STATE OF VERMONT

2008

303(d) LIST OF WATERS

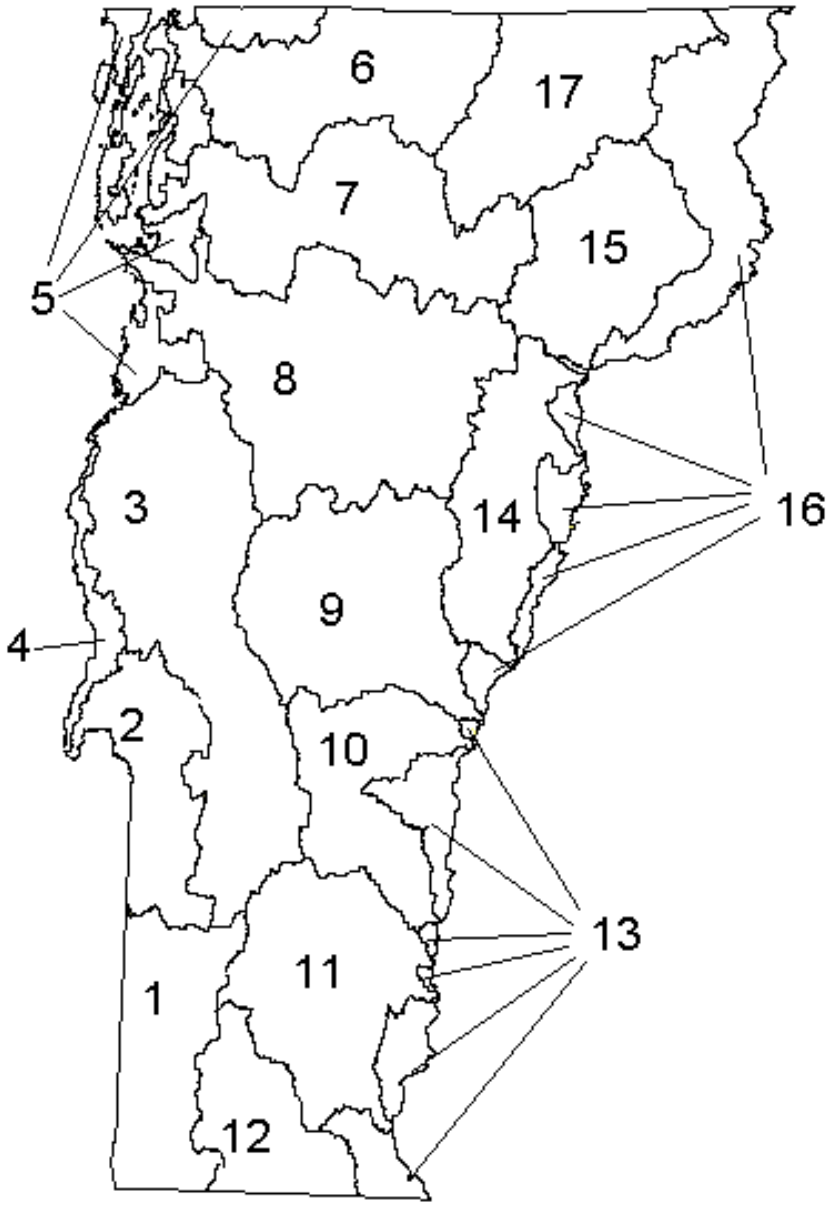
PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

October 2008

(Approved by USEPA September 24, 2008)

Prepared by:

Vermont Department of Environmental Conservation
Water Quality Division
Building 10 North
103 South Main Street
Waterbury, VT 05671-0408
(802) 241-3770
(802) 241-3287 FAX



