

STATE OF VERMONT

2004

303(d) LIST OF WATERS

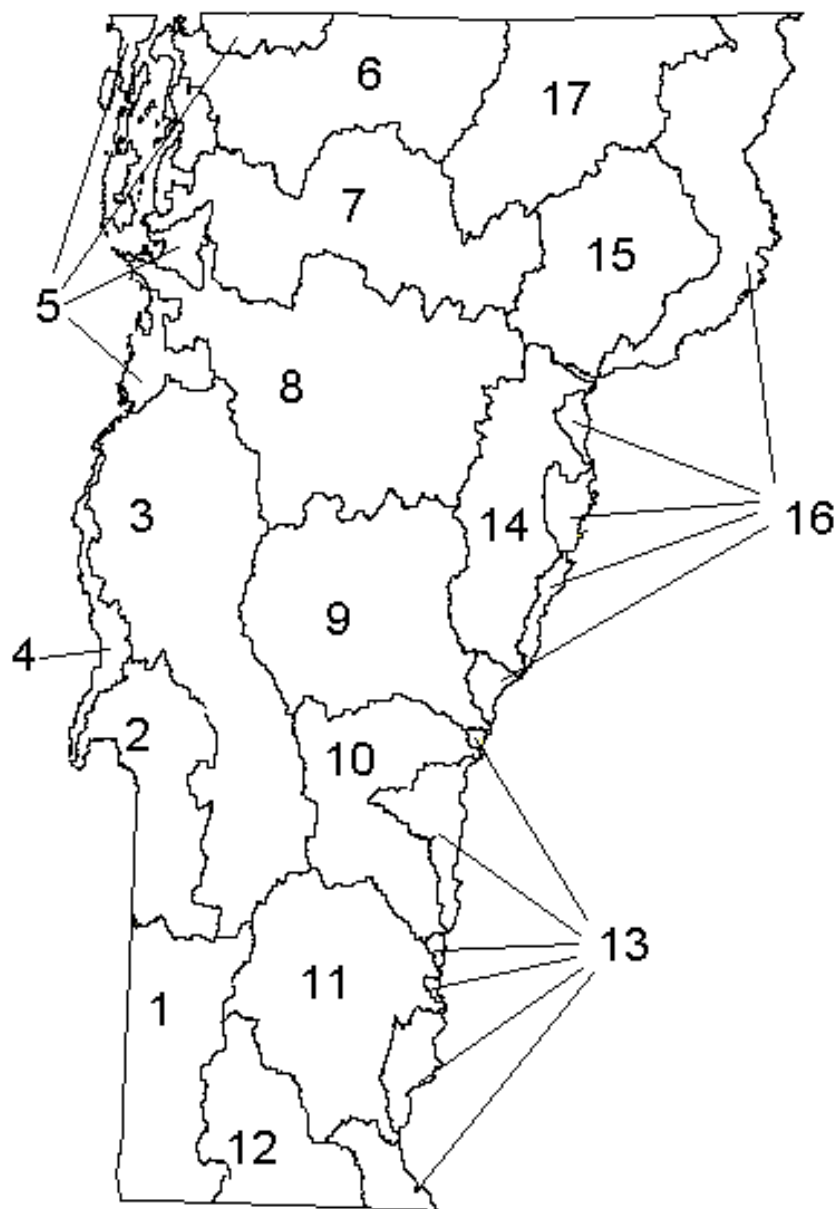
(APPROVED BY USEPA REGION 1: JULY 19, 2004)

PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

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

PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

Part A of the 2004 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 2004 Vermont Surface Water Assessment and Listing Methodology, current EPA 2004 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 Year 2002 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	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 Year - An indication of when the TMDL will be completed.

