART OF ACT 250 PROCESS TO BRING THE WITHDRAWAL INTO COMPLIANCE | |
| VT13-01 | | CT RIVER, WILDER DAM TO ASCUTNEY VILLAGE (20.5 MILES) | ALS | ARTIFICIAL FLOW CONDITION, FLUCTUATING FLOWS ASSOCIATED WITH HYDROPOWER PRODUCTION | FERC LICENSE EXPIRES IN 2018 | 2020 |
| VT13-02 | | CT RIVER, ABOVE BELLOWS FALLS DAM (21.5 MILES) | ALS | WATER LEVEL FLUCTUATION AT DAM; DEWATERED SHORELINES/WETLANDS | FERC LICENSE EXPIRES IN 2018 | 2020 |
| | | CT RIVER, ABOVE BELLOWS FALLS DAM, SPRINGFIELD | AES, ALS | RESERVOIR WATER LEVEL FLUCTUATION AT DAM; DESTABIL/ERODING STREAMBANKS | OBSERVED IMPACTS TO "SKITCHEWAUG" ARCHEOLOGICAL SITE; SITE RIP-RAPPED; FERC LICENSE EXPIRES IN 2018 | 2020 |
| VT13-03 | | CT RIVER, BELOW BELLOWS FALLS DAM (24 MILES) | ALS | ARTIFICIAL FLOW CONDITION, FLUCTUATING FLOWS BY HYDROPOWER PRODUCTION | FERC LICENSE EXPIRES IN 2018 | 2020 |
| VT13-04 | | CT RIVER, ABOVE VERNON DAM | ALS | WATER LEVEL FLUCTUATION AT DAM; DEWATERED SHORELINE/WETLANDS | FERC LICENSE EXPIRES IN 2018 | 2020 |

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|---------------------|--------------------|---|------------------------|---|---|--------------------------------------|
| VT13-05 | | CT RIVER, BELOW VERNON DAM (5.5 MILES) | ALS | ARTIFICIAL FLOW CONDITION, FLUCTUATING FLOWS BY HYDROPOWER PRODUCTION | FERC LICENSE EXPIRES IN 2018 | 2020 |
| VT13-10 | | ELLIS BROOK, FARR (?) BROOK BELOW MINARDS POND | ALS | POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT) | WSID #5298 - BELLOWS FALLS WATER DEPT | |
| VT14-04 | 01 | WAITS RIVER, BELOW BRADFORD DAM (0.3 MILE) | AES, ALS | ARTIFICIAL FLOW CONDITION, POOR FLOW REGIME IN DAM'S BYPASS SEGMENT | FERC EXEMPTION | 2022 |
| VT14-07 | 01 | WELLS RIVER, BELOW DAM AT BOLTONVILLE (0.4 MI) | AES, ALS, 2CR | ARTIFICIAL FLOW CONDITION, POOR FLOW AND PHYSICAL ALTERATIONS IN HYDROELECTRIC DAM BYPASS SEGMENT | FERC EXEMPTION | 2024 |
| VT14-09 | | SOUTH PEACHAM BK AND STEVENS RIVER (BELOW HARVEY'S LAKE 4.9 MI) | ALS | DAM MANAGEMENT ALTERS AQUATIC HABITAT | TOWN IS WORKING WITH NGO AND CONSULTANTS ON FEASIBILITY ANALYSIS OF DAM REMOVAL | |
| VT14-09L05 | | HARVEYS LAKE (Barnet) | ALS | WATER LEVEL MGMT MAY ALTER AQUATIC HABITAT | TOWN IS WORKING TOWARDS DAM REMOVAL AND PLACEMENT OF WEIR TO STABILZE WATER LEVEL | |
| VT15-01 | | PASSUMPSIC RIVER, BELOW GREAT FALLS DAM (0.1 MILES) | ALS | ARTIFICIAL FLOW REGIME AND CONDITION BY HYDRO OPERATIONS; ALTERS AQUATIC HABITAT IN BYPASS REACH | FERC LICENSE EXPIRES IN 2019; CONSERVATION FLOW FOR BYPASS REACH BEEN ESTABLISHED. WILL BE INCLUDED IN 401 WATER QUALITY CERT. | 2019 |
| VT16-07 | 01 | CONNECTICUT RIVER, ABOVE WILDER DAM TO BRADFORD (APPROX 30 MILES) | ALS | RESERVOIR WATER LEVEL FLUCTUATION AT DAM; DESTABILIZING/ERODING STREAMBANKS UPSTREAM | EXPOSURE & EROSION ARCHEOL FEATURES KNOWN AS "LONG HOUSES"; ALSO "STOCKING" SITE | 2020 |
| VT17-01L01 | | LAKE MEMPHREMAGOG | ALS | WATER LEVEL FLUCTUATION BY HYDRO MAY ALTER AQUATIC HABITAT AND DEWATER WETLANDS AND SHORELINE | DEC IS A PARTY TO REGULAR MEETINGS WHICH INCLUDES INTERNATIONAL JOINT COMMISSION, CANADIAN ENVIRONMENTAL REGULATORY AUTHORITIES AND MUNICIPALITIES TO DISCUSS WAYS TO IMPROVE THE WATER QUALITY OF THE LAKE | |

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|---------------------|--------------------|---|------------------------|--|--|--------------------------------------|
| VT17-03 | 02 | AVERILL CREEK DOWNSTREAM FROM DAM ON GREAT AVERILL LAKE (5.4 MILES) | ALS | ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| | 03 | AVERILL CREEK DOWNSTREAM FROM DAM ON LITTLE AVERILL LAKE (1 MILE) | ALS | ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| | 01 | COATICOOK RIVER BELOW NORTON POND DAM (3 MILES) | ALS | ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| VT17-03L01 | | LITTLE AVERILL POND (Averill) | ALS, 2CR | WATER LEVEL FLUCTUATION BY HYDRO ALTERS FISHERY, RECREATION & ENDANGERED SPECIES | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| VT17-03L02 | | GREAT AVERILL POND (Norton) | ALS, 2CR | WATER LEVEL FLUCTUATION BY HYDRO ALTERS AQUATIC HABITAT, RECREATION | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| VT17-03L04 | | NORTON POND (Norton) | AES, ALS, 2CR | WATER LEVEL FLUCTUATION BY HYDRO ALTERS AQUATIC HABITAT, RECREATION, AESTHETICS | UNLICENSED FACILITY; PUC HEARING TO BE HELD FALL 2018 | 2018 |
| VT17-05 | 01 | UNNAMED BROOKS, TRIBS TO CLYDE RIVER | ALS | POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT | WSID #5105; BRIGHTON | |
| VT17-08L03 | | SHADOW LAKE (Glover) | AES, ALS | WATER LEVEL FLUCTUATION (SEASONAL DRAWDOWN) MAY ALTER AQUATIC HABITAT AND AESTHETICS | | |
| VT17-10 | 01 | SEAVER BROOK | ALS | LACK OF MINIMUM FLOW BELOW WATER WITHDRAWAL FOR PRIVATE PONDS IMPAIRS 0.3 MILES; STRUCTURE PREVENTS FISH PASSAGE | DEC AND DFW IN PROCEEDING TO ESTABLISH MINIMUM FLOW AND RESTORE FISH PASSAGE | |