STATE OF VERMONT

2008

LIST OF PRIORITY SURFACE WATERS
OUTSIDE THE SCOPE OF CLEAN WATER ACT SECTION 303(d)

includes:

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

PART C. **SURFACE WATERS IN NEED OF FURTHER ASSESSMENT**

PART D. **SURFACE WATERS WITH COMPLETED AND APPROVED TMDLs**

PART E. **SURFACE WATERS ALTERED BY EXOTIC SPECIES**

PART F. **SURFACE WATERS ALTERED BY FLOW REGULATION**

PART G. **SURFACE WATERS ALTERED BY CHANNEL ALTERATION**

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OVERVIEW

The following six-part list of waters has been prepared by the Vermont Department of Environmental Conservation (VT DEC) in accordance with the Vermont Surface Water Assessment and Listing Methodology. Each part is considered to be outside the scope of Clean Water Act Section 303(d).

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. Section 303d of the Federal Clean Water Act does not govern these waters. 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.

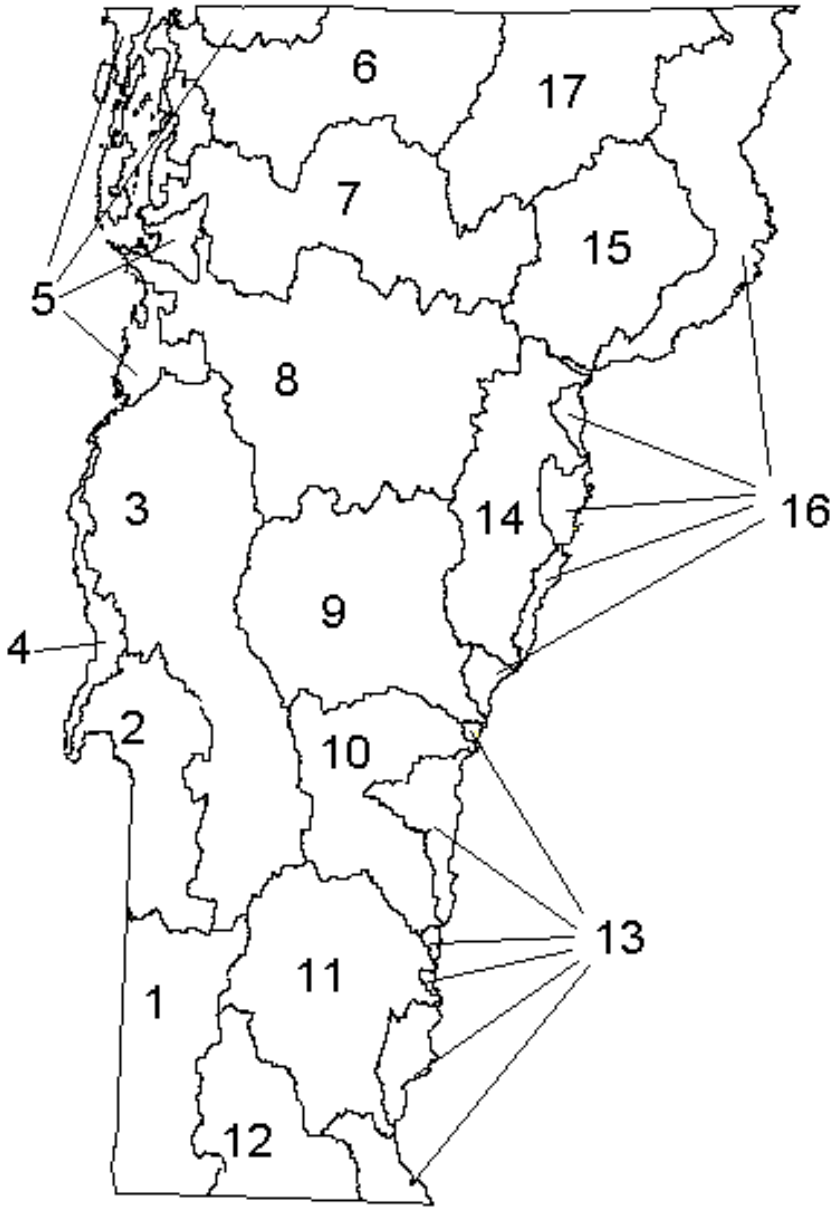
All waters appearing in **Part C** are assessed as "stressed" and have been identified as needing further assessment to confirm the presence of a violation of one or more criteria of the Vermont Water Quality Standards. A violation has not been documented by sufficient data (i.e. there is an insufficient weight of evidence). Part C waters are considered high priority waters for assessment and monitoring.

All waters identified on **Part D** have appeared on a previous version of the Part A-303d List and also have completed and approved TMDLs in place. If future assessments show the impairment has been eliminated, the waters will remain on Part D as a means of TMDL tracking, however, the current assessment status of the water will be noted. These waters correspond to Category 4a of EPA's Consolidated Assessment Listing Methodology.

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 have been altered to the extent that one or more designated uses are not supported due to the presence of exotic aquatic species. This list currently includes waters altered by the proliferation of Eurasian watermilfoil, water chestnut, zebra mussels or the presence of alewives. These waters correspond to Category 4c of EPA's Consolidated Assessment Listing Methodology.

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 to the extent that one or more designated uses are not supported. Alterations arise from flow fluctuation, obstructions, or other manipulations of water levels that originate from hydroelectric facilities or other dam operations or from water withdrawals for industrial or municipal water supply or snowmaking purposes. These waters correspond to Category 4c of EPA's Consolidated Assessment Listing Methodology.

Waters appearing in **Part G** have been assessed as "altered." These waters include stream or river reaches with significant impacts due to physical channel alterations, documented channel degradation or a change in stream type that have resulted from human activities such as gravel mining, dredging, channelization, improper bridge or culvert placement, or floodplain encroachments. In these situations, the aquatic habitat is altered from the stable ecological state due to changes in bedload movement and habitat feature loss so that one or more designated uses are not supported. In these altered reaches, the changes in bedload and habitat features result from an instability of the system itself as streams naturally realign themselves into a new natural equilibrium. These waters correspond to Category 4c of EPA's Consolidated Assessment Listing Methodology.



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
DAF&M VT Department 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.
PL83-566 (a USDA cost share program)

PART B - IMPAIRED SURFACE WATERS NOT NEEDING A TOTAL MAXIMUM DAILY LOAD DETERMINATION

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 on the preceding page that names these 17 river basins and identifies their approximate boundaries.

A statewide map illustrating designated river and stream waterbodies and designated waterbodies of Lake Champlain, Lake Memphremagog and South Bay 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.

Pollutant(s) - The measured 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 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 summary narrative explaining why a TMDL determination is not needed to correct the specific impairment.

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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)
VT01-02	HOOSIC RIVER, LOWEST 2 MILES IN VERMONT	PHOSPHORUS	ALS	EXCESSIVE PHOSPHORUS LOADING FROM UPSTREAM WWTFs (MASSACHUSETTS)

Two large WWTFs located within the State of Massachusetts found upstream of the listed impairment (Hoosac and Adams) have been issued NPDES permit renewals, by the New England regional office of US EPA, that include a phosphorus concentration effluent limit of 1.0 mg/l. Massachusetts is a non-delegated state. Prior to these changes, VT DEC calculations indicated that phosphorus control at the Hoosac WWTF alone would reduce concentrations in VT to a level believed to be sufficient and appropriate to eliminate the impairment. Phosphorus control at the Adams WWTF will provide even greater/further levels of protection.

A macroinvertebrate assessment in 2000 by VT DEC of the Hoosic River met Class B biological criteria prior to the implementation of P controls at the two WWTFs in Massachusetts. Monitoring conducted in 2003 also met the biological criteria. These biological results are the latest in the trend of improving WQ in the Hoosic River since 1985.

VT05-10L01	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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)
VT06-08	JAY BRANCH, RM 8.3 UPSTREAM 1.9 MILES	SEDIMENT	ALS	EROSION FROM LAND DEVELOPMENT 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 impairment of this stream reach is the result of failure to comply with applicable Vermont construction and erosion control permits and operational stormwater permits. 1272 orders have been issued and an enforcement case has been initiated by ANR. Ultimately, the remediation measures associated with the enforcement action and future permit compliance enforcement is expected to allow the stream reach to return to compliance with the WQS.

Jay Peak Resort (JPR) submitted a draft 2006 Water Quality Remediation Plan (WQRP) to the Water Quality Division (WQD) in October of 2006. The WQRP was required per the requirements of a Section 1272 Order issued by DEC concerning the sediment impairment of the Jay Branch and to Jay Branch-Tributary #9. The WQD continues to work with JPR to refine the WQRP. Upon completion of the remediation projects, additional requirements may be required and will be dependent upon biomonitoring results and the progress towards meeting VT Water Quality Standards for the impaired reaches in a reasonable timeframe.

	JAY BRANCH-TRIBUTARY #9	SEDIMENT	ALS	EROSION FROM LAND DEVELOPMENT 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 impairment of this stream reach is the result of failure to comply with applicable Vermont construction and erosion control permits and operational stormwater permits. 1272 orders have been issued and an enforcement case has been initiated by ANR. Ultimately, the remediation measures associated with the enforcement action and future permit compliance enforcement is expected to allow the stream reach to return to compliance with the WQS.

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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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)
VT07-01	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.

VT08-02	UNNAMED TRIB TO WINOOSKI RIVER	METALS (Fe, As)	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. Water quality sampling is ongoing and scheduled for May 2008 to determine effectiveness of treatment. Water quality improvement is expected. 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.

VT08-08	MUDDY BROOK (0.1 MILE)	METALS (Fe)	AES	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. Currently the amount of water collected in the drains is significantly less than previously reported. October 2006 monitoring data shows compliance with the VTWQS, however, monitoring is to continue. The landfill facility has a post-closure court order requiring water quality monitoring and maintenance of the site.

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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)
VT08-16	TRIB (#23) TO STEVENS BR, BELOW WIILIAMSTOWN WWTF OUTFALL (0.5 MI)	NUTRIENTS	ALS	TREATED EFFLUENT DISCHARGE TO SMALL RECV'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.

Improvements at the facility in 2005 (aeration system upgrades) were conducted on a voluntary basis by the Town. Recent biological monitoring downstream of the discharge in 2002 and 2005 indicates considerably improved invertebrate and fish communities, at times exceeding minimum criteria.

VT10-11	BLACK RIVER BELOW SPRINGFIELD WWTF	NUTRIENT ENRICHMENT	AES, 2CR	PHOSPHORUS ENRICHMENT; EXCESSIVE ALGAL PRODUCTION

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

The Town is addressing phosphorus removal requirement though their NPDES permit and via 1272 Order (order dated 9/2001). The VTDEC received the engineering sign-off in May 2005 stating that the phosphorus reduction improvements were completed and fully operational as of September 30, 2004. Monitoring reports indicate that the permitee has been in compliance with the effluent limitations set forth in the permit.