	Lakes and Ponds	Streams and Rivers	Total
Total number of impairment entries listed in Part A:	44	111	155

Part A. Impaired Waters in Need of a TMDL

Waterbody ID	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Year
VT01-02	HOOSIC RIVER, ENTIRE 7 MILE LENGTH IN VERMONT	PCBs	FC	ELEVATED LEVELS OF TOXIC CONTAMINANT IN BROWN TROUT	2008
VT01-05	LYE BROOK, RM 2.5 TO HEADWATERS (4.5 MILES)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2005
VT01-05L10	LITTLE MUD (Winhall)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2004
VT01-06	BRANCH POND BROOK (POND TO ROARING BRANCH)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2005
VT01-06L02	BEEBE POND (Sunderland)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC	2004
VT02-01	POULTNEY RIVER, FROM CARVERS FALLS UP TO CASTLETON RIVER (2.8 MILES)	NUTRIENTS	ALS	NUTRIENT ENRICHMENT FROM AGRICULTURAL RUNOFF, EROSION	2010
	POULTNEY RIVER, MOUTH UPSTRM TO CARVERS FALLS (10.4 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
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)	2008
VT02-03	CASTLETON RIVER, FAIR HAVEN	E. COLI	CR	WWTF PUMP STATION OVERFLOWS	2009
VT02-04	POULTNEY RIVER, 0.5 MI ABOVE TO 0.5 MI BELOW CASTLETON RIVER CONFL	NUTRIENTS	ALS	AGRICULTURAL RUNOFF	2010
VT02-05	METTAWEE RIVER, UPSTREAM OF NY/VT BORDER (8.2 MILES)	TEMPERATURE	ALS, 2CR	LOSS OF RIPARIAN VEGETATION; CLOSE PROXIMITY OF AGRICULTURAL USES	2004
	UNNAMED TRIB TO METTAWEE RIVER	METALS (IRON, ZINC)	ALS	PAWLET LANDFILL LEACHATE	2010
VT03-01	LOWER OTTER CREEK, BELOW VERGENNES WWTF (APPROX 7 MILES)	E. COLI	CR	PERIODIC & RECURRING OVERFLOWS AT LAGOONS OF WWTF; PARTIALLY TREATED	2009
	LOWER OTTER CREEK, MOUTH UPSTREAM TO VERGENNES DAM (APPROX 7.6 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
	OTTER CREEK, BELOW MOUTH OF MIDDLEBURY RIVER TO WEYBRIDGE DAM (6 MILES)	E. COLI	CR	AGRICULTURAL RUNOFF, POSSIBLE FAILED SEPTIC SYSTEMS	2013
VT03-04	SUCKER BROOK, FROM SUGAR HILL RESERVOIR DAM TO 0.25 MILES DOWNSTREAM	LOW D.O.	ALS	D.O. PROBLEMS DUE TO HYPOLIMNETIC WITHDRAWAL; PROBLEM IS FOR 0.25 MILES NOT FOR 2.5 MILES AS PREVIOUSLY REPORTED	2005

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. Impaired Waters in Need of a TMDL

Waterbody ID	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Year
VT03-05	OTTER CREEK BELOW RUTLAND CITY WWTF	E. COLI	CR	RUTLAND CITY WWTF COLLECTION SYSTEM PASSES CSOs	2009
VT03-06	MOON BROOK, MOUTH TO RM 2.3	STORMWATER	ALS	STORMWATER RUNOFF; EROSION; NO MONITORING DATA ON POLLUTANTS	2012
	MOON BROOK, MOUTH TO RUTLAND CITY LANDFILL	IRON	ALS	GLEASON RD UNLINED LANDFILL LEACHATE ENTERING SURFACE WATER VIA GROUNDWATER	2013
VT03-07	LITTLE OTTER CREEK - LOWER - FROM MOUTH UPSTREAM 9 MILES	E. COLI, UNDEFINED	ALS, AES, CR	AGRICULTURAL RUNOFF	2007
	LITTLE OTTER CREEK - UPPER - FROM RM 15.4 TO RM 16.4	E. COLI, UNDEFINED	ALS	AGRICULTURAL RUNOFF	2007
	LITTLE OTTER CREEK, MOUTH UPSTRM TO FALLS/LEDGE WEST RT 7 (CIRCA 1 MI)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE; FISH PRESENT ONLY SEASONALLY; EXTREMELY LOW #s	2008
VT03-08	LEWIS CREEK, FROM LOWER COV'D BRIDGE UPSTRM TO FOOTBRIDGE (12.3 MI)	E. COLI	CR	AGRICULTURAL RUNOFF	2007
	POND BROOK, FROM LEWIS CREEK CONFLUENCE UPSTREAM (1.5 MILES)	E. COLI	CR	AGRICULTURAL RUNOFF	2007
VT03-09	LOWER DEAD CREEK, FROM MOUTH UPSTREAM (APPROX 3 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
VT03-12	MIDDLEBURY RIVER, FROM MOUTH UPSTREAM 2 MILES	E. COLI	CR	AGRICULTURAL RUNOFF, LIVESTOCK, POSSIBLE FAILED SEPTIC SYSTEMS	2005
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	2009
VT03-14L03	**CHITTENDEN RESERVOIR (Chittenden)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT04-01L01	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT04-01L02	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT04-02L01	SOUTHERN SECTION - LAKE CHAMPLAIN	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008

