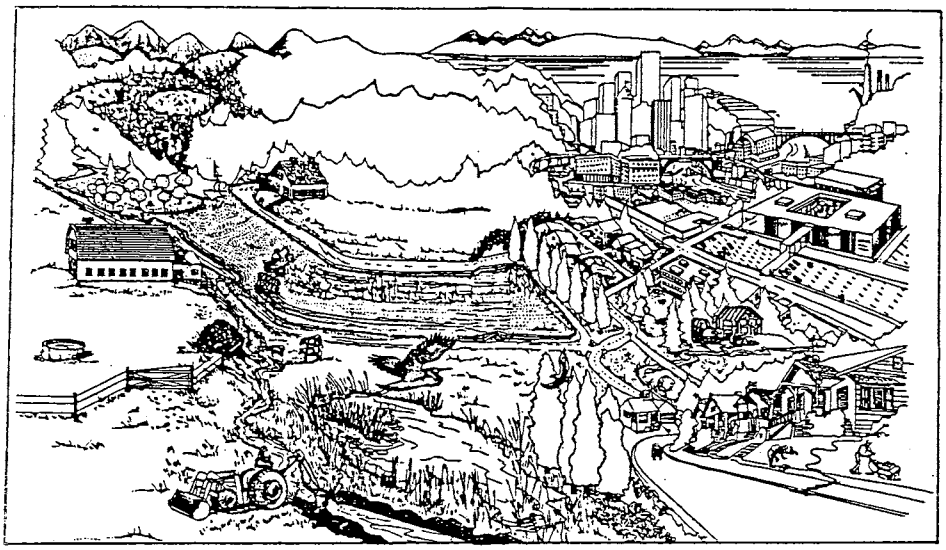
Technical Report No. 6B
Appendices A-J

Lake Champlain Nonpoint Source Pollution Assessment



Lake Champlain Basin Program

Prepared by
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of Natural Resources

for
Lake Champlain Management Conference

February 1994

PUBLICATION SERIES

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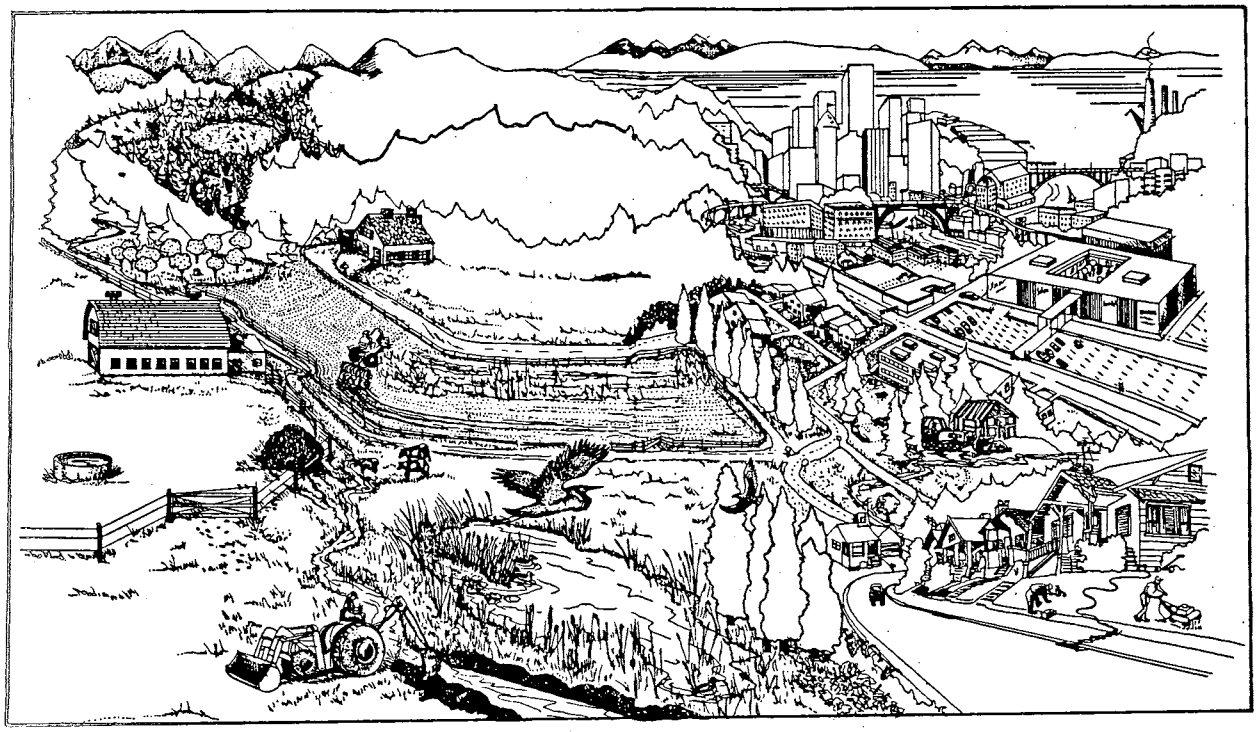
FINAL REPORT