VT11-15	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 has resulted in an elimination of the problematic Mn discharge. Staining of the substrate is no longer occurring. Historical staining from previous Mn discharge remains. Ongoing sampling results will be monitored to ensure Mn levels remain below levels necessary to prevent further impairment.

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	Segment Name/ Description	Pollutant(s)	Use(s) Impaired	Surface Water Quality Problem(s)
VT12-01	LOWER DEERFIELD RIVER BELOW HARRIMAN RESERVOIR (3.5 MILES)	LOW TEMPERATURE	ALS	LOW TEMPERATURE HYPOLIMNETIC WATER RELEASE FROM RESERVOIR

This portion of the Deerfield River has been identified as impaired; however, no TMDL is necessary as the State of Vermont has the regulatory authority and legal means to eliminate the cause of the impairment.

The Deerfield River bypass section below Harriman Dam (approx 3.5 miles) does not presently support the VT Class B Aquatic Life Use thresholds based on the macroinvertebrate community integrity. Two river reaches were sampled, 0.5 and 1.1 miles below the Harriman Dam, and did not support Vermont DEC threshold biocriteria for a MHG stream type as determined by VTDEC Biocriteria Guidance 2002.

The Deerfield River flow within the assessed section of river (below Harriman Dam to the West Branch of the Deerfield River) is controlled by TransCanada Hydro Northeast under a FERC license agreement and conditions specified in VTDEC 401 water quality certification issued January 1995. The certification agreement however, identified temperature as a water quality concern. The deep reservoir release, as agreed upon in the certification, to allow for the enhancement of a coldwater Brook and Brown trout fishery may be too cold to support the required level of biological integrity resulting in an “undue adverse effect of the aquatic biota”. The very cold temperature may also not support an optimal fishery by limiting the growth rate of the targeted species.

Due to the above concerns, the VTDEC Water Quality 401 certification states that if monitoring data collected after the implementation of the required flow regime show temperature is either limiting the fishery or resulting in an undue adverse effect on the aquatic biota, mitigation measures will be required. Since the Deerfield Project was relicensed in 1997 and stream flow was restored to the Harriman bypass reach, wild brook trout have been re-introduced. A temperature study has been conducted, and the fish population and benthic community have been monitored. The data is currently being reviewed to determine whether additional mitigation measures (beyond conservation flows) are necessary to restore the river's biological integrity.

VT15-09	MOOSE RIVER BELOW EAST ST. JOHNSBURY VILLAGE (1 MILE)	E. COLI	CR	FAILED SEPTIC SYSTEMS &/OR RESIDENTIAL STRAIGHT PIPES

No TMDL is necessary as DEC has the authority and legal means to address the sources causing this impairment. The authority and legal means that are available are sufficient to attain WQS. Authority to order correction of this impairment resides within 10 VSA 1277.

Federal funding for the correction was obtained. Construction of necessary systems was completed in the Summer of 2005. Follow up water quality monitoring is ongoing.

Part C - Waters in Need of Further Assessment

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 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.

A statewide map further illustrating designated river and stream waterbodies and waterbody designations for Lake Champlain, Lake Memphremagog and South Bay 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.

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

Possible Use(s) Impaired - An indication of which designated or existing uses (as defined in the VWQS) are possibly 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)

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

Part C. Waters appearing below are in need of further assessment. If future assessment results indicate impairment, the waterbody will be included in the next 303(d) list (Part A).

Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT01-02	HOOSIC RIVER, LOWEST 2 MILES IN VERMONT	METALS (Cr, Pb), PRIORITY ORG	AH, DWS	NO. POWNAL TANNERY SUPERFUND SITE CONTAMINATED BY PAST PROCESS & WASTE DISPOSAL PRACTICES
VT01-03	BARNEY BROOK	TOXICS, IRON, SEDIMENT	ALS, AES	HIGH EMBEDDEDNESS, NEEDS FURTHER ASSESSMENT; INVERTS GOOD-FAIN IN 03 AND 04
	HEWITT BROOK	PCB, TOXICS	ALS	HIGH LEVELS OF PCB AND OTHER TOXICS DOWNSTREAM OF BENNINGTON LANDFILL
VT01-05	MUNSON BROOK	SEDIMENT	ALS	HIGH EMBEDDEDNESS
	WEST BRANCH BATTENKILL	SEDIMENT, TEMPERATURE, DEBRIS	ALS, AES	LAND DEVELOPMENT, DEBRIS IN STREAM, URBAN RUNOFF
VT02-04	POULTNEY RIVER, FROM BUXTON HOLLOW TO D&H RAIL TRAIL	E. COLI	CR	SOURCE(S) NEED FURTHER ASSESSMENT
VT02-05	INDIAN RIVER BELOW WEST PAWLET WWTF	LOW D.O.	ALS	D.O. LEVELS OF DISCHARGE & DOWNSTREAM
VT03-03	OTTER CREEK, MIDDLEBURY RIVER CONFL UPSTREAM TO FURNACE BROOK CONFL	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	AGRICULTURAL RUNOFF, BANK EROSION
VT03-05	OTTER CREEK, FURNACE BROOK CONFL UPSTREAM TO MILL RIVER CONFLUENCE	SEDIMENT, ORG ENRICHMENT, TOXICS, METALS	AES, ALS, CR, DWS	NEEDS FURTHER ASSESSMENT & MONITORING ESP. SOURCE(S)
VT03-06	MUSSEY BROOK	SEDIMENT, NUTRIENTS, TOXICS, METALS, E. COLI	AES, ALS, CR	LAND DEVELOPMENT; URBAN RUNOFF; EROSION, POOR FISH IN 02 & 04
	TRIBUTARY TO EAST CREEK	IRON	ALS	HEAVY IRON PRECIPITATE, SOURCES UNKNOWN
VT03-07	MUD CREEK, MOUTH UPSTREAM 4 MILES	E. COLI	CR	AGRICULTURAL RUNOFF
VT03-08	LEWIS CREEK, RM 7.5 TO 16.6	NUTRIENTS	ALS, CR	BANK INSTABILITY, EROSION, LOSS OF RIPARIAN BUFFER
VT03-11	NEW HAVEN RIVER (WEYBRIDGE TOWN LINE TO BRISTOL)	SEDIMENT, HABITAT ALTERATION	AH	MORPHOLOGICAL INSTABILITY
	NEW HAVEN RIVER, MOUTH TO YORK HILL BRIDGE (13 MILES)	E. COLI	CR	SOURCES UNKNOWN
VT03-14	EAST CREEK, FROM CHITTENDEN RESERVOIR TO 4 MILES DOWNSTREAM	LOW D.O.	ALS	POSSIBLE LOW DISSOLVED OXYGEN LEVELS FROM HYPOLIMNETIC WITHDRAWAL OF UNLICENSED HYDRO DAM
	TENNEY BROOK, LOWEST 1 MILE	SEDIMENT	ALS	LAND DEVELOPMENT, HYDROLOGIC MODIDIFCATION; SOURCE(S) NEED MORE ASSESSMENT; BUGS FAIR AND FISH GOOD 2001

Part C. Waters appearing below are in need of further assessment. If future assessment results indicate impairment, the waterbody will be included in the next 303(d) list (Part A).

Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT03-15	CLARENDON RIVER	SEDIMENT, NUTRIENTS, E. COLI, STORMWATER	AES, ALS, CR	AGRICULTURAL RUNOFF, INDUSTRIAL AND URBAN RUNOFF
VT04-03	EAST CREEK-NORTH FORK	NUTRIENTS	ALS	AGRICULTURE OR NATURAL; INVERTS "FAIR" FISH "POOR" 2004
VT05-01	YOUNGMAN BROOK (1.8 MI ABOVE MOUTH TO HEADWATERS)	UNDEFINED-TYPICAL (SEDIMENT, NUTRIENTS)	ALS	AGRICULTURAL RUNOFF
VT05-02	PIKE RIVER	NUTRIENTS, SEDIMENT, E. COLI	AES, ALS, CR	QUEBEC & VT AGRICULTURAL RUNOFF
VT05-07	MILL RIVER, 3.5 MILES IN UPPER REACHES	SEDIMENT, NUTRIENT & ORG ENRICHMENT, E. COLI	AES, ALS, CR	AGRICULTURAL & URBAN RUNOFF, STREAMBANK EROSION
VT05-07L02	ST. ALBANS RESERVOIR, NORTH (Fairfax)	UNKNOWN	ALS	MACROINVERTEBRATE ASSESSMENT INDICATES POTENTIAL BIOLOGICAL ALTERATION. COPPER IN SEDIMENTS ABOVE NOAA THRESHOLD EFFECTS VALUE.
VT05-09	INDIAN BROOK FROM LAKE UPSTREAM 10 MILES TO BUTLERS CORNERS (RT 15)	E. COLI	CR	POSSIBLE FAILED SEPTIC SYSTEMS
	INDIAN BROOK, RM 3.1 TO RM 5.8	SEDIMENT, TOXICS, METALS	ALS	POTENTIAL IMPACTS FROM LANDFILL LEACHATE, DEVELOPED AREAS
	MALLETTS CREEK, MOUTH UPSTREAM 3.5 MILES	SEDIMENT, NUTRIENT & ORG ENRICHMENT, METALS, E. COLI	AES, ALS, CR	LAND DEVELOPMENT, EROSION/SEDIMENTATION, URBAN RUNOFF
VT05-10	DIRECT DRAINAGES TO BURLINGTON BAY	SEDIMENT, NUTR & ORG ENRICHMENT, METALS, TOXICS, E. COLI	AES, ALS, CR	LAND DEVELOPMENT; EROSION/SEDIMENTATION; URBAN RUNOFF
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	E. COLI	CR	ELEVATED E. COLI LEVELS OFF COLCHESTER PT NEAR MOUTH OF WINOOSKI RIVER
VT05-11	MCCABES BROOK	TURBIDITY	ALS	ELEVATED TURBIDITY, SOURCES NEED FURTHER INVESTIGATION
VT06-01	MISSISQUOI RIVER, LAKE TO TYLER BRANCH	SEDIMENT, NUTRIENTS, E. COLI, TURBIDITY	AES, ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION, LOSS OF RIPARIAN VEGETATION
	MISSISQUOI RIVER, SWANTON DAM UPSTRM TO SHELDON SPR DAM (APPROX 12 MI)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE; POPULATION IN SEGMENT CONSIDERED SMALL
VT06-02	MISSISQUOI RIVER, TYLER BRANCH TO RICHFORD	SEDIMENT, NUTRIENTS, E. COLI, TURBIDITY	AES, ALS, CR	NPS CONTRIBUTIONS FROM U.S. AND QUEBEC, STREAMBANK EROSION, AGRICULTURAL ACTIVITY

Part C. Waters appearing below are in need of further assessment. If future assessment results indicate impairment, the waterbody will be included in the next 303(d) list (Part A).

Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT06-05	BLACK CREEK, MOUTH TO EAST FAIRFIELD (12 MILES)	SEDIMENT, NUTRIENTS, E. COLI	AES, AH, CR	AGRICULTURAL RUNOFF
VT06-06	TYLER BRANCH	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	AGRICULTURAL RUNOFF; MORPHOLOGICAL INSTABILITY (WEST ENOSBURG TO COLD HOLLOW BROOK)
VT06-07	TROUT RIVER (MOUTH UP TO MONTGOMERY CENTER)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
	TROUT RIVER, FROM MOUTH TO 6 MILES UPSTREAM	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION
VT06-08	JAY BRANCH, RM 8.3 TO RM 5.6	SEDIMENT, STORMWATER	ALS, AES	POTENTIAL IMPACTS FROM CONSTRUCTION EROSION, WATERSHED HYDROLOGY
VT07-02	LOWER MIDDLE LAMOILLE FROM FAIRFAX FALLS DAM TO ARROWHEAD MT LAKE	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	AGRICULTURAL RUNOFF
		MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT07-04	LAMOILLE RIVER, FROM FAIRFAX FALLS DAM UPSTREAM TO LAKE LAMOILLE	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	BANK INSTABILITY; SOURCE(S) NEED FURTHER ASSESSMENT; OBSERVED PLAN FORM ADJUSTMENT; CHANNEL OVERWIDENING
VT07-07	LAMOILLE RIVER, FROM LAKE LAMOILLE UPSTREAM TO HARDWICK LAKE	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	BANK INSTABILITY; AGRICULTURAL RUNOFF; SOURCE(S) NEEDS FURTHER ASSESSMENT; MORPHOLOGICAL INSTABILITY (WOLCOTT TO HARDWICK LAKE)
VT07-08	RODMAN BROOK	IRON	ALS	MACROINVERTEBRATES POOR/FAIR 2006, GOOD 2007, LANDFILL LEACHATE
VT07-12	SEYMOUR RIVER (LOWEST 3.5 MILES)	SEDIMENT, NUTRIENTS	AH, AES	BANK EROSION, AGRICULTURAL ENCROACHMENTS, CHANNEL INSTABILITY
VT07-13	BREWSTER RIVER FROM SKI AREA TO MOUTH	SEDIMENT	ALS, AES	CONSTRUCTION EROSION; INCREASED PEAK STORMWATER DISCHARGE; ROAD & PARKING LOT RUNOFF
VT07-14	NORTH BRANCH IN WATERVILLE VILLAGE	TOXICS	ALS, DWS, AES	SEEP WITH MTBE, XYLENE, TMB ABOVE VGES. SEEP AT WATERFALL ON NORTH BRANCH
	NORTH BRANCH LAMOILLE (RT 109 TO MOUTH)	SEDIMENT	AH	BANK EROSON, CHANNEL INSTABILITY
VT07-15	GIHON RIVER (EDEN & JOHNSON)	ORGANICS	ALS, CR, DWS	LEAK FROM UNDERGROUND STORAGE TANK (EDEN); OIL SPILLS (JOHNSON) BOTH IN CLOSE PROXIMITY TO SURFACE WATER; NO SURFACE WQ DATA
VT07-16	MUD BROOK	IRON	ALS, AES	IRON PRECIPATE DEGRADING HABITAT-BUGS FAIR IN 2002

Part C. Waters appearing below are in need of further assessment. If future assessment results indicate impairment, the waterbody will be included in the next 303(d) list (Part A).

Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT07-19	WILD BRANCH, MOUTH TO HEADWATERS	SEDIMENT	ALS, AES, 2CR	POST RE-LOCATION OF CHANNEL; FLOOD DAMAGE AND REPAIR; LOSS OF FLOODPLAIN, ENCROACHMENTS, BANK EROSION
VT07-22	STANNARD BROOK	SEDIMENT	ALS	FLOODS AND POST FLOOD WORK (1973, 95, 97); BANK EROSION-BUGS FAIR IN 2002
VT08-02	SUNNYSIDE BROOK (TRIB #8 TO SUNDERLAND BROOK)	ORG ENRICHMENT, TOXICS, SEDIMENT	ALS	POTENTIAL IMPACT SURFACE WATER BY PAST DUMPING (CHAMPLAIN CABLE & HAMPDEN); LAND DEVELOPMENT
		UNDEFINED	ALS	POTENTIAL IMPACTS FROM LAND DEVELOPMENT AND RUNOFF
VT08-06	GRAVES BROOK (MOUTH UPSTREAM TO RM 0.3)	SEDIMENT	ALS	RESIDENTIAL WATERSHED, SOME AGRICULTURE, RIPARIAN ENCROACHMENTS
	THATCHER BROOK (WATERBURY TO WATERBURY CTR)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT08-07	BRYANT BROOK	SEDIMENT, NUTRIENTS	ALS, AES, AH	NEEDS SAMPLING AND STRESSOR ID
	WINOOSKI RIVER (10 MILES)	LOW D.O.	ALS	POSSIBLE DISSOLVED OXYGEN PROBLEMS FROM HYPOLIMNETIC WITHDRAWAL OF UNLICENSED HYDRO DAM
	WINOOSKI RIVER (VT 14 BRIDGE UP TO 2ND RT 2 BRIDGE)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT08-10	HUNTINGTON RIVER	E. COLI	CR	THREE SEASONS OF MONITORING WITH ELEVATED E. COLI LEVELS. SOURCES NEED FURTHER EVALUATION. ONE SEGMENT LISTED ON 303d.
	HUNTINGTON RIVER (HUNTINGTON TO HUNTINGTON CTR)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT08-12	BIG SPRUCE BROOK (RM 0.1 UP TO HEADWATERS, APPROX 0.5 MI)	SEDIMENT, ACID	ALS	SEDIMENT SOURCE(S) NEED FURTHER ASSESSMENT; HYDROLOGIC MODIFICATION; pH SHOCK IN SPRINGTIME; BUGS FAIR IN 2000 AND GOOD-FAIR IN 2003
	EAST BRANCH, LITTLE RIVER	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	LAND DEVELOPMENT, AGRICULTURAL RUNOFF; MORPHOLOGICAL INSTABILITY (MOSCOW/STOWE TO STERLING BROOK)
	LITTLE RIVER, WEST BRANCH (RM 7.0 TO RM 7.5)	SEDIMENT	ALS	IMPACTS MAY BE RELATED TO PAST CONSTRUCTION EROSION
	LONG TRAIL TRIBUTARY (LOWEST 0.1 MILES)	SEDIMENT, ACID	ALS	SEDIMENT SOURCE(S) NEED FURTHER ASSESSMENT; pH SHOCK IN SPRINGTIME

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Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT08-12	WEST BRANCH LITTLE RIVER (FROM RM 7.5 UPSTREAM FOR 0.75 MI)	SEDIMENT	ALS	STORMWATER FLOWS & RUNOFF FROM DEVELOPED/-ING AREA; HYDROLOGIC CHANGE; POSSIBLE SPRINGTIME pH SHOCK
	WEST BRANCH LITTLE RIVER (RM 8.5 UP TO HEADWATERS)	SEDIMENT, ACID	ALS	SEDIMENT SOURCE(S) NEED FURTHER ASSESSMENT; pH SHOCK IN SPRINGTIME
VT08-13	HANCOCK BROOK	ACID	ALS	LOW pH SHOCK IN SPRINGTIME
	MINISTER BROOK	ACID	ALS	LOW SPRINGTIME pH, GRAVEL ROAD RUNOFF
VT08-15	JAIL BRANCH, BARRE CITY AND BELOW (1.5 MILES)	SEDIMENT, NUTRIENTS, E. COLI	ALS	LAND DEVELOPMENT; EROSION/SEDIMENTATION; URBAN RUNOFF
	JAIL BRANCH, WASHNGTON/ORANGE AREA	E. COLI	CR	ELEVATED BACTERIA LEVELS; SOURCE(S) UNKNOWN
VT08-16	STEVENS BRANCH, FROM BARRE CITY LIMITS TO MOUTH, 5.8 MILES	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS	URBAN RUNOFF INCLUDING SUSPECTED FLOOR DRAINS FROM COMMERCIAL BUILDINGS ON RIVER
VT08-17	DOG RIVER, 3 AREAS (ROXBURY, RIVERTON, NORTHFIELD FALLS)	E. COLI	CR	RESIDENTIAL STRAIGHT PIPES &/OR FAILED SEPTIC SYSTEMS
VT08-18	MAD RIVER (WARREN DAM UP TO RT 100)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY; CONTRIBUTIONS FROM NEARBY GRAVEL/SAND PIT
VT08-20	FREEMAN BROOK	E. COLI	CR	FAILED/FAILING SEPTIC SYSTEMS
	MILL BROOK	SEDIMENT, IRON	ALS, 2CR	LAND DEVELOPMENT, ROAD RUNOFF, CHANNEL ALTERATIONS
VT09-01	WHITE RIVER (MOUTH TO BETHEL)	E. COLI	CR	ELEVATED BACTERIA LEVELS EARLY 1990's AND 2001-2003. SOURCES UNKNOWN
	WHITE RIVER, WEST HARTFORD	METALS (Ni, Cr)	ALS	ELEVATED LEVELS OF Cr & Ni IN SEDIMENT
VT09-04	FIRST BRANCH WHITE RIVER	E. COLI	CR	ELEVATED LEVELS OF E.COLI BACTERIA, SOURCES UNKNOWN
	FIRST BRANCH, WHITE RIVER, CHELSEA TO MOUTH	SEDIMENT, TEMPERATURE	ALS, 2CR	SOIL & STREAMBANK EROSION, LOSS OF RIPARIAN VEGETATION
VT09-05	KINGSBURY BROOK	TEMPERATURE, NUTRIENTS	ALS	AG RUNOFF, LOSS OF RIPARIAN VEGETATION
	SECOND BRANCH WHITE RIVER, EASTBRKFLD TO 1 MI ABOVE WHITE (17 MI)	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION
VT09-06	3RD BRANCH (WHITE RIVER), AYERS BRK TO BETHEL (11 MILES)	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS	STORMWATER & AGRICULTURAL RUNOFF, LIVESTOCK ACCESS, LOSS RIPARIAN VEGETATION, BANK EROSION

