

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1992	alkalinity	discrete or composite	VT DEC	2320-B	APHA 1989		
1993	alkalinity	discrete or composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1994	alkalinity	discrete or composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1995	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1996	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1997	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1998	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric, pH 4.5	
1999	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric	
2000	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric	
2001	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric	
2002	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric	
2003	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1989	titrimetric	
2004	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2005	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2006	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2007	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2008	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2009	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 1998	titrimetric	
2010	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2011	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2013	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2014	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2015	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2016	alkalinity	composite, unfiltered	VT DEC	2320-B	APHA 2005	titrimetric	
2016	aluminum	composite, unfiltered, digested	VT DEC	SW-6020A	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
1992	benthos	core or grab	NYS Bio Survey			microscope, gridded dish	
1993	benthos	core or grab	NYS Bio Survey			microscope, gridded dish	
1994	benthos	core or grab, sieved, formalin	NYS Bio Survey			microscope, gridded dish	
1995	benthos	Ekman dredge, 500 um sieve, formalin	NYS Bio Survey			microscope, gridded dish	

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1996	benthos	Ekman dredge, 500 um sieve, formalin	NYS Bio Survey			microscope, gridded dish	
1997	benthos	Ekman dredge, 500 um sieve, formalin	NYS Bio Survey			microscope, gridded dish	
1992	calcium	discrete or composite	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1993	calcium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1994	calcium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1995	calcium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1996	calcium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1997	calcium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1998	calcium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1999	calcium	composite, unfiltered	VT DEC	6010B	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry	
2000	calcium	composite, unfiltered	VT DEC	6010B, 7140	EPA SW-846 1996	atomic emission spectrometry, atomic absorption	
2001	calcium	composite, unfiltered	VT DEC	6010B, 7140	EPA SW-846 1996	atomic emission spectrometry, atomic absorption	
2002	calcium	composite, unfiltered	VT DEC	7140	EPA SW-846 1996	atomic absorption, direct aspiration	
2003	calcium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2004	calcium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2005	calcium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	calcium on a 5yr schedule after 2005. Next collection occurs in 2010

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2010	calcium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2011	calcium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	Beginning in 2011, metals will be collected annually, 3x per station. Hurricane Irene disrupted field operations and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	calcium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2013	calcium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2014	calcium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2015	calcium	composite, unfiltered, digested	VT DEC	6020A	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2016	calcium	composite, unfiltered, digested	VT DEC	6020A	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2000	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1989	automated ferricyanide	
2001	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1989	automated ferricyanide	
2002	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1989	automated ferricyanide	
2003	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1989	automated ferricyanide	
2004	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	
2005	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2006	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	
2007	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	
2008	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	
2009	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 1998	automated ferricyanide	
2010	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
2011	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
2013	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
2014	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
2015	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
2016	chloride - dissolved	composite, filtered, 0.45 um cellulose nitrate filter	VT DEC	4500-Cl-(G)	APHA 2005	automated ferricyanide	
1992	chloride - total	discrete or composite, unfiltered	VT DEC	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1993	chloride - total	discrete or composite, unfiltered	VT DEC/NYSDOH	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1994	chloride - total	discrete or composite, unfiltered	VT DEC	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1995	chloride - total	composite, unfiltered	VT DEC/NYSDOH	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1996	chloride - total	composite, unfiltered	VT DEC/NYSDOH	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1997	chloride - total	composite, unfiltered	VT DEC/NYSDOH	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1998	chloride - total	composite, unfiltered	VT DEC/NYSDOH	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1999	chloride - total	composite, unfiltered	VT DEC	4500-Cl-(E)	APHA 1989	automated ferricyanide	
1992	chlorophyll	10mL, 0.45 um glass fiber filter	NYS Bio Survey/VTDEC	10200-H	APHA	acetone, fluorometer	

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1993	chlorophyll	10mL, 0.45 µm glass fiber filter	NYS Bio Survey	10200-H	APHA	acetone, fluorometer	