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Waterbody ID	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Year
VT05-01	SOUTHERN SECTION - LAKE CHAMPLAIN	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
	ROCK RIVER - MOUTH TO VT/QUE BORDER (3.6 MILES)	UNDEFINED	AES	ALGAL GROWTH; AGRICULTURAL RUNOFF; FISH KILL (91)	2005
	ROCK RIVER, UPSTREAM FROM QUE/VT BORDER (APPROX 13 MILES)	UNDEFINED	ALS	AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT	2005
	SAXE BROOK (TRIB TO ROCK RIVER) FROM MOUTH UPSTREAM 1 MILE	UNDEFINED	ALS	AGRICULTURAL RUNOFF	2005
VT05-01L01	MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT05-02L01	LAKE CARMi (Franklin)	PHOSPHORUS	AES, CR	ALGAE BLOOMS	2012
VT05-04L01	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
VT05-04L02	ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
	ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT05-07	**RUGG BROOK, RM 4.3 (CROSBY ST) UPSTREAM 0.4 MILES	STORMWATER	ALS	STORMWATER RUNOFF	2012
	JEWETT BROOK (3.5 MILES)	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF	2010
	MILL RIVER, FROM ST. ALBANS BAY TO 1.8 MILES UPSTREAM	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION	2010
	RUGG BROOK, FROM MOUTH TO APPROX 4.3 MILES UPSTREAM	E. COLI, UNDEFINED	ALS, CR	AGRICULTURAL RUNOFF	2010
VT05-07	STEVENS BROOK, RM 6.8 (PEARL ST) TO RM 9.3	STORMWATER	ALS	STORMWATER RUNOFF, EROSION/SEDIMENTATION, MORPHOLOGICAL INSTABILITY	2008
	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	2013
	STEVENS BROOK, MOUTH UPSTREAM 6.8 MILES	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF; MORPHOLOGICAL INSTABILITY	2010
VT05-07L01	ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
	ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011