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

LIST OF ACRONYMS AND TERMS

As	arsenic
BMP	best management practice
Cfu	colony forming unit
CRJC	CT River Joint Commissions
CSO	combined sewer overflow
Cu	copper
AAF&M	VT Agency of Agriculture, Food & Markets
DEC-AP	VT DEC, Air Pollution Division
DEC-ENF	VT DEC, Enforcement Division
DEC-FE	VT DEC, Facilities Engineering Division
DEC-HM	VT DEC, Hazardous Materials Section (of DEC-WM)
DEC-SW	VT DEC, Solid Waste Section (of DEC-WM)
DEC-WM	VT DEC, Waste Management Division
DEC-WQ	VT DEC, Water Quality Division
DEC-WS	VT DEC, Water Supply Division
DEC-WWM	VT DEC, Wastewater Management Division
DF&W	VT Department of Fish & Wildlife
DFP&R	VT Department of Forests, Parks & Recreation
D.O.	dissolved oxygen
DOH	VT Department of Health
E.COLI	Escherichia coli (an indicator bacterium)
EPT	Ephemeroptera/Plecoptera/Tricoptera
FERC	Federal Energy Regulatory Commission
Fe	iron
F/S	feasibility study
Hg	mercury
-HUA	Hydrologic Unit Area (a USDA cost share program)
LCBP	Lake Champlain Basin Program
MG/L	milligrams per liter (same as parts per million)
MOU	memorandum of understanding
MT/YR	metric tons per year
Ni	nickel
NOx	nitrogen oxide
NPL	National Priority Listing
NPS	nonpoint source
P	phosphorus
Pb	lead
PCB	poly-chlorinated biphenol
pH	hydrogen ion concentration (measurement of)
RCWP	Rural Clean Water Program
RI/FS	Remedial Investigation/Feasibility Study
RM	river mile
SCS	Soil Conservation Service (same as USDA-NRCS)
SECT 319	Section 319 [of federal Clean Water Act]
SHG	Small High Gradient
SO2	sulfur dioxide
SRF	State Revolving Fund
UG/L	micrograms per liter (same as parts per billion)
USACOE	US Army Corps of Engineers
USBOM	US Bureau of Mines
USDA	US Department of Agriculture
USDA-ACP	- Agriculture Conservation Program
USDA-HUA	- Hydrologic Unit Area
USDA-SpP	- Special Project
USDA-WQIP	- Water Quality Incentive Program
USDA-NRCS	- Natural Resource Conservation Service
USEPA	US Environmental Protection Agency
USF&WS	US Fish & Wildlife Service
UVM	University of Vermont
UVM-SNR	- School of Natural Resources
VSA	VT Statutes Annotated
VTDEC	Vermont Department of Environmental Conservation
WQ	water quality
WQS	Water Quality Standards
WWTF	wastewater treatment facility
Zn	zinc
1272	Section 1272 of 10 VSA Chapter 47
1272 Order	An order issued by the ANR Secretary to properly manage or eliminate an existing discharge to waters that may cause a violation of the Water Quality Standards.
1277	Section 1277 of 10 VSA Chapter 47
1277 Order	An order issued by the ANR Secretary to a municipality that is discharging untreated or improperly treated sewage that causes a reduction in water quality to construct a sewage collection and treatment system to correct or abate the discharge.
566	PL83-566 (a USDA cost share program)

PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

Part A of the 2008 List of Waters identifies impaired surface waters that are scheduled for total maximum daily load (TMDL) development. 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 ("Total maximum daily loads (TMDL) and individual water quality-based effluent limitations"). A TMDL is deemed necessary for these waters (unless remediation will be completed prior to the scheduled TMDL) in order to establish the maximum amount of a pollutant that may be introduced into the water after the application of required pollution controls and to 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 illustrating designated lake and river waterbodies can be obtained upon request from the Water Quality Division, Department of Environmental Conservation in Waterbury, Vermont.

Segment Name/Description - The name of the river/stream segment or lake/pond. Entries denoted by "**" indicate newly discovered impairments since the 2006 list. Entries denoted by "+" indicate slight modifications in the listing information for clarification from the 2006 list.

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

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

AES – aesthetics
ALS - aquatic life 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 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:	15	98 (5)	113

Number in parentheses ( ) represents new Part A listings since the 2006 listing cycle. The total number of Part A listings has decreased from 149 in 2006 to 113 in 2008.