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Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT09-06	AYERS BROOK	METALS (Ni, Cr)	ALS	ELEVATED LEVELS OF Cr & Ni IN SEDIMENT
	AYERS BROOK (MOUTH UP TO BROOKFIELD GULF)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
	COLD BROOK	SEDIMENT, NUTRIENTS, E. COLI, ORG ENRICHMENT	AES, ALS, CR	AGRICULTURAL RUNOFF, STREAMBANK EROSION; BUGS FAIR-POOR 2001
	THIRD BRANCH WHITE RIVER	E. COLI	CR	ELEVATED BACTERIA LEVELS, SOURCES UNKNOWN
	THIRD BRANCH, WHITE RIVER (BETHEL UP TO RANDOLPH)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT09-07	CLARK BROOK	ACID	ALS	ACID PRECIPITATION
	HANCOCK BRANCH	ACID, SEDIMENT	ALS	ACID PRECIPITATION, STREAMBANK EROSION
VT10-01	OTTAUQUECHEE RIVER, TAFTSVILLE DAM TO HARTLAND RESERVOIR	E. COLI, NUTRIENTS	CR, ALS	FAILED/FAILING SEPTIC SYSTEMS; FERTILIZED TURF, HORSE FARMS
VT10-06	FALLS BROOK (3 MILES)	SEDIMENT	ALS	LAND DEVELOPMENT; EROSION; STREAMBANK DESTABILIZATION
	KENT POND BROOK	TEMPERATURE, LOW DO	ALS	BIOLOGY NOT SUPPORTING BELOW POND (2 YEAR), POSSIBLE IMPACTS FROM IMPOUNDMENT
	WEST BRANCH OF ROARING BROOK & UPPER ROARING BROOK (APPROX 3 MILES)	SEDIMENT	AES, ALS	LAND DEVELOPMENT;EROSION; ROAD RUNOFF
VT10-07	KEDRON BROOK - WOODSTOCK	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	HORSE RECREATION ACTIVITY; PASTURE; ROAD RUNOFF; LOSS OF RIPARIAN VEGETATION; GOLF COURSE
VT10-10	BARNARD BROOK	SEDIMENT, TEMPERATURE	ALS	SOURCE(S) NEED FURTHER ASSESSMENT
	GULF STREAM BROOK	SEDIMENT	2CR	GRAVEL ROAD MAINTENANCE
VT10-11	BLACK RIVER, 2.5 TO 7.5 MILES ABOVE MOUTH	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	CONTRIBUTIONS FROM URBAN RUNOFF, LAND DEVELOPMENT
VT10-14	JEWELL BROOK	ARSENIC	ALS, CR, 2CR	ARSENIC IN SEDIMENT FROM FORMER MILL
VT10-16	NO. BRANCH BLACK RIVER ABOVE STOUGHTON POND	SEDIMENT, NUTRIENTS, E. COLI	AES, ALS, CR	SOURCE(S) NEED FURTHER ASSESSMENT; NOTABLE EROSION
VT11-01	LOWER WILLIAMS RIVER (MOUTH UPSTREAM TO MIDDLE BRANCH CONFLUENCE)	SEDIMENT, NUTRIENTS, TEMPERATURE	AES, ALS, CR	ENCORACHMENTS & RUNOFF FROM AGRICULTURE & DEVELOPMENT, POOR RIPARIAN CONDITION

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Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT11-05	LOWER SAXTONS RIVER	SEDIMENT, TEMPERATURE	AES, ALS	POOR RIPARIAN CONDITION, CHANNEL MODIFICATION, NEED FISH COMMUNITY DATA
VT11-14	WARDSBORO BROOK, FROM WEST WARDSBORO TO MOUTH (7 MILES)	SEDIMENT; TEMPERATURE	ALS	STREAMBANK EROSION; LAND DEVELOPMENT; ROAD RUNOFF; CHANNEL WIDENING; LOSS RIPARIAN VEGETATION
VT11-16	WINHALL RIVER (I.P. CO. BRIDGE TO MOUTH)	SEDIMENT, TEMPERATURE	AES, ALS	CHANNEL HABITAT CHANGE, ROAD RUNOFF, LOSS RIPARIAN VEGETATION; EROSION/SEDIMENTATION
VT13-01	CT RIVER, WILDER DAM TO ASCUTNEY VILLAGE (20.5 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT13-02	CT RIVER, ASCUTNEY VILLAGE TO BELLOWS FALLS DAM (21.5 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT13-03	CT RIVER, BELOW BELLOWS FALLS DAM TO WEST RIVER CONFL (24 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT13-04	CT RIVER, ABOVE VERNON DAM	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT13-05	CT RIVER, BELOW VERNON DAM (5.5 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT13-07	LULLS BROOK	SEDIMENT	AES, ALS	SEDIMENTATION FROM GRAVEL ROAD RUNOFF & OTHER SOURCES; NEEDS ADDITIONAL ASSESSMENT
VT13-08	MILL BROOK, FROM READING THRU BROWNSVILLE TO MILL POND (APPROX 8 MI)	E. COLI, TEMPERATURE, SEDIMENT	AES, ALS, CR	NEEDS FURTHER ASSESSMENT
VT13-10	COMMISSARY BROOK, TRIB TO CT RIVER, ROCKINGHAM	SEDIMENT	AES, ALS	MINERAL EXTRACTION RELATED RUNOFF, DISCHARGES & EROSION; HABITAT DEGRADATION
VT14-04	WAITS RIVER, BELOW SOUTH BRANCH CONFLUENCE	SEDIMENT, TEMPERATURE	ALS, 2CR	HABITAT ALTERATION, CHANNEL WIDENING, EROSION, LAND RUNOFF
VT14-07	WELLS RIVER	METALS (Fe)	AES	NEWBURY LANDFILL LEACHATE ENTERING SURFACE WATER VIA GROUNDWATER
VT14-09	STEVENS RIVER (US RT 5 UP TO I-91)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT15-01	PASSUMPSIC RIVER, EAST-WEST BR CONFL TO VAIL STATION (5.6 MILES)	SEDIMENT, E. COLI	AES, ALS, CR	URBAN RUNOFF
	PASSUMPSIC RIVER, GREAT FALLS DAM TO PIERCE MILLS DAM (1.5 MILES)	SEDIMENT, E. COLI	AES, ALS, CR	URBAN RUNOFF
VT15-03	SIMPSON BROOK	UNDEFINED	ALS	IMPACTS TO FISH COMMUNITY, UNDETERMINED SOURCES

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Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT15-04	SLEEPERS RIVER	METALS (Ni)	ALS	ELEVATED LEVELS OF Ni IN SEDIMENT
		OIL	AES, CR, 2CR	FAIRBANKS-MORSE FOUNDRY SITE: OIL SPILLS, OTHER POSSIBLE CONTAMINANTS
VT15-05	UNNAMED OUTLET STREAM OF LILY POND IN LYNDON	PRIORITY ORG (TCE), METALS (IN SEDIMENT)	DWS	PARKER LANDFILL RECEIVED HAZARDOUS WASTE; CONTAMINATED GROUNDWATER & POTENTIALLY CONTAM'D SURFACE WATER (THREAT)
VT15-08	DISH MILL BROOK, MOUTH TO RM 1.3	SEDIMENT, HYDROLOGIC ALTERATIONS	ALS	SCOUR EVENTS FROM INCREASED PEAK FLOWS; PERIODIC SEDIMENTATION ISSUES
	TRIB TO DISH MILL BROOK	SEDIMENT	ALS	HIGH EMBEDDEDNESS, EROSION FROM PARKING AREAS
VT15-09	GAGE BROOK	E. COLI	CR	SAMPLING INDICATES ELEVATED E. COLI LEVELS, SOURCES NEED FURTHER EVALUATION
VT16-06	CT RIVER, McINDOES RESERVOIR	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN ALL FISH
	CT RIVER, WELLS RIVER CONFLUENCE UPSTRM TO DODGE FALLS (APPROX 5 MI)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT16-07	CT RIVER, WELLS RIVER CONFLUENCE DOWNSTRM TO WILDER DAM (47.3 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
VT16-08	CLOUGH BROOK	ACID	ALS	MEDIUM TO LOW BUFFERING, LOW pH
	LEACH CREEK (VT 102 UP TO WALLACE POND)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT16-09	WILLARD STREAM (MOUTH UP TO VT 102)	SEDIMENT	AES, ALS	MORPHOLOGICAL INSTABILITY
VT16-10	EAST BRANCH, NULHEGAN RIVER	SEDIMENT	AES, ALS	SEDIMENTATION; SILVICULTURAL EROSION
VT16-11	MURPHY BROOK	SEDIMENT	ALS	LOGGING ROADS
VT16-16	FIRST BROOK	SEDIMENT	ALS	LAND DEVELOPMENT, AGRICULTURAL RUNOFF
VT17-01	JOHNS RIVER	NITROGEN	ALS	ELEVATED NITROGEN LEVELS IN 2005 AND 2006; FISH COMMUNITY IMPACTS
VT17-01L01	LAKE MEMPHREMAGOG (Newport)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE
VT17-01L02	SOUTH BAY (Newport)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE
VT17-04	CLYDE RIVER, MOUTH TO NEWPORT 1,2,3 HYDRO DAM	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE

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Waterbody ID	Segment Name/ Description	Possible Pollutant(s)	Possible Use(s) Impaired	Possible Surface Water Quality Problem Needing Assessment
VT17-04	CLYDE RIVER, WEST CHARLESTON DOWN TO LAKE SALEM	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE
	TRIB TO CLYDE RIVER	UNDEFINED	ALS, DWS	UNNAMED TRIB. IN NEWPORT HAD 28K GAL SOLVENT DUMPED IN PIT (FILLED) AS THREAT
VT17-04L04	LAKE SALEM (Derby)	E. COLI	CR	UNKNOWN SOURCE OF BACTERIA CONTAMINATION IN INLET STREAMS AND LAKE
VT17-04L06	CLYDE POND (Derby)	MERCURY	FC	ELEVATED LEVELS OF MERCURY IN WALLEYE
VT17-08	BARTON RIVER, BELOW ETHAN ALLEN WETLANDS	TOXICS	ALS	NEED FISH COMMUNITY AND SEDIMENT MONITORING
VT17-09	BLACK RIVER, MOUTH UPSTREAM TO COVENTRY FALLS (6 MILES)	MERCURY	FC	ELEVATED LEVELS OF Hg IN WALLEYE

Part D - Waters with Completed and Approved TMDLs

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.

A statewide map further illustrating designated river and stream waterbodies and waterbody designations for Lake Champlain, Lake Memphremagog and South Bay can be obtained upon request from the Water Quality Division, Department of Environmental Conservation in Waterbury, Vermont.

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

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 date of EPA approval.