1994	chlorophyll	10mL, 0.45 µm glass fiber filter	NYS Bio Survey	10200-H	APHA	acetone, fluorometer	
1995	chlorophyll	integrated, 10mL, GF/C glass fiber filters	NYS Bio Survey/VTDEC	10200-H	APHA	acetone, fluorometer	
1996	chlorophyll	integrated, 10mL, GF/C glass fiber filters	NYS Bio Survey/VTDEC	10200-H	APHA	acetone, fluorometer	
1997	chlorophyll	integrated, 10mL, GF/C glass fiber filters	NYS Bio Survey/VTDEC	10200-H	APHA	acetone, fluorometer	
1998	chlorophyll	integrated, 100 mL, GF/C glass fiber filter	VT DEC/NYSDEC (Darrin Freshwater Institute)	10200-H	APHA	acetone, fluorometer	
1999	chlorophyll	integrated, 10-100 mL, GF/A or Gelman AE glass fiber filter	VT DEC/NYSDEC (Darrin Freshwater Institute)	10200-H	APHA	acetone, fluorometer	
2000	chlorophyll	integrated, 50, 150 mL, GF/C or GF/A filters	VT DEC/NYSDEC (Darrin Freshwater Institute)	10200-H	APHA	acetone, fluorometer	
2001	chlorophyll	Integrated, 50, 150 mL, GF/A or GF/C glass fiber filters	VT DEC	445	USEPA 1997	acetone, fluorometer	
2002	chlorophyll	Integrated, 50, 150 mL, GF/A or GF/C glass fiber filters	VT DEC	445	USEPA 1997	acetone, fluorometer	
2003	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2004	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2005	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2006	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	Tributary collections discontinued after 2005.
2007	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2008	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2009	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2010	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2011	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded. A Turner Chl-A probe was added to the VT Hydrolab sonde.
2012	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2013	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2014	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	446	USEPA 1998	in-vivo chlorophyll and pheophytin by fluorescence	
2015	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	
2016	chlorophyll	integrated hose, 100 mL, filtered GF/A glass fiber filter. VT-Hydrolab chlorophyll-a probe	VT DEC	445	USEPA 1997	in-vivo chlorophyll and pheophytin by fluorescence	After the return of the probe from repair on 7-5-2016, probe readings from the composite hose samples were more than twice as high compared to the filtered samples. Probe mg/l readings from 7-6-2016 until the end of the season were reduced by dividing by 2.2.
1992	conductivity	discrete or composite	field	NY = hydrolab, VT = meter			
1993	conductivity	discrete or composite, unfiltered	field	NY = hydrolab, VT = meter			
1994	conductivity	discrete or composite, unfiltered	field	NY = hydrolab, VT = meter			

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1995	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
1996	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
1997	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
1998	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
1999	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2000	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2001	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2002	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2003	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2004	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2005	conductivity	composite, unfiltered	field	NY = hydrolab, VT = meter			
2006	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			Vermont now has MS5 Hydrolab unit
2007	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			New York has a new Hydrolab unit.
2008	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2009	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2010	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2011	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			Hurricane Irene disrupted field and laboratory operations in late August.
2012	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2013	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2014	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2015	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2016	conductivity	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
1992	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1993	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1994	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1995	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1996	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1997	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1998	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
1999	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
2000	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
2001	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
2002	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
2003	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1989	Winkler titration, azide modification	
2004	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	
2005	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	
2006	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	Vermont has Hydrolab LDO probe and new hydrolab unit.



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2007	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	New York now uses an LDO oxygen probe on the Hydrolab unit
2008	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	
2009	dissolved oxygen	discrete	field, VT DEC	NY = hydrolab, VT = 4500-O-C	APHA 1998	Winkler titration, azide modification	
2010	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration, azide modification	
2011	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	Azide modification has been discontinued. Hurricane Irene disrupted field and laboratory operations in late August.
2012	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	
2013	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	
2014	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	
2015	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	
2016	dissolved oxygen	discrete	field, VT DEC	NY, VT = hydrolab, VT = 4500-O-C	APHA 2005	Winkler titration	Following a comparison of LDO probe results to Winkler results, it was determined that Winkler samples would be taken at 4, 25 and 34, two times a year in late summer to compare with the LDO probe.