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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Priority
VT01-02	HOOSIC RIVER, ENTIRE 7 MILE LENGTH IN VERMONT	PCBs	FC	ELEVATED LEVELS OF TOXIC CONTAMINANT IN BROWN TROUT	L
VT01-05	LYE BROOK, RM 2.5 TO HEADWATERS (4.5 MILES)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
VT01-06	BRANCH POND BROOK (POND TO ROARING BRANCH)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
VT02-02	UNNAMED TRIB TO HUBBARDTON RIVER, BELOW WWTF DISCHARGE	E. COLI, NUTRIENTS, TEMPERATURE	ALS, CR, 2CR	BENSON WWTF DISCHARGE POSSIBLE SOURCE; SITUATION NEEDS MORE MONITORING & ASSESSMENT ESP UPSTREAM OF WWTF DISCHARGE (LAND USES & WETLAND)	M
VT02-03	CASTLETON RIVER, FAIR HAVEN	E. COLI	CR	WWTF PUMP STATION OVERFLOWS	L
VT02-05	**FLOWER BROOK, MOUTH TO RM 0.5	E. COLI	CR	ELEVATED E. COLI MONITORING RESULTS	L
	METTAWEE RIVER, UPSTREAM OF NY/VT BORDER (8.2 MILES)	TEMPERATURE	ALS, 2CR	LOSS OF RIPARIAN VEGETATION; CLOSE PROXIMITY OF AGRICULTURAL USES	L
	UNNAMED TRIB TO METTAWEE RIVER	METALS (IRON, ZINC)	ALS	PAWLET LANDFILL LEACHATE	M
VT03-01	+OTTER CREEK, MOUTH OF MIDDLEBURY RIVER TO PULP MILL BRIDGE (4.0 MI)	E. COLI	CR	AGRICULTURAL RUNOFF, POSSIBLE FAILED SEPTIC SYSTEMS	L
	LOWER OTTER CREEK, BELOW VERGENNES WWTF (APPROX 7 MILES)	E. COLI	CR	PERIODIC & RECURRING OVERFLOWS AT LAGOONS OF WWTF; PARTIALLY TREATED	L
VT03-05	OTTER CREEK BELOW RUTLAND CITY WWTF	E. COLI	CR	RUTLAND CITY WWTF COLLECTION SYSTEM PASSES CSOs	L
VT03-06	MOON BROOK, MOUTH TO RM 2.9	STORMWATER	ALS	STORMWATER RUNOFF; EROSION	H
VT03-07	+LITTLE OTTER CREEK, MOUTH TO RM 7.8	E. COLI	CR	ELEVATED E. COLI MONITORING RESULTS	L
	LITTLE OTTER CREEK, MOUTH TO RM 9.0	UNDEFINED	ALS, AES	AGRICULTURAL RUNOFF	M
	LITTLE OTTER CREEK, RM 15.4 TO RM 16.4	E. COLI, UNDEFINED	ALS	AGRICULTURAL RUNOFF	M
VT03-08	LEWIS CREEK, FROM LOWER COV'D BRIDGE UPSTRM TO FOOTBRIDGE (12.3 MI)	E. COLI	CR	AGRICULTURAL RUNOFF	L