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*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
VT02-01	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
VT03-01	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
VT03-07	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
VT03-09	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
VT03-11L01	NORTH POND (Bristol)	ACID	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT03-11L02	GILMORE POND (Bristol)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
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
VT03-18L07	LITTLE MUD (Mt. Tabor)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
VT04-01L01	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT04-01L01	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT04-01L02	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT04-01L02	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT04-02L01	SOUTHERN SECTION (A) - LAKE CHAMPLAIN (Bridport)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT04-02L01	SOUTHERN SECTION - LAKE CHAMPLAIN (Bridport)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT04-02L01	SOUTHERN SECTION (B) - LAKE CHAMPLAIN (Bridport)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT05-01L01	MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT05-01L01	MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-04L01	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT05-04L01	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-04L02	ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-07L01	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	ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT05-09	INDIAN BROOK, RM 5.8 (SUZIE WILSON RD) TO RM 9.8	STORMWATER	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	EPA APPROVED TMDL AUGUST 21, 2008
VT05-09L01	MALLETTS BAY - LAKE CHAMPLAIN (Colchester)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-10	ENGLESBY BROOK, MOUTH TO RM 1.3	STORMWATER	STORMWATER RUNOFF, BLANCHARD BEACH CLOSURE	EPA APPROVED TMDL SEPTEMBER 30, 2007
VT05-10L01	BURLINGTON BAY - LAKE CHAMPLAIN (Burlington)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-11	LAPLATTE RIVER, AT MOUTH	MERCURY	ELEVATED LEVELS OF Hg IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-11	MUNROE BROOK, MOUTH TO RM 2.8	STORMWATER	STORMWATER RUNOFF, EROSION, LAND DEVELOPMENT	EPA APPROVED TMDL AUGUST 21, 2008

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT05-11	POTASH BROOK, MOUTH TO RM 5.2	STORMWATER	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	EPA APPROVED TMDL DECEMBER 19, 2006
VT05-11	BARTLETT BROOK, MOUTH TO RM 0.7	STORMWATER	STORMWATER RUNOFF, LAND DEVELOPMENT, EROSION	EPA APPROVED TMDL SEPTEMBER 30, 2007
VT05-11L01	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT05-11L01	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	PHOSPHORUS	P ENRICHMENT	EPA APPROVED LAKE CHAMPLAIN PHOSPHORUS TMDL SEPTEMBER 25, 2002
VT06-01	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
VT06-06L01	KINGS HILL POND (Bakersfield)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
VT07-01	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	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
VT08-01	WINOOSKI RIVER, MOUTH TO WINOOSKI DAM	MERCURY	ELEVATED LEVELS OF Hg IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007
VT08-02	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	MOREHOUSE BROOK, MOUTH TO RM 0.6	STORMWATER	STORMWATER RUNOFF, EROSION	EPA APPROVED TMDL SEPTEMBER 30, 2007
VT08-02	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	CENTENNIAL BROOK, MOUTH TO RM 1.2	STORMWATER	STORMWATER RUNOFF, LAND DEVELOPMENT; EROSION	EPA APPROVED TMDL SEPTEMBER 30, 2007

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT08-09	WINOOSKI RIVER - CABOT VILLAGE	E. COLI	RESIDENTIAL DIRECT DISCHARGES &/OR FAILED SEPTIC SYSTEMS	EPA APPROVED TMDL MARCH 8, 2001
VT08-13L01	HARDWOOD POND (Elmore)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
VT09-07L01	SKYLIGHT POND (Ripton)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 20, 2004
VT10-14	BLACK RIVER, BELOW LUDLOW WWTF FOR APPROX. 0.5 MILES	PHOSPHORUS	NUTRIENT ENRICHMENT FROM WWTF	EPA APPROVED TMDL MAY 1, 2001
VT11-08L01	SUNSET LAKE (Marlboro)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
VT11-15	STYLES BROOK (2 MILES)	SEDIMENT	LAND DEVELOPMENT, HYDROLOGIC MODIFICATION	EPA APPROVED TMDL JUNE21, 2002
VT11-15	TRIB #1, NO. BRANCH, BALL MTN BROOK, ABOVE GOLF COURSE POND	SEDIMENT	URBAN RUNOFF, LAND DEVELOPMENT IN STEEP AREA, EROSION	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
VT11-16L01	STRATTON POND (Stratton)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
VT11-18L06	MOSES (Weston)	ACID	ATMOSPHERIC DEPOSITION: CRITICALLY ACIDIFIED; CHRONIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT12-01L01	HARRIMAN RESERVOIR (Whitingham)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 20, 2004
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
VT12-03	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)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
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
VT12-03L02	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	UPPER DEERFIELD RIVER, BELOW SEARSBURG DAM	MERCURY	ELEVATED LEVELS OF Hg IN ALL FISH	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT12-04L01	ADAMS RESERVOIR (Woodford)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
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
VT12-05L01	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
VT14-07L01	LEVI POND (Groton)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 20, 2004
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
VT17-02L02	TURTLE POND (Holland)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003

Part D. Waters in this section have completed and EPA-approved TMDLs.

WaterbodyID	*Name*	*Pollutant*	*Previously Identified Problem*	*Status*
VT17-02L03	ROUND POND (Holland)	ACID	ATMOSPHERIC DEPOSITION: EXTREMELY SENSITIVE TO ACIDIFICATION; EPISODIC ACIDIFICATION	EPA APPROVED TMDL SEPTEMBER 30, 2003
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	LAKE SALEM (Derby)	MERCURY	ELEVATED LEVELS OF MERCURY IN WALLEYE	EPA APPROVED REGIONAL MERCURY TMDL ON DECEMBER 20, 2007

Part E - Waters Altered by Exotic Species

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 and identifies the boundary of each river basin has been referenced earlier.

A statewide map further illustrating designated river and stream waterbodies and waterbody designations for Lake Champlain, Lake Memphremagog and South Bay 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.

Use(s) Impacted - An indication of which designated or existing uses (as defined in the VWQS) are impacted by exotic 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 exotic species problem 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.

Part E. Waters appearing below are altered by exotic 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	LAKE PARAN (Bennington)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; NOTED NATURAL MILFOIL DECLINE IN 1991
VT02-01	DISCRETE AREAS OF LOWER POULTNEY RIVER	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	HANDPULLING ONGOING SINCE 1998 BY TNC
VT02-01L01	COGGMAN POND (West Haven)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	VTDEC/TNC HANDPULLING ONGOING SINCE 1999
		AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	CONFIRMED POPULATION IN 1998; VTDEC/TNC HANDPULLING ONGOING
VT02-02L06	BLACK POND (Hubbardton)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; WEEVIL AUGMENTATION (1997-2000)
VT02-02L07	MILL POND (PARSONS MILL POND) (Benson)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT WATER CHESTNUT GROWTH	VTDEC/TNC HANDPULLING ONGOING
VT02-03	CASTLETON RIVER	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	NO CONTROL
VT02-03L05	LAKE BOMOSEEN (Castleton)	ALS, CR	ZEBRA MUSSEL INFESTATION	ZM POPULATION DISCOVERED IN 1999; FIRST WATER INTAKE LINE CLOGGED IN LATE 2001; ADULTS COMMON THRUOUT MOST OF LAKE IN 2005
		AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; WEEVIL AUGMENTATION (93, 94, 97); 1997 AND 2001 MILFOIL DECLINES OF UNKNOWN CAUSE
VT02-03L06	GLEN LAKE (Castleton)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; NOTED NATURAL MILFOIL DECLINE IN 1992; WQD WEEVIL HARVEST IN 1999-2007; MIDDLEBURY COLLEGE WEEVIL HARVEST IN 2005 AND 2006
VT02-05L03	LAKE ST. CATHERINE (Wells)	AES, ALS	ALEWIVES	ALEWIVES CONFIRMED IN 1997, NOW ABUNDANT THRUOUT LAKE; VT DEPT OF FISH AND WILDLIFE CONTROL ALTERNATIVES REPORT (2004);
VT03-04	LEICESTER RIVER	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	HAND PULLING
VT03-06L01	BEAVER POND (PROCTR)	AES, ALS, CR, 2CR	DENSE EURASIAN WATERMILFOIL GROWTH IN MOST SHORELINE AREAS	NO CONTROL ACTIVITIES
VT03-07L01	VERGENNES WATERSHED (Bristol)	AES, ALS, CR, 2CR	DENSE EURASIAN WATERMILFOIL GROWTH IN MOST SHORELINE AREAS	WEEVIL INTRODUCED (93-94); LIMITED EXPERIMENTAL INTRO - POOR RESPONSE; NO FURTHER CONTROL ACTIVITIES

Part E. Waters appearing below are altered by exotic 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
VT03-08L02	CEDAR LAKE (MONKTON POND) (Monkton)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; WEEVIL AUGMENT'N (97-98); NOTED NATURAL MILFOIL DECLINE IN 1997, RETURNED TO MODERATE IN 2000
VT03-10L01	RICHVILLE POND (Shoreham)	AES, ALS, CR, 2CR	DENSE EURASIAN WATERMILFOIL GROWTH	NO CONTROL ACTIVITIES
VT03-14L06	BEAVER (MENDON)	AES, ALS, CR, 2CR	DENSE EURASIAN WATERMILFOIL GROWTH IN MOST SHORELINE AREAS	NO CONTROL ACTIVITIES; TOWN IS INVESTIGATING REMOVING DAM
VT03-15L01	CHIPMAN LAKE (TINMOUTH POND) (Tinmouth)	AES, ALS, CR. 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	POPULATION DISCOVERED IN 1998; WEEVIL PRESENT; ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM; SOLARBEE INSTALLED IN 2006 AS EXPERIMENTAL CONTROL FOR EWM
VT04-01L01	OTTER CREEK SECTION - LAKE CHAMPLAIN (Ferrisburg)	ALS, CR	ZEBRA MUSSEL INFESTATION	CHAMPLAIN II & DIAMOND ISL STONE BOAT WRECKS COVERED; NATIVE MUSSELS MOSTLY EXTIRPATED; NEARLY ALL SUITABLE SUBSTRATE COVERED
		AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
VT04-01L02	PORT HENRY SECTION - LAKE CHAMPLAIN (Ferrisburg)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR	ZEBRA MUSSEL INFESTATION	NEARLY ALL SUITABLE SUBSTRATE COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
VT04-02	WHITNEY CREEK	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	NO CONTROL
VT04-02L01	SOUTHERN SECTION - LAKE CHAMPLAIN (Bridport)	AES, ALS, CR, 2CR	DENSE WATER CHESTNUT GROWTH	ONGOING HARVESTING; NORTHWARD EXPANSION HALTED IN 1999
		ALS, CR	ZEBRA MUSSEL INFESTATION	NEARLY ALL SUITABLE SUBSTRATE COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
		AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
VT04-03	EAST CREEK, ORWELL	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	HANDPULLING ONGOING BY TNC