1992	inorganic carbon - dissolved	discrete or composite, unfiltered	NYS DOH	4500-CO2(C)	APHA 1989	titrimetric method for free CO <sub>2</sub>	
1993	inorganic carbon - dissolved	discrete or composite, unfiltered	NYS DOH	4500-CO2(C)	APHA 1989	titrimetric method for free CO <sub>2</sub>	
1994	inorganic carbon - dissolved	discrete or composite, unfiltered	NYS DOH	4500-CO2(C)	APHA 1989	titrimetric method for free CO <sub>2</sub>	discontinued after 1994
1992	inorganic carbon (soluble)	discrete or composite	NYS DOH				discontinued after 1992
1992	iron	discrete or composite	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	

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1993	iron	discrete or composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1994	iron	discrete or composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1995	iron	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1996	iron	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1997	iron	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1998	iron	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1999	iron	composite, unfiltered	VT DEC	6010B	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry	
2000	iron	composite, unfiltered	VT DEC	6010B, 7380	EPA SW-846 1996	ICP-atomic emission spectrometry, atomic absorption, direct aspiration	
2001	iron	composite, unfiltered	VT DEC	7380	EPA SW-846 (1996)	AA, direct aspiration	
2002	iron	composite, unfiltered	VT DEC	7380	EPA SW-846 (1996)	AA, direct aspiration	
2003	iron	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2004	iron	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2005	iron	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	iron on a 5yr schedule after 2005. Next collection occurs in 2010
2010	iron	composite, unfiltered	VT DEC	3005A, 6020A	EPA - test methods for evaluating solid wastes	ICP/MS	Iron discontinued after 2010
2016	iron	composite, unfiltered	VT DEC	SW 6020A	EPA - test methods for evaluating solid wastes	ICP/MS	Iron added in 2016

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1992	lead	discrete or composite	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1993	lead	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1994	lead	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1995	lead	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1996	lead	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1997	lead	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	
1998	lead	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	atomic absorption, furnace	lead discontinued after 1998
1992	magnesium	discrete or composite	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1993	magnesium	discrete or composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1994	magnesium	discrete or composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1995	magnesium	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1996	magnesium	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1997	magnesium	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1998	magnesium	composite, unfiltered	NYS DEC (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1999	magnesium	composite, unfiltered	VT DEC	6010B	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry	
2000	magnesium	composite, unfiltered	VT DEC	6010B, 7450	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry, atomic absorption, direct aspiration	
2001	magnesium	composite, unfiltered	VT DEC	6010B, 7450	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry, atomic absorption, direct aspiration	
2002	magnesium	composite, unfiltered	VT DEC	7450	EPA SW-846 3rd ed. 1986, and 1996	ICP/MS	
2003	magnesium	composite, unfiltered	VT DEC	6020	EPA SW-846 (1996)	ICP/MS	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2004	magnesium	composite, unfiltered	VT DEC	6020	EPA SW-846 (1996)	ICP/MS	
2005	magnesium	composite, unfiltered	VT DEC	6020	EPA SW-846 (1996)	ICP/MS	magnesium on a 5yr schedule after 2005. Next collection occurs in 2010
2010	magnesium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846 (1996)	ICP	
2011	magnesium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846 (1996)	ICP	Beginning in 2011, metals will be collected 3x annually. Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	magnesium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846 (1996)	ICP	
2013	magnesium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846 (1996)	ICP	
2014	magnesium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846 (1996)	ICP	
2015	magnesium	composite, unfiltered, digested	VT DEC	6020C	EPA SW-846 (1996)	ICP/MS	
2016	magnesium	composite, unfiltered, digested	VT DEC	SW 6020A	EPA SW-846 (1996)	ICP/MS	
1992	mysids	vertical tow, sieved, formalin	NYS Bio Survey			microscope, gridded dish	
1993	mysids	vertical tow, formalin	NYS Bio Survey			microscope, gridded dish	
1994	mysids	vertical tow, formalin	NYS Bio Survey			microscope, gridded dish	
1995	mysids	vertical bongo tow, 200 um mesh, ethanol	NYS Bio Survey			microscope, gridded dish	
1996	mysids	vertical bongo tow, 200 um mesh, ethanol	NYS Bio Survey			microscope, gridded dish	
1997	mysids	vertical bongo tow, 200 um mesh, formalin	NYS Bio Survey			microscope, gridded dish	
1998	mysids	vertical bongo tow, 200 um mesh, formalin	NYS DEC			microscope, gridded dish	
1999	mysids	vertical bongo tow, 200 um mesh, formalin	NYS DEC			microscope, gridded dish	
2000	mysids	vertical bongo tow, 200 um mesh, formalin	NYS DEC			microscope, gridded dish	
2001	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2002	mysids	vertical bongo tow, 253 um mesh, formalin	NYS DEC			microscope, gridded dish	
2003	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2004	mysids	vertical bongo tow, 253 um mesh, formalin	NYS DEC			microscope, gridded dish	
2005	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2006	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	beginning in 2006, sampling only at 3 maintenance sites (10, 12, 62)
2007	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2008	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2009	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2010	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2011	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2012	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2013	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2014	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2015	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