Lake Champlain Nonpoint Source Pollution Assessment

April, 1994

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This technical report is the seventh in a series of reports prepared under the Lake Champlain Basin Program. Those in print are listed below.

Lake Champlain Basin Program Technical Reports

1. *A Research and Monitoring Agenda for Lake Champlain.* Proceedings of a Workshop, December 17-19, 1991, Burlington, VT. Lake Champlain Research Consortium. May, 1992.

2. *Design and Initial Implementation of a Comprehensive Agricultural Monitoring and Evaluation Network for the Lake Champlain Basin.* NY-VT Strategic Core Group. February, 1993.

3. (A) *GIS Management Plan for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc., and Associates in Rural Development. March, 1993.

   (B) *Handbook of GIS Standards and Procedures for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc. March, 1993.

   (C) *GIS Data Inventory for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc. March, 1993.

4. (A) *Lake Champlain Economic Database Project. Executive Summary.* Holmes & Associates. March 1993.

   (B) *Socio-Economic Profile, Database, and Description of the Tourism Economy for the Lake Champlain Basin.* Holmes & Associates. March 1993

   (C) *Potential Applications of Economic Instruments for Environmental Protection in the Lake Champlain Basin.* Anthony Artuso. March 1993.

   (D) *Conceptual Framework for Evaluation of Pollution Control Strategies and Water Quality Standards for Lake Champlain.* Anthony Artuso. March 1993.

5. *Lake Champlain Sediment Toxics Assessment Program. An Assessment of Sediment - Associated Contaminants in Lake Champlain - Phase 1.* Alan McIntosh, Editor, UVM School of Natural Resources. February 1994.

   Lake Champlain Sediment Toxics Assessment Program. An Assessment of Sediment - Associated Contaminants in Lake Champlain - Phase 1. Executive Summary. Alan McIntosh, Editor, UVM School of Natural Resources. February 1994.

6. (A) *Lake Champlain Nonpoint Source Pollution Assessment.* Lenore Budd, Associates in Rural Development Inc. and Donald Meals, UVM School of Natural Resources. February 1994.

   (B) *Lake Champlain Nonpoint Source Pollution Assessment.* Appendices A-J. Lenore Budd, Associates in Rural Development Inc. and Donald Meals, UVM School of Natural Resources. February 1994.

Appendices

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J Vermont Watersheds Phase II Load Estimates

APPENDIX A
Project Advisory Committee Members

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Ms. Robin Ulmer
Boquet River Association