Part E. Waters appearing below are altered by exotic 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
VT04-03	SOUTH FORK OF EAST CREEK, ORWELL	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	HANDPULLING ONGOING BY TNC
VT04-04L04	BROOKSIDE POND	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	HANDPULLING BY VTDEC
VT05-01L01	MISSISQUOI BAY - LAKE CHAMPLAIN (Alburg)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR	ZEBRA MUSSEL INFESTATION	ADULT ZEBRA MUSSELS FOUND AT BRIDGE (1998). ADULTS FOUND N. OF BRIDGE,W. OF MISSISQUOI R. (2004-2005), THROUGHOUT BAY IN 2007
	MISSISQUOI BAY-LAKE CHAMPLAIN (Alburg)	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	CONFIRMED 2005; HANDPULLING ONGOING BY VTDEC, MNWR AND OTHERS
VT05-01L03	BULLIS POND	AES, ALS, CR, 2CR	WATER CHESTNUT INFESTATION	HANDPULLING BY VTDEC
VT05-04L01	NORTHEAST ARM - LAKE CHAMPLAIN (Swanton)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN; WEEVILS INTRODUCED INTO PELOTS BAY IN 1999 AND 2000
		ALS, CR, DWS	ZEBRA MUSSEL INFESTATION	ADULT ZEBRA MUSSELS EXPANDING RAPIDLY
VT05-04L02	ISLE LAMOTTE - LAKE CHAMPLAIN (Alburg)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION IN SOME NEAR SHORE AREAS	WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR, DWS	ZEBRA MUSSEL INFESTATION	NEARLY ALL SUITABLE SUBSTRATE COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
VT05-07L01	ST. ALBANS BAY - LAKE CHAMPLAIN (St. Albans)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	HARVESTING IN PAST AND AGAIN IN 2005; 2007 HANDPULLING PLUS NUISANCE NATIVES; WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR	ZEBRA MUSSEL INFESTATION	ADULT ZEBRA MUSSELS EXPANDING RAPIDLY

Part E. Waters appearing below are altered by exotic 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
VT05-09L01	MALLETTS BAY - LAKE CHAMPLAIN (Colchester)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR	ZEBRA MUSSEL INFESTATION	NATIVE MUSSELS IMPACTED IN OUTER MALLETTS BAY
VT05-10L01	BURLINGTON BAY - LAKE CHAMPLAIN (Burlington)	AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION IN SOME NEAR SHORE AREAS	WEEVILS PRESENT IN LAKE CHAMPLAIN
		ALS, CR, DWS	ZEBRA MUSSEL INFESTATION	ZEBRA MUSSELS ON GEN. BUTLER WRECK; NEARLY ALL SUITABLE SUBSTRATE IN BAY COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
VT05-10L02	MAIN SECTION - LAKE CHAMPLAIN (South Hero)	ALS, CR, DWS	ZEBRA MUSSEL INFESTATION	NEARLY ALL SUITABLE SUBSTRATE COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
		AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION IN SOME NEAR SHORE AREAS	WEEVILS PRESENT IN LAKE CHAMPLAIN
VT05-11L01	SHELBURNE BAY - LAKE CHAMPLAIN (Shelburne)	ALS, CR, DWS	ZEBRA MUSSEL INFESTATION	NEARLY ALL SUITABLE SUBSTRATE COVERED; EXPANDING ONTO SOFT SUBSTRATE; NATIVE MUSSELS MOSTLY EXTIRPATED
		AES, ALS, CR, 2CR	EURASIAN WATERMILFOIL INFESTATION	WEEVILS PRESENT IN LAKE CHAMPLAIN
VT05-11L02	LAKE IROQUOIS (Hinesburg)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; WEEVIL AUGMENTATION (1996-2007)
VT06-05L01	METCALF POND (Fletcher)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	
VT06-05L03	FAIRFIELD POND (Fairfield)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; WEEVIL AUGMENTATION 2005 AND 2006 (MIDDLEBURY COLLEGE); ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM
VT07-03L03	ARROWHEAD MOUNTAIN LAKE (Milton)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; NOTED NATURAL MILFOIL DECLINE IN 1995; WEEVIL AUGMENTATION (98-99)

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity
VT07-08L02	LAKE ELMORE (Elmore)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	POPULATION DISCOVERED IN 2002, ALREADY MODERATE IN DENSITY; ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM
VT08-01	WINOOSKI RIVER	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	NO CONTROL
VT11-07	WEST RIVER - RETREAT MEADOWS AREA	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	HAND PULLING
VT12-01L02	SADAWGA LAKE	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL	NO CONTROL
VT13-02	CT RIVER, HOYTS LNDNG, WILDER DAM, TRANSCANADA LAUNCH	AES, ALS, CR, 2CR	MODERATE EURASIAN WATERMILFOIL INFESTATION; INFESTATION SINCE 1995	NO CONTROL ACTIVITIES
VT13-08L01	MILL POND (KENNEDYS POND) (Windsor)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	SOME ONGOING NON-CHEMICAL CONTROLS
VT14-03L01	LAKE FAIRLEE (Thetford)	AES, ALS, CR. 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; AGGRESSIVE ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM
VT16-19L01	ROUND POND (Newbury)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; NOTED NATURAL MILFOIL DECLINE IN 1993; NO CONTROL ACTIVITIES
VT16-19L03	HALLS LAKE (Newbury)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM
VT17-04L05	LAKE DERBY (Derby)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	ONGOING LOCAL NON-CHEMICAL CONTROL PROGRAM
VT17-07L01	BROWNINGTON POND (Brownington)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; NOTED NATURAL DECLINE (1989) - LINKED TO WEEVIL POPULATION; MILFOIL POPULATION VARIES WITH WEEVIL POPULATION
VT17-10L01	LAKE ELLIGO (ELIGO POND) (Craftsbury)	AES, ALS, CR, 2CR	LOCALLY ABUNDANT EURASIAN WATERMILFOIL GROWTH	WEEVIL PRESENT; AGGRESSIVE LOCAL NON-CHEMICAL CONTROL PROGRAM; WEEVIL AUGMENTATION 2005 AND 2006

Part F - Waters Altered by Flow Regulation

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.

A statewide map further illustrating designated river and stream waterbodies and waterbody designations for Lake Champlain, Lake Memphremagog and South Bay 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.

Use(s) Impacted - An indication of which designated or existing uses (as defined in the VWQS) 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). .

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT01-03	BASIN BROOK	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5017 - NORTH BENNINGTON WATER DEPT; SERVES AS BACK UP SUPPLY SOURCE TO GRAVEL WELL FIELD	
	BOLLES BROOK/ROARING BRANCH, INTAKE TO CITY STREAM CONFLUENCE	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5016 - BENNINGTON WATER DEP'T; ASSESSMENT OF WATER WITHDRAWAL IMPACT DIFFICULT GIVEN LOW PRODUCTIVITY & LOW pH EFFECT	
VT02-01	POULTNEY RIVER, MOUTH TO CARVERS FALLS (10.4 MILES)	ALL USES	ARTIFICAL FLOW REGULATION & CONDITION BY HYDRO; DEWATERING OF LARGEST/HIGHEST WATERFALL IN VT	PRESENTLY IN FERC LICENSING PROCESS; NY 401 ISSUED (4/95); NEPA PROCESS DONE (3/97); VT 401 FILING (3/98); SECTION 401 WQ CERT APPL'N UNDER REVIEW BY VT DEC	2008
VT03-04	LEICESTER RIVER, FROM DAM ON LAKE DUNMORE TO 1.0 MILE DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	UNLICENSED FACILITY	2010
	LEICESTER RIVER, FROM SALISBURY DAM TO 5 MILES DOWNSTREAM	ALS	POSSIBLE DOWNSTREAM FISH PASSAGE PROBLEM AT DAM (THREAT)	UNLICENSED FACILITY	2010
		ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	UNLICENSED FACILITY	2010
	SILVER LAKE STREAM, FROM DAM ON LAKE TO 0.6 MILES DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	401 & LICENSE APPLICATION FILED (5/94); SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW	2008
	SUCKER BROOK, 1.5 MILES TO LAKE DUNMORE INCLUDING FALLS OF LANA	ALS	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	401 & LICENSE APPLICATION FILED (5/94); SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW	2008

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT03-04	SUCKER BROOK, FROM SUGAR HILL RESERVOIR DAM TO 2.5 MILES DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO, LOW D.O.	401 & LICENSE APPLICATIONS FILED 5/94; SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW	2008
VT03-04L01	SUGAR HILL RESERVOIR (Goshen)	ALS	WATER LEVEL FLUCTUATION ALTERS AQUATIC BIOTA & WETLANDS	401 & LICENSE APPLICATION FILED (5/94); SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW	2008
VT03-04L02	SILVER LAKE (Leicester)	ALS	WATER LEVEL MGMT BY HYDRO MAY alter AQUATIC BIOTA	401 & LICENSE APPLICATION FILED (5/94); SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW	2008
VT03-04L05	LAKE DUNMORE (Salisbury)	ALS	WATER LEVEL MGMT BY HYDRO ALTERS AQUATIC BIOTA	LAKE ASSOC. HAS WATER LEVEL AGREEMENT W/CVPS	2010
VT03-05	OTTER CREEK, 0.1 MILES BELOW PROCTOR DAM	AES	ARTIFICIAL DEWATERING OF LARGE WATERFALL BY HYDRO	FERC LICENSE EXPIRES IN 2012	2012
VT03-06	FURNACE BROOK		LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWL POINT	BACKUP WATER SUPPLY FOR PROCTOR	
	KILN BROOK	ALS	LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5228 - PROCTOR WATER DEPT; MUNICIPALITY STARTED MONITORING STREAMFLOWS IN 2007 IN COOP WITH ANR	
VT03-12	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	EAST CREEK, CHITTENDEN RESERVOIR TO 4 MILES DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY DAM; ONLY LOCAL DRAINAGE BELOW	UNLICENSED FACILITY	2010
	EAST CREEK, FROM GLEN DAM TO 3.0 MILES DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	UNLICENSED FACILITY	2010
		ALS	POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT)	UNLICENSED FACILITY	2010

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT03-14	EAST CREEK, FROM PATCH DAM TO 2.4 MILES DOWNSTREAM	ALS	POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT)	UNLICENSED FACILITY	2010
		ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY HYDRO	UNLICENSED FACILITY	2010
	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)	
	TRIB TO EAST CREEK, HYDRO FACILITY TO EAST CK CONFLUENCE	ALS	LOW DO DOWNSTREAM OF HYDRO FACILITY	UNLICENSED FACILITY	2010
VT03-14L03	CHITTENDEN RESERVOIR (Chittenden)	ALS	WATER LEVEL FLUCTUATION BY HYDRO ALTERS AQUATIC BIOTA & WETLANDS	UNLICENSED FACILITY	2010
VT03-14L05	PATCH POND (Rutland)	ALS	WATER LEVEL FLUCTUATIONS MAY ALTER AQUATIC BIOTA	UNLICENSED FACILITY	2010
VT03-18	ROARING BROOK	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITDRAWAL POINT (THREAT)	WSID #5242 - WALLINGFORD WATER DISTRICT #1; SOURCE USED ONLY AS AN EMERGENCY SUPPLY	
VT05-02L01	LAKE CARMI (Franklin)	ALS	WATER LEVEL MGMT MAY ALTER AQUATIC HABITAT	NEED TO DETERMINE EXTENT, TIMING, AND IMPACT OF DRAWDOWNS. WATER LEVEL MONITORING IN 2006 AND 2007	
VT06-02	MISSISQUOI RIVER, BELOW ENOSBURG FALLS DAM (0.1 MILE)	ALS	ARTIFICIAL FLOW REGULTATION & CONDITION BY HYDRO	FERC LICENSE EXPIRES IN 2023	2023
VT06-04	LOVELAND BROOK	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5126 - RICHFORD	
VT06-08	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)	