2015	mysids	vertical bongo tow, 253 um mesh	NYS DEC			microscope, gridded dish	
1992	nitrogen - ammonia	discrete or composite	NYS DOH	USEPA 350.1	USEPA 1979	ammonia (as nitrogen), colorimetric	
1993	nitrogen - ammonia	discrete or composite, unfiltered	NYS DOH/VTDEC	USEPA 350.1	USEPA 1979	ammonia (as nitrogen), colorimetric	
1994	nitrogen - ammonia	discrete or composite, unfiltered	NYS DOH/VTDEC	USEPA 350.1	USEPA 1979	ammonia (as nitrogen), colorimetric	
1992	nitrogen - nitrate/nitrite	discrete or composite	NYS DOH	USEPA 353.2	USEPA 1979	nitrate-nitrite by automated colorimetry	
1993	nitrogen - nitrate/nitrite	discrete or composite, unfiltered	NYS DOH/VTDEC	USEPA 353.2	USEPA 1979	nitrate-nitrite by automated colorimetry	
1994	nitrogen - nitrate/nitrite	discrete or composite, unfiltered	NYS DOH/VTDEC	USEPA 353.2	USEPA 1979	nitrate-nitrite by automated colorimetry	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1992	nitrogen - total	discrete or composite, unfiltered	VT DEC		Ebina 1983	peroxodisulfate digestion	
1993	nitrogen - total	discrete or composite, unfiltered	VT DEC		Ebina 1983	peroxodisulfate digestion	
1994	nitrogen - total	discrete or composite, unfiltered	VT DEC		Ebina 1983	peroxodisulfate digestion	
1995	nitrogen - total	composite, unfiltered	VT DEC		Ameel et al(1993)	persulfate digestion	
1996	nitrogen - total	composite, unfiltered	VT DEC		Ameel et al(1993)	persulfate digestion	
1997	nitrogen - total	composite, unfiltered	VT DEC		Ameel et al(1993)	persulfate digestion	
1998	nitrogen - total	composite, unfiltered	VT DEC		Ameel et al(1993)	persulfate digestion	
1999	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2000	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2001	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2002	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2003	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2004	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2005	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2006	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2007	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2008	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2009	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 1998	automated, persulfate digestion	
2010	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	
2011	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2012	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	
2013	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	
2014	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	
2015	nitrogen - total	composite, unfiltered	VT DEC	APHA 4500-N-C	APHA 2005	automated, persulfate digestion	
2016	nitrogen - total	composite, unfiltered	VT DEC	SM 4500-N C Modified	APHA 2005	automated, persulfate digestion	
1992	nitrogen - total kjehldahl	discrete or composite	NYS DOH	USEPA 351.2	USEPA 1979		
1993	nitrogen - total kjehldahl	discrete or composite, unfiltered	NYS DOH	USEPA 351.2	USEPA 1979	nitrogen, total Kjehldahl, colorimetric	
1994	nitrogen - total kjehldahl	discrete or composite, unfiltered	NYS DOH	USEPA 351.2	USEPA 1979	nitrogen, total Kjehldahl, colorimetric	discontinued after 1994
1992	organic carbon - dissolved	discrete or composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1993	organic carbon - dissolved	discrete or composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1994	organic carbon - dissolved	discrete or composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1995	organic carbon - dissolved	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1996	organic carbon - dissolved	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1997	organic carbon - dissolved	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1998	organic carbon - dissolved	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1999	organic carbon - dissolved	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	EPA/600/4-79/020	organic carbon, total - UV promoted	discontinued after 1999
1992	organic carbon (soluble)	discrete or composite	NYS DOH				discontinued after 1992
1992	organic carbon (total)	discrete or composite	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1993	organic carbon (total)	discrete or composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1994	organic carbon (total)	discrete or composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2 (low level)	USEPA 1979	organic carbon, total - UV promoted	
1995	organic carbon (total)	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1996	organic carbon (total)	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1997	organic carbon (total)	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1998	organic carbon (total)	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	USEPA 1979	organic carbon, total - UV promoted	
1999	organic carbon (total)	composite, unfiltered	NYS DEC (Columbia)	USEPA 415.2	EPA/600/4-79/020	organic carbon, total - UV promoted	discontinued after 1999
1992	pH	discrete or composite	field	NY = hydrolab, VT = meter			
1993	pH	discrete or composite, unfiltered	field	NY = hydrolab, VT = meter			
1994	pH	discrete or composite, unfiltered	field	NY = hydrolab, VT = meter			
1995	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
1996	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
1997	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
1998	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
1999	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2000	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2001	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2002	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2003	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2004	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2005	pH	composite, unfiltered	field	NY = hydrolab, VT = meter			
2006	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			Vermont now has Hydrolab unit
2007	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			NY has new Hydrolab unit
2008	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			



Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2009	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2010	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2011	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			Hurricane Irene disrupted field and laboratory operations in late August.