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VT03-08	POND BROOK, FROM LEWIS CREEK CONFLUENCE UPSTREAM (1.5 MILES)	E. COLI	CR	AGRICULTURAL RUNOFF	L
VT03-12	MIDDLEBURY RIVER, FROM MOUTH UPSTREAM 2 MILES	E. COLI	CR	AGRICULTURAL RUNOFF, LIVESTOCK, POSSIBLE FAILED SEPTIC SYSTEMS	L
VT03-14	EAST CREEK, MOUTH TO 0.2 MI (BELOW CSO DISCHARGE PTS #2 AND #9)	E. COLI	CR, AES	RUTLAND CITY COLLECTION SYSTEM CSO	L
VT04-01L01	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT04-01L02	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT04-02L01	SOUTHERN SECTION - LAKE CHAMPLAIN (Bridport)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-01	ROCK RIVER - MOUTH TO VT/QUE BORDER (3.6 MILES)	UNDEFINED	AES	ALGAL GROWTH; AGRICULTURAL RUNOFF; FISH KILL (91)	M
	ROCK RIVER, UPSTREAM FROM QUE/VT BORDER (APPROX 13 MILES)	UNDEFINED	ALS	AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT	M
	SAXE BROOK (TRIB TO ROCK RIVER) FROM MOUTH UPSTREAM 1 MILE	UNDEFINED	ALS	AGRICULTURAL RUNOFF	M
VT05-02L01	LAKE CARMI (Franklin)	PHOSPHORUS	AES, CR	ALGAE BLOOMS	H
VT05-04L01	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-04L02	ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-07	JEWETT BROOK (3.5 MILES)	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF	M
	MILL RIVER, FROM ST. ALBANS BAY TO 1.8 MILES UPSTREAM	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION	M
	RUGG BROOK, FROM MOUTH TO APPROX 3.1 MILES UPSTREAM	E. COLI, UNDEFINED	ALS, CR	AGRICULTURAL RUNOFF	M
	RUGG BROOK, RM 3.1 UPSTREAM 1.6 MILES	STORMWATER	ALS	STORMWATER RUNOFF	H

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VT05-07	STEVENS BROOK, RM 6.8 (PEARL ST) TO RM 9.3	STORMWATER	ALS	STORMWATER RUNOFF, EROSION/SEDIMENTATION, MORPHOLOGICAL INSTABILITY	H
	STEVENS BROOK, APPROX. 1 MILE BELOW CTRL VT RAIL YARD UPSTREAM TO YARD	SEDIMENT, OIL, GREASE, HYDROCARBONS	AES, ALS, AWS, DWS, CR	SEDIMENT, SOIL & WATER CONTAMINATION FROM FUEL SPILLS & MANAGEMENT	L
	STEVENS BROOK, MOUTH UPSTREAM 6.8 MILES	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF; MORPHOLOGICAL INSTABILITY	M
VT05-07L01	ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-08	STONE BRIDGE, FROM MOUTH UPSTREAM 2 MILES	UNDEFINED	ALS	AGRICULTURAL RUNOFF, LAND DEVELOPMENT	M
VT05-09	DIRECT SMALLER DRAINAGES TO INNER MALLETTS BAY	E. COLI	CR	URBAN RUNOFF, FAILED/FAILING SEPTIC SYSTEMS; INCLUDES SMITH HOLLOW BROOK & CROOKED CREEK	L
VT05-09L01	MALLETTS BAY - LAKE CHAMPLAIN (Colchester)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-10	ENGLESBY BROOK	E. COLI	CR	ELEVATED E. COLI VALUES IN WQ SAMPLES	L
VT05-10L01	BURLINGTON BAY - LAKE CHAMPLAIN (Burlington)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT05-11	LAPLATTE RIVER FROM HINESBURG TO MOUTH (10.5 MILES)	FECAL COLIFORM	CR	AGRICULTURAL RUNOFF	L
	MUD HOLLOW BROOK, FROM MOUTH TO 3 MILES UPSTREAM	FECAL COLIFORM	CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION	L
	POTASH BROOK	E. COLI	CR	BEACH CLOSURES (RED ROCKS)	L
VT05-11L01	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	L
VT06-04	+BERRY BK, MOUTH UP TO AND INCLUDING NO. TRIB (APPROX. 1 MI)	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	M
	GODIN BROOK	SEDIMENT, E. COLI, NUTRIENTS	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	M
	SAMSONVILLE BROOK	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	M