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT06-08	UPPER MISSISQUOI RIVER, 4 MILES BELOW BAKERS FALLS DAM	ALS	POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT)	NO LONGER OPERATING	
VT07-03	TRIB TO LOWER LAMOILLE	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #2345 (VT WHEY CO. GEORGIA DAIRY IND PARK); NO LONGER UNDER DEC-WS JURISDICTION	
VT07-04	MID-LAMOILLE RIVER, IMMED. BELOW CADYS FALLS DAM (0.3 MILES)	ALS	POSSIBLE FISH PASSAGE PROBLEM AT DAM; LACK OF FLOWS TO SUPPORT AQUATIC HABITAT	FERC LICENSE EXPIRES IN 2015	2015
		AES	ARTIFICIAL DEWATERING OF FALLS BY HYDRO	CURRENT FERC LICENSE EXPIRES IN 2015	2015
VT07-07	LAMOILLE RIVER - HARDWICK LAKE TO LAKE LAMOILLE IN MO'VILLE (15.7 MI)	ALS	WOLCOTT DAM: POSSIBLE FISH PASSAGE PROBLEM AT DAM (THREAT)	UNLICENSED FACILITY	2011
		AES, ALS, 2CR	HARDWICK LAKE DAM: ARTIFICIAL FLOW REGIME DOWNRIVER		2011
		AES, ALS, 2CR	BELOW MORRISVILLE DAM: NO FLOW IN BYPASS IMPAIRS AESTHETICS, RECREATION, HABITAT	FERC LICENSE EXPIRES IN 2015	2015
		AES, ALS, 2CR	WOLCOTT DAM: ARTIFICIAL & POOR FLOW REGIME DOWNSTREAM	UNLICENSED FACILITY	2011
		AES, ALS	WOLCOTT DAM: IMPOUNDMENT WATER LEVEL FLUCTUATION BY HYDRO IMPAIRS AQUATIC HABITAT; EROSION	UNLICENSED FACILITY	2011
		ALS	POSSIBLE FISH PASSAGE PROBLEM AT DAMS (THREAT)	FERC LICENSE EXPIRES IN 2015	2015
VT07-07L01	LAKE LAMOILLE (Morristown)	ALS	WATER LEVEL FLUCT'N BY HYDRO MAY ALTER AQUATIC HABITAT	FERC LICENSE EXPIRES IN 2015	2015
VT07-08	ELMORE POND BROOK-FROM DAM TO 2.2 MILES DOWNSTREAM	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BY DAM	FERC LICENSE EXPIRES IN 2015	2015

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT07-08L02	LAKE ELMORE (Elmore)	ALS	WATER LEVEL FLUCT'N BY HYDRO MAY ALTER AQUATIC HABITAT	FERC LICENSE EXPIRES IN 2015	2015
VT07-13	BREWSTER RIVER (5.9 MILES)	ALS	ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW SMUGGLERS NOTCH SNOWMAKING WATER WITHDRAWAL	PARTIAL SUPPORT 5.9 MI (7.8 MI TOTAL LENGTH); SKI RESORT ON COMPLIANCE SCHEDULE	2009
	STERLING BROOK (0.8 MILE)	ALS	ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW SMUGGLERS NOTCH SNOWMAKING WATER WITHDRAWAL	NON-SUPPORT 0.8 MI (1.8 MI TOTAL LENGTH); SKI RESORT ON COMPLIANCE SCHEDULE	2009
	UNNAMED BROOK, TRIB TO BREWSTER RIVER (1 MILE)	ALS	ARTIFICIAL FLOW CONDITION, INSUFFICIENT FLOW BELOW MORSE RESERVOIR, USED FOR DOMESTIC WATER AND SNOWMAKING	NON-SUPPORT 1.0 MI (2.7 MI TOTAL LENGTH); SKI RESORT ON COMPLIANCE SCHEDULE FOR SNOWMAKING USE BUT NOT DOMESTIC WATER USE	
VT07-21	NICHOLS BRK (WOODBURY) BELOW DAMS ON E.LONG PD & NICHOLS PD (3.1 MI)	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION AT 2 DAMS	NO LONGER USED FOR HYDROELECTRIC PURPOSES; APP TO REBUILD NICHOLS POND DAM FILED 12/07	2008
VT07-21L01	EAST LONG POND (Woodbury)	ALS	WATER LEVEL FLUCTUATION BY HYDRO MAY ALTER AQUATIC HABITAT & ENDANGERED SPECIES	NEED TO DETERMINE CURRENT MANAGEMENT	
VT07-21L02	NICHOLS POND (Woodbury)	ALS	WATER LEVEL FLUCTUATION MAY ALTER AQUATIC HABITAT	DAM ORDER APPLICATION FILED ON 12/07	2008
VT07-21L05	HARDWICK LAKE (Hardwick)	AES, ALS	WATER LEVEL FLUCT'N BY HYDRO ALTERS AQUATIC HABITAT & WETLANDS	NO LONGER MANAGED FOR HYDRO; LAKE DRAINED DURING FALL WINTER FOR ICE CONTROL	2011
VT07-22L04	CASPIAN LAKE (Greensboro)	ALS	WATER LEVEL FLUCTUATION HAS POTENTIAL TO ALTER FISHERY	NO LONGER MANAGED FOR HYDRO	2009
VT08-01	LOWER WINOOSKI RIVER BELOW GORGE #18 DAM	AES	ARTIFICIAL FLOW CONDITION LIMITS DAM SPILLAGE	AESTHETICS STUDY REQUIRED IN ESSEX #19 401 SETTLEMENT (1993) REMAINS UNDONE	2009
VT08-04	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	WINOOSKI RIVER AT MIDDLESEX #2 DAM	AES	ARTIFICIAL DEWATERING OF BYPASS BY HYDRO	UNLICENSED FACILITY	2009

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT08-05	WINOOSKI RIVER, IMPOUNDMENT OF MIDDLESEX #2 HYDRO (2 MILES)	AES, ALS	WATER LEVEL FLUCTUATION BY HYDRO CAUSES IMPOUNDMENT STREAMBANK EROSION	UNLICENSED FACILITY	2009
VT08-06	TYLER BRK (O.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	MOLLYS FALLS BROOK (2 MILES)	ALL USES	ARTIFICIAL FLOW CONDITION CREATED BY HYDRO; BYPASSES ONE OF VT'S HIGHEST WATERFALLS	UNLICENSED FACILITY	2009
	SUCKER BROOK BELOW PEACHAM POND (1 MILE)	ALL USES	ARTIFICIAL FLOW REGULATION & CONDITION BELOW HYDRO DAM	UNLICENSED FACILITY	2009
VT08-09L03	PEACHAM POND (Peacham)	ALS	WATER LEVEL FLUCT'N BY HYDRO-RELATED DAM MAY ALTER AQUATIC HABITAT	UNLICENSED FACILITY	2009
VT08-09L05	MOLLYS FALLS RESERVOIR (Cabot)	ALS, CR, 2CR	WATER LEVEL FLUCT'N BY HYDRO ALTERS AQUATIC HABITAT & RECREATION	UNLICENSED FACILITY	2009
VT08-11	LOWER LITTLE RIVER BELOW HYDRO DAM (2.3 MILES)	ALL USES	ARTIFICIAL FLOW REGIME & CONDITION BY HYDRO	SECTION 401 WQ CERTIFICATION APPL'N UNDER REVIEW BY DEC	2009
VT08-11L02	WATERBURY RESERVOIR (Waterbury)	ALL USES	WATER LEVEL FLUCTUATION ALTERS ALL USES	CWA SECTION 401 WQ CERTIFICATION APPLICATION UNDER REVIEW BY VTDEC	2009
VT08-12	WEST BRANCH, LITTLE RIVER (8 MILES)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW MT MANSFIELD SNOWMAKING WATER WITHDRAWAL	NON-SUPPORT 2.2 MI, PARTIAL SUPPORT 5.8 MI (10.6 MI TOTAL LENGTH); SKI RESORT COMPLIANCE SCHEDULE INDEFINITE	
VT08-16	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	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)	

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT08-20	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	LOWER FLINT BROOK	ALS	ARTIFICIAL FLOW REGULATION; POSSIBLE LACK OF MINIMUM FLOW BELOW FISH HATCHERY WITHDRAWAL (THREAT)	CONDITION BASED ON ANR OBSERVATIONS	
VT09-07L04	SILVER LAKE (Barnard)	ALS	WATER LEVEL MGMT MAY ALTER AQUATIC HABITAT	DEC PREPARING TO PETITION WRP TO END WINTER DRAWDOWN	2009
VT10-01	LOWER OTTAUQUECHEE RIVER, BELOW NO. HARTLAND DAM (0.9 MILE)	AES, ALS, 2CR	ARTIFICIAL FLOW REGULATION & CONDITION	ANR AND USACOE NEGOTIATING TO BRING OPERATIONS AT CORPS DAMS/FACILITIES INTO COMPLIANCE WITH VT WQS; HOWEVER, LICENSED HYDRO FACILITY HAS DEFICIENT FLOWS	2021
	LOWER OTTAUQUECHEE RIVER, BELOW OTTAUQUECHEE WOOLEN MILL DAM (0.1 MI)	AES	ARTIFICIAL FLOW CONDITION, DEWATERING OF FALLS BY HYDRO		2011
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
VT11-05	SIGNAL HILL BROOK	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5303 - VT ACADEMY (EMERGENCY BACKUP)	
VT11-07	WEST RIVER, MOUTH TO GRASSY BROOK (12 MILES)	AH, 2CR	WIDE SHALLOW CHANNEL, LOSS OF RIPARIAN VEGETATION, USACOE DAM OPERATION		
VT11-08	STICKNEY BROOK (2.5 MILES)	ALS	ARTIFICIAL FLOW CONDITION, SEASONALLY DEVOID OF FLOW BELOW DIVERSION DAM; DREDGING	WSID # 5290 - BRATTLEBORO WATER DEP'T; WATER SUPPLY RESERVOIR ABOVE DAM; SEDIMENT & TEMPERATURE ALSO NOTED AS OTHER POSSIBLE POLLUTANTS	
VT11-10	WEST RIVER, BELOW BALL MTN DAM TO TOWNSHEND DAM IMPOUNDMENT (9 MILES)	ALL USES	ARTIFICIAL FLOW REGIME AT DAM	NO MINIMUM FLOW BY ACOE BASED ON ANY BIOLOGICAL/WQ CRITERIA; USACOE STUDYING STRUCTURAL MODIFICATIONS TO BRING OPERATIONS AT CORPS DAMS INTO COMPLIANCE WITH VT WQS	