2012	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2013	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2014	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			Hurricane Irene disrupted field and laboratory operations in late August.
2015	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
2016	pH	composite, unfiltered	field	lake = hydrolab, tributaries = meter			
1992	phosphorus - dissolved	discrete or composite	VT DEC/NYDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1993	phosphorus - dissolved	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC/NYDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1994	phosphorus - dissolved	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1995	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1996	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1997	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1998	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
1999	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2000	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2001	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2002	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2003	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2004	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	persulfate digestion, automated ascorbic reduction,	
2005	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2006	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2007	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2008	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2009	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2010	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2011	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2012	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2013	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2014	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2015	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2015	phosphorus - dissolved	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
1992	phosphorus - ortho	discrete or composite	VT DEC/NYDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1993	phosphorus - ortho	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
1994	phosphorus - ortho	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	discontinued after 1994
1992	phosphorus - total	discrete or composite	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1993	phosphorus - total	discrete or composite, unfiltered	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1994	phosphorus - total	discrete or composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
1995	phosphorus - total	composite, unfiltered	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1996	phosphorus - total	composite, unfiltered	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1997	phosphorus - total	composite, unfiltered	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
1998	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
1999	phosphorus - total	composite, unfiltered	VT DEC/NYSDOH	4500-P-F	APHA 1989	automated ascorbic reduction	
2000	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
2001	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
2002	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2003	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
2004	phosphorus - total	composite, unfiltered	VT DEC	4500-P-F	APHA 1989	automated ascorbic reduction	
2005	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2006	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2007	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2008	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2009	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 1998	persulfate digestion, automated ascorbic acid method	
2010	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2011	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2013	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2014	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2015	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
2016	phosphorus - total	composite, unfiltered	VT DEC	4500-P-H	APHA 2005	persulfate digestion, automated ascorbic acid method	
1992	phytoplankton	integrated or discrete, acid Lugols preservative	NYS Bio Survey			settling chambers	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1993	phytoplankton	integrated or discrete, acid Lugols preservative	NYS Bio Survey			settling chambers	
1994	phytoplankton	integrated or discrete, acid Lugols preservative	NYS Bio Survey			settling chambers	
1995	phytoplankton	integrated hose - 2x secchi, acid Lugols preservative	NYS Bio Survey			settling chambers	
1996	phytoplankton	integrated hose - 2x secchi, acid Lugols preservative	NYS Bio Survey			settling chambers	
1997	phytoplankton	integrated hose - 2x secchi, acid Lugols preservative	contractor?			settling chambers	
1998	phytoplankton	integrated hose - 2x secchi, acid Lugols preservative	contractor?			settling chambers	
1999	phytoplankton	integrated hose - 2x secchi, acid Lugols preservative	contractor?			settling chambers	
2000	phytoplankton	integrated hose - 2x secchi, lugols and formalin preserved samples	Lake Champlain Research Institute			settling chambers	
2001	phytoplankton	integrated hose - 2x secchi, lugols and formalin preserved samples	Lake Champlain Research Institute			settling chambers	
2002	phytoplankton	integrated hose - 2x secchi, lugols and formalin preserved samples	Lake Champlain Research Institute			settling chambers	
2003	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols and formalin preserved samples	Lake Champlain Research Institute			settling chambers or Sedgewick Rafter cells	
2004	phytoplankton	63 um net tow, lugols and formalin preserved samples	Lake Champlain Research Institute			Sedgewick Rafter cells	
2005	phytoplankton	63 um net tow, lugols and formalin preserved samples	Lake Champlain Research Institute			Sedgewick Rafter cells	
2006	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC			settling chambers or Sedgewick Rafter cells	
2007	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC			settling chambers or Sedgewick Rafter cells	
2008	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC			settling chambers or Sedgewick Rafter cells	
2010	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c1	APHA 2005	settling chambers or Sedgewick Rafter cells	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2011	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c1	APHA 2005	settling chambers or Sedgewick Rafter cells	Hurricane Irene disrupted field and laboratory operations in late August.