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Waterbody ID	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Year
VT05-08	STONE BRIDGE, FROM MOUTH UPSTREAM 2 MI.	UNDEFINED	ALS	AGRICULTURAL RUNOFF, LAND DEVELOPMENT	2006
VT05-09	DIRECT SMALLER DRAINAGES TO INNER MALLETTS BAY	E. COLI	CR	URBAN RUNOFF, FAILED/FAILING SEPTIC SYSTEMS; INCLUDES SMITH HOLLOW BROOK & CROOKED CREEK	2009
	INDIAN BROOK, RM 5.8 (SUZIE WILSON RD) TO RM 9.8	STORMWATER	ALS	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	2009
VT05-09L01	MALLETTS BAY - LAKE CHAMPLAIN (Colchester)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
	MALLETTS BAY - LAKE CHAMPLAIN (Colchester)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT05-10	ENGLESBY BROOK, MOUTH TO RM 1.3	STORMWATER, E. COLI	ALS, CR	STORMWATER RUNOFF, BLANCHARD BEACH CLOSURE	2009
VT05-10L01	BURLINGTON BAY - LAKE CHAMPLAIN	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
	BURLINGTON BAY - LAKE CHAMPLAIN	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
VT05-11	**LAPLATTE RIVER, AT MOUTH	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
	BARTLETT BROOK, MOUTH TO RM 0.7	STORMWATER	ALS	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	2009
VT05-11	LAPLATTE RIVER FROM HINESBURG TO MOUTH (10.5 MILES)	FECAL COLIFORM	CR	AGRICULTURAL RUNOFF	2010
	MUD HOLLOW BROOK, FROM MOUTH TO 3 MILES UPSTREAM	FECAL COLIFORM	CR	AGRICULTURAL RUNOFF, STREAMBANK	2010
	MUNROE BROOK, MOUTH TO RM 2.8	STORMWATER	ALS	STORMWATER RUNOFF, EROSION, LAND DEVELOPMENT	2009
	POTASH BROOK, MOUTH TO RM 5.2	STORMWATER, E. COLI	ALS, CR	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION; BEACH CLOSURES (RED ROCKS)	2009
VT05-11L01	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	PCBs	FC	ELEVATED LEVELS OF PCBs IN LAKE TROUT	2011
VT06-01	MISSISQUOI RIVER, MOUTH UPSTRM TO SWANTON DAM (APPROX 8 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008

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VT06-04	BERRY BRK UP TO NO.TRIB (MOUTH TO 1 MI UPSTRM)	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	2007
	GODIN BROOK	SEDIMENT, E. COLI, NUTRIENTS	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	2007
	SAMSONVILLE BROOK	SEDIMENT, NUTRIENTS, E. COLI	ALS, CR	AGRICULTURAL RUNOFF, AQUATIC HABITAT IMPACTS	2007
	TROUT BROOK, UPSTREAM FROM MOUTH FOR 2.3 MILES	UNDEFINED	ALS	AGRICULTURAL RUNOFF	2006
VT06-05	CHESTER BROOK	UNDEFINED	ALS	AGRICULTURAL RUNOFF	2006
	WANZER BROOK	UNDEFINED	ALS	AGRICULTURAL RUNOFF	2006
VT06-08	**COBURN BROOK	NUTRIENTS	ALS	AGRICULTURAL ACTIVITY AND RUNOFF	2014
	MUD CREEK, FROM RM6.5 DOWNSTREAM TO QUE/VT BORDER	UNDEFINED	ALS	AGRICULTURAL RUNOFF; NUTRIENT ENRICHMENT	2007
	TAFT BROOK IN TROY, FROM MOUTH UPSTREAM 0.1 MILE	NUTRIENTS	ALS	AGRICULTURAL RUNOFF	2009
VT07-01	LAMOILLE RIVER, MOUTH TO CLARKS FALLS DAM (8.5 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
	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	2006
VT07-03	DEER BROOK, MOUTH TO 2.5 MILES UPSTREAM	NITROGEN; UNDEFINED	ALS	INDUSTRIAL PARK STORMWATER DISCHARGE; SAND PIT; CORRODING ROAD CULVERTS; NO MONITORING DATA ON POLLUTANTS ABOVE	2006
VT07-03L03	ARROWHEAD MOUNTAIN LAKE (Milton)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008
VT07-09	MILL BROOK IN FAIRFAX, MOUTH TO 5.0 MILES UPSTREAM	SEDIMENT, NUTRIENTS	AES, ALS	ALGAE GROWTH	2011
VT07-11	STEVENSVILLE BROOK (UPSTREAM FROM RM 2.1 TO HEADWATERS)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION	2005
VT07-13	TRIB TO BREWSTER RIVER (1 MILE)	METALS (IRON)	AES, ALS	IRON SEEPS ON STREAMBANK	2013
VT08-01	WINOOSKI RIVER	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008