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Waterbody ID	Segment Name/ Description	Use(s) Impacted	Surface Water Quality Problem	Current Status/Management or Control Activity	Projected WQS Compliance Year
VT11-10	WEST RIVER, TOWNSHEND DAM TO GRASSY BROOK	AH, 2CR	USACOE DAM OPERATION, IMPOUNDED WATERS		
VT11-10L01	BALL MOUNTAIN RESERVOIR (Jamaica)	ALS	UP & DOWNSTREAM FISH PASSAGE AT DAM - ESP. ANADROMOUS ATLANTIC SALMON	ANR AND USACOE NEGOTIATING TO BRING OPERATIONS AT CORPS DAMS INTO COMPLIANCE WITH VTWQS	
		AES, ALS	WATER LEVEL FLUCTUATION ALTERS AQUATIC HABITAT	ANR AND USACOE NEGOTIATING TO BRING OPERATIONS AT CORPS DAMS INTO COMPLIANCE WITH VTWQS	
VT11-16	MILL BROOK (1.6 MILES)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW BROMLEY SNOWMAKING WATER WIHDRAWAL	PARTIAL SUPPORT 1.6 MI (8 MI TOTAL LENGTH)	
	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). PERMITS ISSUED TO BROMLEY RESORT FOR ALTERNATIVE THAT WOULD ACHIEVE COMPLIANCE BUT STATUS UNCLEAR-RESORT NOT OPERATING	
VT11-18L01	HAPGOOD POND (Peru)	ALS	ANNUAL DRAWDOWNS ALTER AQUATIC HABITAT		
VT12-05	COLD BROOK (2.5 MILES)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW MT SNOW/HAYSTACK SHARED SNOWMAKING WATER WITHDRAWAL	PARTIAL SUPPORT 2.5 MI (5.3 MI TOTAL LENGTH)	
	NORTH BRANCH OF DEERFIELD RIVER (11.5 MILES)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW MT SNOW/HAYSTACK SNOWMAKING WATER WITHDRAWAL	NON-SUPPORT 2.2 MI, PART'L SUPPORT 9.3 MI (13.3 MI TOTAL LENGTH); MT SNOW FILED APPLICATION IN 12/07 TO ABANDON THIS SOURCE AND DEVELOP NEW INTAKE BELOW COLD BK CONFLUENCE	2009
	TRIB TO NORTH BRANCH (1 MILE)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW MT SNOW SNOWMAKING WATER WITHDRAWAL	PARTIAL SUPPORT 1 MI (1.5 MI TOTAL LENGTH); TO BE BROUGHT INTO COMPLIANCE WHEN NEW SOURCE BROUGHT ONLINE	2009
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	2018
VT13-02	CT RIVER, ABOVE BELLOWS FALLS DAM (21.5 MILES)	ALS	WATER LEVEL FLUCTUATION AT DAM; DEWATERED SHORELINES/WETLANDS	DOWNSTREAM FISH PASSAGE PROBLEM AT DAM RESOLVED; FERC LICENSE EXPIRES IN 2018	2018

Part F. Waters appearing below are altered by flow regulation. 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	Projected WQS Compliance Year
VT13-02	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	2018
VT13-03	CT RIVER, BELOW BELLOWS FALLS DAM (24 MILES)	ALS	ARTIFICIAL FLOW CONDITION, FLUCTUATING FLOWS BY HYDROPOWER PRODUCTION	FERC LICENSE EXPIRES IN 2018	2018
VT13-04	CT RIVER, ABOVE VERNON DAM	ALS	WATER LEVEL FLUCTUATION AT DAM; DEWATERED SHORELINE/WETLANDS	FERC LICENSE EXPIRES IN 2018	2018
VT13-05	CT RIVER, BELOW VERNON DAM (5.5 MILES)	ALS	ARTIFICIAL FLOW CONDITION, FLUCTUATING FLOWS BY HYDROPOWER PRODUCTION	FERC LICENSE EXPIRES IN 2018	2018
VT13-08	MILL BROOK (7 MILES)	ALS	ARTIFICIAL & INSUFFICIENT FLOW BELOW MT. ASCUTNEY SNOWMAKING WATER WITHDRAWAL	PARTIAL SUPPORT 7 MI (18.5 MI TOTAL LENGTH)	
VT13-10	ELLIS BROOK, FAIR (?) BROOK BELOW MINARDS POND	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5298 - BELLOWS FALLS WATER DEPT	
VT14-04	WAITS RIVER, BELOW BRADFORD DAM (0.3 MILE)	AES, ALS	ARTIFICIAL FLOW CONDITION, POOR FLOW REGIME IN DAM'S BYPASS SEGMENT	FERC EXEMPTION	2011
VT14-07	WELLS RIVER, BELOW DAM AT BOLTONVILLE (0.4 MI)	AES, ALS	ARTIFICIAL FLOW CONDITION, POOR FLOW AND PHYSICAL ALTERATIONS IN HYDROELECTRIC DAM BYPASS SEGMENT	FERC EXEMPTION	2010
VT14-09	STEVENS RIVER (BELOW HARVEY'S LAKE)	ALS	DAM MANAGEMENT ALTERS AQUATIC HABITAT		
VT14-09L05	HARVEYS LAKE (Barnet)	ALS	WATER LEVEL MGMT MAY ALTER AQUATIC HABITAT	TOWN IS EXPLORING DAM RECONSTRUCTION; SUBJECT OF BASIN PLANNING INITIATIVE 2007	
VT15-02	BROWN BROOK	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5037 - DANVILLE	

Part F. Waters appearing below are altered by flow regulation. 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	Projected WQS Compliance Year
VT16-07	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	2018
VT17-03	AVERILL CREEK DOWNSTREAM FROM DAM ON GREAT AVERILL LAKE (5.4 MILES)	ALS	ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME	UNLICENSED FACILITY	2014
	AVERILL CREEK DOWNSTREAM FROM DAM ON LITTLE AVERILL LAKE (1 MILE)	ALS	ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME	UNLIICENSED FACILITY	2014
	COATICOOK RIVER BELOW NORTON POND DAM (3 MILES)	ALS	ARTIFICIAL FLOW CONDITION BY HYDRO CREATES POOR FLOW REGIME	UNLICENSED FACILITY	2014
VT17-03L01	LITTLE AVERILL POND (Averill)	ALS, 2CR	WATER LEVEL FLUCTUATION BY HYDRO ALTERS FISHERY, RECREATION & ENDANGERED SPECIES	UNLICENSED FACILITY	2014
VT17-03L02	GREAT AVERILL POND (Norton)	ALS, 2CR	WATER LEVEL FLUCTUATION BY HYDRO ALTERS AQUATIC HABITAT, RECREATION	UNLICENSED FACILITY	2014
VT17-03L04	NORTON POND (Norton)	AES, ALS, 2CR	WATER LEVEL FLUCTATION BY HYDRO ALTERS AQUATIC HABITAT, RECREATION, AESTHETICS	UNLICENSED FACILITY	2014
VT17-05	UNNAMED BROOK, TRIB TO CLYDE RIVER	ALS	POSSIBLE LACK OF MINIMUM FLOW BELOW WATER SUPPLY WITHDRAWAL POINT (THREAT)	WSID #5105; BRIGHTON	
VT17-08L03	SHADOW LAKE (Glover)	AES, ALS	WATER LEVEL FLUCTUATION (SEASONAL DRAWDOWN) MAY ALTER AQUATIC HABITAT AND AESTHETICS		

Part G - Waters Altered by Channel Alteration

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 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.

A statewide map further illustrating designated river and stream waterbodies and waterbody designations for Lake Champlain, Lake Memphremagog and South Bay 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.

Use(s) Impacted - An indication of which designated or existing uses (as defined in the VWQS) 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.

Rationale for Placement on Part G –Information supporting the water's assessment as altered and its being placed on Part G.

Part G. Waters appearing below do not meet WQS because of significant impacts due to physical channel alterations, documented channel degradation or a change in stream type resulting from historical activities such as gravel mining, dredging, channelization, improper bridge or culvert placement, or floodplain encroachments. These waters have been assessed as altered, rather than impaired, according to the Vermont Surface Water Assessment and Listing Methodology. The rationale for placement on Part G is given below each listed water.

Waterbody ID	Segment Name/ Description	Use(s) Impaired	Surface Water Quality Problem(s)
VT07-10	BROWNS RIVER (LOWER-MID), FROM RIVER MILE 3.5 TO 18.5 (15 MILES)	ALS	SEVERE STREAMBANK EROSION FROM AGRICULTURAL ENCROACHMENTS; EFFECTS FROM PAST/HISTORIC IN-STREAM GRAVEL EXTRACTION

Recent investigations of stream geomorphology conducted according to Vermont's Stream Geomorphic Assessment protocols considered with other extensive field investigations indicate that the status of failing ALS in the Browns River is due primarily to extensive historical stream channel alterations. These alterations have been identified as extensive channel straightening, extensive gravel mining, and floodplain encroachments of transportation and other infrastructure. These historical actions have set in motion a channel evolution process of degradation and consequent aggradation of channel sediments that is having a negative effect on the biological communities.

Based on conditions observed in this mainstem portion of the river, it's believed that the stream channel geomorphic condition is not the result of the current level of hydrologic change contributed by developed areas. A river the size of the Browns in this portion of the watershed readily absorbs these minor hydrologic contributions. Nor are these aquatic life impacts the result of sediment discharged to the stream from external sources. The waterbody has been assessed as altered and not meeting the WQS (not impaired) according to the VTDEC Assessment and Listing Methodology and thus is better suited to be listed on Part G of the Vermont List of Priority Waters.

VT08-12	WEST BRANCH, LITTLE RIVER (5.8 MILES)	2CR	MORPHOLOGICAL INSTABILITY; SERIOUS & ON-GOING CHANNEL DEGRADATION; DEGRADATION NOW IN RESPONSE TO HISTORIC HUMAN INTERVENTION

Recent investigations of stream geomorphology conducted according to Vermont's Stream Geomorphic Assessment protocols considered with other extensive field investigations indicate that the status of failing to meet the secondary contact recreation use the West Branch Little River is due primarily to extensive historical stream channel alterations. These alterations have been identified as extensive channel straightening, extensive gravel mining, and floodplain encroachments of transportation and other infrastructure. These historical actions have set in motion a channel evolution process of degradation and consequent aggradation of channel sediments that is having a negative effect on the aquatic habitat and thus the biological communities. The waterbody has been assessed as altered and not meeting the WQS (not impaired) according to the VTDEC Assessment and Listing Methodology and thus is better suited to be listed on Part G of the Vermont List of Priority Waters.