2012	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c1	APHA 2005	settling chambers or Sedgewick Rafter cells	
2013	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c1	APHA 2005	settling chambers or Sedgewick Rafter cells	A biovolume calculation error was corrected for years 2006 - 2013. Revised data posted on the web in March 2014.
2014	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c2	APHA 2005	settling chambers or Sedgewick Rafter cells	Spiny Water flea found in Lake Champlain
2015	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c2	APHA 2005	settling chambers or Sedgewick Rafter cells	
2016	phytoplankton	2x secchi by integrated hose or by 63 um net tow, lugols preserved samples	VT DEC	10200-F2a, 2c2	APHA 2005	settling chambers or Sedgewick Rafter cells	
1992	potassium	discrete or composite	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1993	potassium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1994	potassium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1995	potassium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1996	potassium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1997	potassium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1998	potassium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1999	potassium	composite, unfiltered	VT DEC	258.1	EPA SW-846 3rd ed. 1986, and 1996	atomic absorption	
2000	potassium	composite, unfiltered	VT DEC	6010B, 7610	EPA SW-846 1996	ICP-atomic emission spectrometry, atomic absorption	
2001	potassium	composite, unfiltered	VT DEC	6010B, 7610	EPA SW-846 (1996)	ICP-atomic emission spectrometry, atomic absorption	
2002	potassium	composite, unfiltered	VT DEC	7610	EPA SW-846 (1996)	atomic absorption, direct aspiration	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2003	potassium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2004	potassium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2005	potassium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	potassium on a 5yr schedule after 2005. Next collection occurs in 2010
2010	potassium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2011	potassium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	Beginning in 2011, metals will be collected 3x annually. Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded
2012	potassium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2013	potassium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2014	potassium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2015	potassium	composite, unfiltered, digested	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2016	potassium	composite, unfiltered, digested	VT DEC	SW-6020A	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
1992	silica - dissolved reactive	discrete or composite	VT DEC	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1993	silica - dissolved reactive	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1994	silica - dissolved reactive	discrete or composite, 0.45 um cellulose nitrate filter	VT DEC	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1995	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1996	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1997	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1998	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC/NYSDOH	4500-Si(F)	APHA 1989	automated method for molybdate reactive Si	
1999	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2000	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2001	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2002	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2003	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2004	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	
2005	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 1998	automated method for molybdate reactive Si	silica on a 5yr schedule after 2005. Next collection occurs in 2010
2010	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	
2011	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	Beginning in 2011, silica will be collected annually at all stations. Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	
2013	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	
2014	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	
2015	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	



Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2016	silica - dissolved reactive	composite, 0.45 um cellulose nitrate filter	VT DEC	4500-SiO2(F)	APHA 2005	automated method for molybdate reactive Si	
1992	sodium	discrete or composite	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1993	sodium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1994	sodium	discrete or composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1995	sodium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1996	sodium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1997	sodium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1998	sodium	composite, unfiltered	NYS DOH (Columbia)	200.7(W)	USEPA 1979	ICP/atomic emission spectrometry	
1999	sodium	composite, unfiltered	VT DEC	6010B	EPA SW-846 3rd ed. 1986, and 1996	ICP-atomic emission spectrometry	
2000	sodium	composite, unfiltered	VT DEC	6010B, 7770	EPA SW-846 1996	ICP-atomic emission spectrometry, atomic absorption, direct aspiration	
2001	sodium	composite, unfiltered	VT DEC	6010B, 7770	EPA SW-846 1996	ICP-atomic emission spectrometry, atomic absorption, direct aspiration	
2002	sodium	composite, unfiltered	VT DEC	7770	EPA SW-846 1996	atomic absorption, direct aspiration	
2003	sodium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2004	sodium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2005	sodium	composite, unfiltered	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	sodium on a 5yr schedule after 2005. Next collection occurs in 2010

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2010	sodium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2011	sodium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	Beginning in 2011, metals will be collected 3x annually. Hurricane Irene disrupted field and laboratory operations in late August. Some samples were lost when the laboratory flooded.