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VT08-02	ALLEN BROOK, RM 2.4 TO RM 7.6	STORMWATER, E.COLI	ALS, CR	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	2009
	CENTENNIAL BROOK, MOUTH TO RM 1.2	STORMWATER	ALS	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	2009
	MOREHOUSE BROOK, MOUTH TO RM 0.6	STORMWATER	ALS	STORMWATER RUNOFF, EROSION	2009
	MUDDY BROOK, MOUTH TO 7 MILES	TOXICS, NUTRIENTS, TEMP.	ALS	LACK OF BUFFER, LAND DEVELOPMENT;	2009
	SUNDERLAND BROOK, RM 3.5 (RT. 7) TO RM 5.3	STORMWATER	ALS	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	2009
	UNNAMED TRIB TO MUDDY BROOK, BELOW ALLING IND PRK (2 MI)	TOXICS (TCE)	DWS, AWS	SURFACE WATER IMPACT FROM PAST DISPOSAL ACTIVITIES	2007
VT08-02L01	SHELBURNE POND (Shelburne)	LOW D.O., PHOSPHORUS	ALS	EXCESSIVE ALGAE AND NATIVE PLANT GROWTH CAUSES PERIODIC LOW D.O./FISH KILLS	2006
VT08-03	**WINOOSKI RIVER, ALDER BROOK UPSTRM TO BOLTON FALLS DAM (10.5 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE	2008
VT08-04	UNNAMED TRIB TO JOINER BROOK (0.5 MILE)	SEDIMENT	ALS	EROSION & RUNOFF FROM 2 - 3 PRIOR LOGGING OPERATIONS; LOGGING OPERATIONS CEASED	2005
VT08-05	WINOOSKI RIVER ABOVE MONTPELIER WWTF DISCHARGE	E. COLI	CR	MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	2013
VT08-11	LOWER LITTLE RIVER BELOW HYDRO DAM TO USGS GAGE & GORGE (0.75 MILES)	LOW D.O.	ALS	LOW DOWNSTREAM DISSOLVED OXYGEN FROM HYPOLIMNETIC WITHDRAWAL; PROBLEM DOES NOT EXTEND 2.3 MILES AS PREVIOUSLY REPORTED	2005
VT08-11L02	WATERBURY RESERVOIR (Waterbury)	SEDIMENT	ALS, AES	SEDIMENTATION, TURBIDITY	2006
VT08-13	LOWER NORTH BRANCH, WINOOSKI RIVER (APPROX 1 MILE)	E. COLI	CR	MONTPELIER WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	2013
VT08-16	GUNNER BROOK, BELOW FARWELL ST. DUMP (APPROX 0.5 MILE)	METALS (Cu, Fe), NUTRIENTS, CONDUCTIVITY, SEDIMENT, E. COLI	AES, ALS	FARWELL ST. LANDFILL LEACHATE, SURFACE RUNOFF FROM DEVELOPED AREA	2013
VT08-18	MAD RIVER, MOUTH TO WAITSFIELD COVERED BRIDGE (12 MILES)	E. COLI	CR	FAILING SEPTIC SYSTEMS AND OTHER UNKNOWN SOURCES; ELEVATED BACTERIA LEVELS	2007
VT08-19	TRIBS TO DOWSVILLE BROOK (TRIBS #1 & 11)	SEDIMENT	ALS	LOGGING RELATED EROSION; LOGGING OPERATIONS CEASED	2005