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VT06-04	TROUT BROOK, UPSTREAM FROM MOUTH FOR 2.3 MILES	UNDEFINED	ALS	AGRICULTURAL RUNOFF	M
VT06-05	CHESTER BROOK	UNDEFINED	ALS	AGRICULTURAL RUNOFF	M
	WANZER BROOK (MOUTH TO RM 3.2)	UNDEFINED	ALS	AGRICULTURAL RUNOFF	M
VT06-08	**BURGESS BROOK TRIBUTARY# 11, MOUTH TO RM 0.5	SEDIMENT	ALS	ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS	L
	**BURGESS BROOK, RM 4.9 TO 5.4	SEDIMENT	ALS	ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS	L
	COBURN BROOK (MOUTH TO RM 0.2)	NUTRIENTS	ALS	AGRICULTURAL ACTIVITY AND RUNOFF	M
	MUD CREEK, FROM RM6.5 DOWNSTREAM TO QUE/VT BORDER	UNDEFINED	ALS	AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT	M
VT07-03	DEER BROOK, MOUTH TO 2.5 MILES UPSTREAM	SEDIMENT	ALS	INDUSTRIAL PARK STORMWATER DISCHARGE; SAND PIT; CORRODING ROAD CULVERTS	M
VT07-09	MILL BROOK IN FAIRFAX, MOUTH TO 5.0 MILES UPSTREAM	SEDIMENT, NUTRIENTS	AES, ALS	ALGAE GROWTH	M
VT07-11	STEVENSVILLE BROOK (UPSTREAM FROM RM 2.1 TO HEADWATERS)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION	M
VT07-13	TRIB TO BREWSTER RIVER (1 MILE)	METALS (IRON)	AES, ALS	IRON SEEPS ON STREAMBANK	M
VT07-15	**HUTCHINS BROOK TRIBUTARY #4, MOUTH TO RM 0.3	SEDIMENT	ALS	ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS	L
	**HUTCHINS BROOK, RM 2.0 TO 3.0	SEDIMENT	ALS	ASBESTOS MINE TAILINGS EROSION; ASBESTOS FIBERS	L
VT08-02	ALLEN BROOK	E. COLI	CR	INSTREAM E. COLI EXCEEDANCES	L
	MUDDY BROOK, MOUTH TO 7 MILES UPSTREAM	TOXICS, NUTRIENTS, TEMPERATURE	ALS	LACK OF BUFFER, LAND DEVELOPMENT; EROSION	M
	UNNAMED TRIB TO MUDDY BROOK, BELOW ALLING IND PRK (2 MI)	TOXICS (TCE)	DWS, AWS	SURFACE WATER IMPACT FROM PAST DISPOSAL ACTIVITIES	L

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VT08-02L01	SHELBURNE POND (Shelburne)	LOW D.O., PHOSPHORUS	ALS	EXCESSIVE ALGAE AND NATIVE PLANT GROWTH CAUSES PERIODIC LOW D.O./FISH KILLS	M
VT08-04	UNNAMED TRIB TO JOINER BROOK (0.5 MILE)	SEDIMENT	ALS	EROSION & RUNOFF FROM 2 - 3 PRIOR LOGGING OPERATIONS; LOGGING OPERATIONS CEASED	L
VT08-05	WINOOSKI RIVER ABOVE MONTPELIER WWTF DISCHARGE	E. COLI	CR	MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	L
VT08-10	HUNTINGTON RIVER, VICINITY OF BRIDGE STREET IN HUNTINGTON	E. COLI	CR	ELEVATED E. COLI LEVELS DETECTED AT SEVERAL SAMPLING STATIONS	L
VT08-11L02	WATERBURY RESERVOIR (Waterbury)	SEDIMENT	ALS, AES	SEDIMENTATION, TURBIDITY	L
VT08-12	INN BROOK, RM 0.3 TO 0.6	IRON	ALS	IRON SEEPS ORIGINATING FROM DISTURBED SOILS; POOR OR FAIR IN 2000, 2001, 2005	L
VT08-13	LOWER NORTH BRANCH, WINOOSKI RIVER (APPROX 1 MILE)	E. COLI	CR	MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	L
VT08-16	GUNNER BROOK, BELOW FARWELL ST. DUMP (APPROX 0.5 MILE)	METALS (Cu, Fe), NUTRIENTS, SEDIMENT	AES, ALS	FARWELL ST. LANDFILL LEACHATE, SURFACE RUNOFF FROM DEVELOPED AREA	M
VT08-18	+MAD RIVER, MOUTH TO MORETOWN (6.2 MILES)	E. COLI	CR	FAILING SEPTIC SYSTEMS AND OTHER UNKNOWN SOURCES; ELEVATED BACTERIA LEVELS	L
VT08-19	TRIBS TO DOWSVILLE BROOK (TRIBS #1 & 11)	SEDIMENT	ALS	LOGGING RELATED EROSION; LOGGING OPERATIONS CEASED	L
VT08-20	+CLAY BROOK, RM 1.8 TO RM 2.3	STORMWATER, IRON	ALS	STORMWATER RUNOFF, EROSION FROM CONSTRUCTION ACTIVITIES & GRAVEL PARKING LOT; INCREASED PEAK STORMWATER FLOWS	H
	FOLSOM BROOK	E. COLI	CR	FAILED/FAILING SEPTIC SYSTEMS; SOME AGRICULTURAL RUNOFF	L
	RICE BROOK, MOUTH TO RM 0.6	STORMWATER	ALS	STORMWATER RUNOFF, EROSION FROM UPSTRM AREAS, LAND DEVELOPMENT, ELEVATED TURBIDITY	H
VT09-06	SMITH BROOK (MOUTH TO RM 0.3)	IRON	ALS, AES	APPARENT LEACHATE FROM ADJACENT OLD DUMP	M
VT10-04	WETLAND DRAINING TO SMALL STREAM TO OTTAUQUECHEE RIVER (BRIDGEWATER)	METALS (Fe)	ALS	BRIDGEWATER LANDFILL; LEACHATE ENTERING SURFACE WATER VIA WETLAND	M