2012	sodium	composite, unfiltered, undigested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2013	sodium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2014	sodium	composite, unfiltered, digested	VT DEC	6010C	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP	
2015	sodium	composite, unfiltered, digested	VT DEC	6020	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
2016	sodium	composite, unfiltered, digested	VT DEC	SW-6020A	EPA SW-846, Rev. 1 (1992) and Rev.0 (1994)	ICP/MS	
1992	total suspended solids	discrete or composite	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1993	total suspended solids	discrete or composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1994	total suspended solids	discrete or composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1995	total suspended solids	composite, unfiltered	VT DEC/NYSDOH (SUNY)	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
1996	total suspended solids	composite, unfiltered	VT DEC/NYSDOH (SUNY)	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1997	total suspended solids	composite, unfiltered	VT DEC/NYSDOH (SUNY)	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1998	total suspended solids	composite, unfiltered	VT DEC/NYSDOH (SUNY)	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
1999	total suspended solids	composite, unfiltered	VT DEC/NYSDOH (SUNY)	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
2000	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
2001	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
2002	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
2003	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1989	total suspended solids, dried at 103 - 105 degrees C	
2004	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	
2005	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	
2006	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	beginning in 2006, TSS collected in tributaries only
2007	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	
2008	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	
2009	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 1998	solids dried at 103 - 105 degrees C	
2010	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	
2011	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	Hurricane Irene disrupted field and laboratory operations in late August.
2012	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2013	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	
2014	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	
2015	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	
2016	total suspended solids	composite, unfiltered	VT DEC	2540-D	APHA 2005	solids dried at 103 - 105 degrees C	
1994	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
1995	zebra mussels	sq meter grid, artificial substrates	NYS Bio Survey			enamel tray	
1995	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
1996	zebra mussels	square meter quadrates, artificial substrates	NYS Bio Survey			enamel tray	
1996	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
1997	zebra mussels	sq meter grid, scraped from unionids	NYS Bio Survey			enamel tray	
1997	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
1998	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults by scuba or scraping	VT DEC		Marsden 1992	microscope, SR cell or dish	
1999	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults by scuba or scraping	VT DEC		Marsden 1992	microscope, SR cell or dish	
2000	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2001	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
2002	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
2003	zebra mussels	veligers by 63µm net or peristaltic pump, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
2004	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel	VT DEC		Marsden 1992	microscope, SR cell or dish	
2005	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by snorkel and collected by scuba	VT DEC		Marsden 1992	microscope, SR cell or dish	
2006	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by shoreline observation	VT DEC		Marsden 1992	microscope, SR cell or dish	
2007	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate, adults surveyed by shoreline observation	VT DEC		Marsden 1992	microscope, SR cell or dish	Veliger sampling after 2006 will continue at 4 locations only.
2008	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
2009	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
2010	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	

Year	Parameter	Lake or Field Methodology	Laboratory	Method	Reference	Description	Significant Changes
2011	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	In 2011, VTDEC will discontinue sampling for veligers at nearshore stations, and will sample for veligers at all openwater stations previously sampled in 2005. Hurricane Irene disrupted field and laboratory operations in late August.
2012	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
2013	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
2014	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	Spiny Water flea found in Lake Champlain
2015	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
2016	zebra mussels	veligers by 63µm net, settled juveniles by PVC plate	VT DEC		Marsden 1992	microscope, SR cell or dish	
1992	zooplankton	tow or discrete, carbonated water, formalin	NYS Bio Survey			microscope, gridded dish	
1993	zooplankton	tow or discrete, carbonated water, formalin	NYS Bio Survey			microscope, gridded dish	
1994	zooplankton	tow or discrete, carbonated water, formalin	NYS Bio Survey			microscope, gridded dish	
1995	zooplankton	vertical tow, No.20 mesh, carbonated water, formalin	NYS Bio Survey			microscope, gridded dish	
1996	zooplankton	vertical tow, No.20 mesh, carbonated water, formalin	NYS Bio Survey			microscope, gridded dish	