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VT08-20	CLAY BROOK, RM 1.8 UPSTREAM 0.1 MILES	STORMWATER, IRON	ALS	STORMWATER RUNOFF, EROSION FROM CONSTRUCTION ACTIVITIES & GRAVEL PARKING LOT; INCREASED PEAK STORMWATER FLOWS	2007
	FOLSOM BROOK	E. COLI	CR	FAILED/FAILING SEPTIC SYSTEMS; SOME AGRICULTURAL RUNOFF	2007
	RICE BROOK, MOUTH TO RM 0.6	STORMWATER	ALS	STORMWATER RUNOFF, EROSION FROM UPSTRM AREAS, LAND DEVELOPMENT	2006
VT09-06	**SMITH BROOK	IRON	ALS, AES	APPARENT LEACHATE FROM ADJACENT DUMP	2014
VT09-07L01	SKYLIGHT POND (Ripton)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC	2004
VT10-04	WETLAND DRAINING TO SMALL STREAM TO OTTAUQUECHEE RIVER (BRIDGEWATER)	METALS (Fe)	ALS	BRIDGEWATER LANDFILL; LEACHATE ENTERING SURFACE WATER VIA WETLAND	2010
VT10-06	EAST BRANCH ROARING BROOK, RM 0.1 TO RM 0.6	STORMWATER, IRON	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	2008
	ROARING BROOK, RM 1.4 UPSTREAM 0.2 MILES	STORMWATER	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	2005
VT10-11	BLACK RIVER; FROM MOUTH TO 2.5 MI UPSTRM (SPRINGFIELD)	E. COLI	CR	COMBINED SEWER OVERFLOWS	2006
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	2006
	TRIBUTARY TO JEWELL BROOK - LUDLOW	IRON	AES	EVIDENCE OF LUDLOW LANDFILL LEACHATE ENTERING SURFACE WATER	2010
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	2005
VT11-15	BALL MOUNTAIN BROOK, ABOVE NORTH BRANCH CONFLUENCE	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2005
VT11-15L02	LITTLE POND (Winhall)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC	2004
VT12-01L01	HARRIMAN RESERVOIR (Whitingham)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC	2004

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Part A. Impaired Waters in Need of a TMDL

Waterbody ID	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)	TMDL Completion Year
	HARRIMAN RESERVOIR (Whitingham)	MERCURY	FC	ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD	2008
VT12-01L04	SHERMAN RESERVOIR (Whitingham)	MERCURY	FC	ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD	2008
VT12-03	EAST BRANCH DEERFIELD RIVER, BELOW SOMERSET DAM	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2005
	EAST BRANCH DEERFIELD RIVER, BELOW SOMERSET DAM	MERCURY	FC	ELEVATED LEVELS OF Hg IN ALL FISH	2008
VT12-03L01	GROUT POND (Stratton)	MERCURY	FC	ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD	2008
VT12-03L02	SOMERSET RESERVOIR (Somerset)	MERCURY	FC	ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD	2008
VT12-04	UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM	MERCURY	FC	ELEVATED LEVELS OF Hg IN ALL FISH	2008
	UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM	ACID	ALS	ATMOSPHERIC DEPOSITION; CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2005
VT12-04L02	LOST POND (Glastenbury)	ACID	ALS	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	2004
VT12-04L05	SEARSBURG RESERVOIR (Searsburg)	MERCURY	FC	ELEVATED LEVEL OF MERCURY IN ALL FISH EXCEPT BROWN BULLHEAD	2008
VT12-05	IRON STREAM, TRIB TO TANNERY BROOK (0.3 MILE)	IRON	ALS	LAND DEVELOPMENT, SOURCE(S) NEED FURTHER ASSESSMENT	2006
	NO. BRANCH DEERFIELD RIVER, TANNERY BRK RD TO 0.2 MI ABOVE SNOW LAKE	STORMWATER	AES, ALS	STORMWATER RUNOFF, LAND DEVELOPMENT & CONSTRUCTION RELATED EROSION	2006
	NO. BRANCH, DEERFIELD RIVER, VICINITY OF WEST DOVER	E. COLI	CR	HIGH E.COLI LEVELS; CAUSE(S) & SOURCE(S) UNKNOWN; NEEDS ASSESSMENT	2006
VT13-12	SACKETTS BROOK	UNDEFINED	ALS	HABITAT DEGRADATION; POSSIBLE PERIODIC SPILLS AT PAPER COMPANY; NEEDS ADDITIONAL UPSTREAM MONITORING	2005
VT13-14	WHETSTONE BROOK - BRATTLEBORO	E. COLI	CR	SOURCES UNKNOWN, POTENTIALLY FAULTY SEWER LINE/SEPTIC SYSTEM	2005
VT13-16	NEWTON BROOK (MOUTH UPSTREAM 2 MILES)	SEDIMENT	ALS	AGRICULTURAL ACTIVITY	2010