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VT10-06	E. BRANCH ROARING BROOK, RM 0.1 TO RM 0.6	STORMWATER, IRON	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	H
	ROARING BROOK, RM 3.5 TO RM 4.2	STORMWATER	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	H
VT10-11	BLACK RIVER; FROM MOUTH TO 2.5 MI UPSTRM (SPRINGFIELD)	E. COLI	CR	COMBINED SEWER OVERFLOWS	L
VT10-14	SOAPSTONE BROOK, LUDLOW	METALS (Fe, As), SEDIMENT	AES, ALS	AQUATIC HABITAT IMPAIRMENT; SOME EFFECT LIKELY FROM ACTIVE TALC MINE DRAINAGE; NEEDS ADDITIONAL UPSTREAM ASSESSMENT	M
	TRIBUTARY TO JEWELL BROOK - LUDLOW	IRON	AES	EVIDENCE OF LUDLOW LANDFILL LEACHATE ENTERING SURFACE WATER	M
VT11-10	WEST RIVER, BELOW BALL MOUNTAIN DAM TO TOWNSEND DAM (10 MILES)	SEDIMENT, TEMPERATURE	2CR	AQUATIC HABITAT DEGRADED FROM SEDIMENT RELEASES (93 & 95); ELEVATED TEMPERATURES	L
VT11-15	BALL MOUNTAIN BROOK, ABOVE NORTH BRANCH CONFLUENCE	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
	BEAR CREEK BROOK, RM 0.7 TO HEADWATERS	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
	KIDDER BROOK, CONFLUENCE OF SUN BOWL BROOK TO HEADWATERS	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
VT11-17	+WEST RIVER, APPROX 1 MILE BELOW TO 0.5 MILE ABOVE SOUTH LONDONDERRY	E. COLI	CR	POSSIBLE SEPTIC SYSTEM DISCHARGES AND/OR DISCHARGE OF SEPTAGE	L
VT12-03	EAST BRANCH DEERFIELD RIVER, BELOW SOMERSET DAM	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
VT12-04	UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM	ACID	ALS	ATMOSPHERIC DEPOSITION; CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	M
VT12-05	IRON STREAM, TRIB TO TANNERY BROOK (0.3 MILE)	IRON	ALS	LAND DEVELOPMENT, SOURCE(S) NEED FURTHER ASSESSMENT	M
	NO. BRANCH DEERFIELD RIVER, TANNERY BRK RD TO 0.2 MI ABOVE SNOW LAKE	STORMWATER	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT & CONSTRUCTION RELATED EROSION	H
	NO. BRANCH, DEERFIELD RIVER, VICINITY OF WEST DOVER	E. COLI	CR	HIGH E.COLI LEVELS; CAUSE(S) & SOURCE(S) UNKNOWN; NEEDS ASSESSMENT	L