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VT14-02	COPPERAS BROOK (1 MILE)	METALS, ACID	AES, ALS, AWS, DWS	HIGH METALS IN DRAINAGE FROM ABANDONED ELIZABETH MINE & FROM TAILINGS PILES	2013
	LORDS BROOK (0.5 MILES ABOVE MOUTH UPSTREAM TO RM 3.3)	METALS, ACID	ALS	ABANDONED MINE DRAINAGE, BELOW "SOUTH CUT"	2011
	WEST BRANCH OF OMPOMPANOOSUC RIVER (3.8 MILES)	METALS, ACID	AES, ALS	HIGH METALS IN DRAINAGE FROM ABANDONED ELIZABETH MINE & FROM TAILINGS	2013
VT14-03	BRIMSTON CRN TO BELOW W. FAIRLEE VILLAGE, LOWER OMPOMPANOOSUC (2.4 MI)	E. COLI	CR	HIGH BACTERIA LEVELS; SOURCE(S) UNKNOWN	2007
	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	2013
VT14-03	OMPOMPANOOSUC RIVER BELOW ELY MINE (1.5 MILES)	METALS	AES	HIGH METALS IN DRAINAGE FROM ABANDONED ELY MINE & FROM TAILINGS	2013
	SAWNEE BEAN BR. TO USACOE BEACH AREA, LOWER OMPOMPANOOSUC (2.4 MILES)	E. COLI	CR	FREQUENT BEACH CLOSURES; HIGH BACTERIA LEVELS; SOURCE(S) UNKNOWN	2007
VT14-05	PIKE HILL BROOK, FROM MOUTH TO 3 MILES UPSTREAM	METALS	AES, ALS	HIGH METALS IN DRAINAGE FROM ABANDONED PIKE HILL MINE & TAILINGS	2013
	TRIBUTARY TO TABOR BRANCH, MOUTH UPSTREAM APPROX 0.1 MILE	UNDEFINED	ALS	AGRICULTURAL & BARNYARD RUNOFF; MILKHOUSE EFFLUENT	2008
VT14-07L01	LEVI POND (Groton)	ACID	ALS	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC	2004
VT14-07L02	TICKLENAKED POND (Ryegate)	PHOSPHORUS	AES, ALS, CR	ALGAE BLOOMS, HIGH PH, LOW D.O.	2008
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	2011
VT15-04	LOWER SLEEPERS RIVER IN ST. JOHNSBURY	E. COLI	CR	ST. JOHNSBURY WWTF COLLECTION SYSTEM PASSES COMBINED SEWER OVERFLOWS	2011
VT16-04L01	MOORE RESERVOIR (Waterford)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN ALL FISH	2008
VT16-05L01	COMERFORD RESERVOIR (Barnet)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN ALL FISH	2008

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VT17-01	CRYSTAL BROOK IN DERBY (0.3 MILE)	SEDIMENT, NUTRIENTS	ALS	AGRICULTURAL RUNOFF	2007
VT17-01L01	LAKE MEMPHREMAGOG (Newport)	PHOSPHORUS	AES, CR	EXCESSIVE ALGAE GROWTH, NUTRIENT ENRICHMENT	2010
VT17-01L02	SOUTH BAY (Newport)	PHOSPHORUS	AES, CR	NUTRIENT ENRICHMENT, NUISANCE ALGAL	2010
VT17-02	TRIBUTARY TO STEARNS BROOK (HOLLAND)	UNDEFINED	ALS	AGRICULTURAL RUNOFF	2007
VT17-04L04	LAKE SALEM (Derby)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE	2008

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