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VT13-12	SACKETTS BROOK	UNDEFINED	ALS	HABITAT DEGRADATION; POSSIBLE PERIODIC SPILLS AT PAPER COMPANY; NEEDS ADDITIONAL UPSTREAM MONITORING	M
VT13-13	CROSBY BROOK, MOUTH TO RM 0.7	SEDIMENT	ALS	HABITAT ALTERATIONS DUE TO SEDIMENTATION, CHANNELIZATION AND BUFFER LOSS	M
VT13-14	WHETSTONE BROOK - BRATTLEBORO	E. COLI	CR	SOURCES UNKNOWN, POTENTIALLY FAULTY SEWER LINE/SEPTIC SYSTEM	L
VT13-16	NEWTON BROOK (MOUTH UPSTREAM 2 MILES)	SEDIMENT	ALS	AGRICULTURAL ACTIVITY	M
VT14-02	COPPERAS BROOK (1 MILE)	METALS, ACID	AES, ALS, AWS, DWS	HIGH METALS IN DRAINAGE FROM ABANDONED ELIZABETH MINE & FROM TAILINGS PILES	M
	LORDS BROOK (0.5 MILES ABOVE MOUTH UPSTREAM TO RM 3.3)	METALS, ACID	ALS	ABANDONED MINE DRAINAGE, BELOW "SOUTH CUT"	M
	WEST BRANCH OF OMPOMPANOOSUC RIVER (3.8 MILES)	METALS, ACID	AES, ALS	HIGH METALS IN DRAINAGE FROM ABANDONED ELIZABETH MINE & FROM TAILINGS	M
VT14-03	+OMPOMPANOOSUC RIVER, USACOE BEACH AREA TO BRIMSTONE CORNER (9.8 MI)	E. COLI	CR	ELEVATED E. COLI LEVELS	L
	ELY BROOK (aka SCHOOLHOUSE BRK) BELOW ELY MINE (2.2 MILES)	METALS, ACID	AES, ALS, AWS, DWS	HIGH METALS IN DRAINAGE FROM ABANDONED ELY MINE	M
	OMPOMPANOOSUC RIVER BELOW ELY MINE (1.5 MILES)	METALS	AES	HIGH METALS IN DRAINAGE FROM ABANDONED ELY MINE & FROM TAILINGS	M
VT14-05	PIKE HILL BROOK, FROM MOUTH TO 3 MILES UPSTREAM	METALS	AES, ALS	HIGH METALS IN DRAINAGE FROM ABANDONED PIKE HILL MINE & TAILINGS	M
	TABOR BRANCH TRIBUTARY, MOUTH UPSTREAM APPROX 0.1 MILE	UNDEFINED	ALS	AGRICULTURAL & BARNYARD RUNOFF; MILKHOUSE EFFLUENT	M
VT14-07L02	TICKLENAKED POND (Ryegate)	PHOSPHORUS	AES, ALS, CR	ALGAE BLOOMS, HIGH pH, LOW D.O.; MANURE RUNOFF	H
VT15-01	PASSUMPSIC RIVER FROM PIERCE MILLS DAM TO 5 MILES BELOW PASSUMPSIC DAM	E. COLI	CR	ST. JOHNSBURY WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	L
VT15-04	LOWER SLEEPERS RIVER IN ST. JOHNSBURY	E. COLI	CR	ST. JOHNSBURY WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	L

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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Priority
VT17-01	CRYSTAL BROOK IN DERBY (0.3 MILE)	SEDIMENT, NUTRIENTS	ALS	AGRICULTURAL RUNOFF	M
VT17-01L01	LAKE MEMPHREMAGOG (Newport)	PHOSPHORUS	AES, CR	EXCESSIVE ALGAE GROWTH, NUTRIENT ENRICHMENT	L
VT17-02	STEARNS BROOK TRIBUTARY (HOLLAND)	UNDEFINED	ALS	AGRICULTURAL RUNOFF	M

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.