APPENDIX B

Nonpoint Source Export Coefficients and Concentration Values

AGRICULTURE

EXPORT - kg/ha/yr

AGEXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	TSS Range	TP Med/Mean	TP Range	SRP Med/Mean	SRP Range	TN Med/Mean	TN Range	TKN Med/Mean	TKN Range	NO3-N Med/Mean	NO3-N Range	NH3-N Med/Mean	NH3-N Range	REFERENCE	COMMENTS
GENERAL/MIXED AGRICULTURE																		
AG	NE/NCentral US	mon			0.230						4.90						EPA, 1974	NES
MSTLY AG	NE/NCentral US	mon			0.200						5.60						EPA, 1974	NES
AG	VA/NC	Lit. Rev.			0.990	0.55-2.03			9.80	5.0-14.3							Dodd, 1992	
RURAL/AG	US	Lit. Rev.			0.500				5.00								Rast & Lee, 1978	
AG	So. ONTARIO	mon	314.00	60.0-961.0	0.700	0.20-1.50	0.240	0.02-0.46			4.00	1.10-6.70			0.66	0.07-1.17	Coote, et al., 1982	22-90% cultivated
DAIRY AG	WI	mon			0.770		0.560		8.80								Zitter, 1968	
GEN AG	NY	mon		30-900		0.10-1.10		0.01-0.16									Task Group B, 1977	Genesee R ws
GEN AG	Gt Lakes ws	mon		400.0-800.0		0.10-1.50		0.02-0.60									Task Group B, 1977	
AG	Gt Lakes ws	mon				0.23-1.50											Gregor & Johnson, 1980	>50% row,lo an dens
AG	Gt Lakes ws	mon			0.270												Gregor & Johnson, 1980	>50% row,med an dens
AG	Gt Lakes ws	mon				0.15-0.69											Gregor & Johnson, 1980	25-50%row,med an d
AG	Gt Lakes ws	mon				0.20-0.79											Gregor & Johnson, 1980	25-50%row,hi an den
AG	Gt Lakes ws	mon				0.10-0.42											Gregor & Johnson, 1980	<25%row,med an den
AG	Gt Lakes ws	mon				0.14-0.51											Gregor & Johnson, 1980	<25%row,hi an dens
AG	VT/QUE	Lit/Calc				66.00											Spiller, et al., 1970?	L. Memphremagog ws
89% AG	Blk Cr, IN	mon			3.150				28.65								Lake & Morrison, 1977	58%row/31%pasture
88% AG	Blk Cr, IN	mon			3.250		0.100		31.76								Lake & Morrison, 1977	63%row/26%pasture
83% AG	Blk Cr, IN	mon			3.000		0.220		25.85								Lake & Morrison, 1977	35%row/48%pasture
75% AG	OH	mon							3.74								Taylor, et al., 1971	
94% AG	ONTARIO	mon			0.60				18.60		8.30		8.70				Patni & Hore, 1978	
AG	IA	mon			0.65				9.54				1.09		6.45		Burwell, et al., 1977	60%row/40%hay-past
AG	IA	mon			0.27				14.11				11.58				Burwell, et al., 1977	
>80% AG	So. ONTARIO	mon			1.29				14.30				8.86				Avadhanula, 1979	
65% AG	So. ONTARIO	mon			1.53				31.10		7.10		24.10				Coote, et al., 1978	42%corn/23%pasture
89% AG	So. ONTARIO	mon			0.61				9.40		5.40		4.10				Coote, et al., 1978	22%row/67%pasture
77% AG	MI	mon			0.20				4.82								EPA, 1974	NES
80% AG	WI	mon			0.28				4.51								EPA, 1974	NES
81% AG	WI	mon			0.43				4.82								EPA, 1974	NES
83% AG	WI	mon			0.24				4.26								EPA, 1974	NES
84% AG	WI	mon			0.17				8.50								EPA, 1974	NES
84% AG	WI	mon			0.25				4.66								EPA, 1974	NES
85% AG	WI	mon			0.15				2.56								EPA, 1974	NES
89% AG	WI	mon			0.22				4.11								EPA, 1974	NES
94% AG	WI	mon			0.29				3.18								EPA, 1974	NES
AG	SWITZ/FRANCE	mon				0.30-0.70				7.0-21.0							CIPEL, 1988	
AG	FRANCE	mon			0.60				14.60								Dorioz and Ferhi, 1994	14 ha alpine ws
MIXED AG	US	Lit. med			0.91				14.30								Reckhow, et al., 1980	
		Lit. mean			1.13				16.53								Reckhow, et al., 1980	
AG	US	Lit. Rev.			0.83	0.25-5.04			9.60	1.2-37.0							EPA, 1976	
>75% AG	US	mon			0.31				9.80	4.2-38.0							Omernik, 1976	NES
AG	NY	mon			0.22				33.30								Johnson, et al., 1976	
AG/RURAL	CT	mon			0.41				5.80								Aylor & Frink, 1980	
MIXED AG	US	Lit. Rev.			0.94	0.10-3.25			14.00	2.5-41.5							Beaulac & Reckhow, 1982	
AG	WI	Lit. Rev.			0.26	0.11-0.45			4.80	3.2-16.4							Clesceri, et al., 1986	
AG	CT	Lit. Rev.			0.39				20.60								Farrow, et al., 1986	
63% AG	PA	mon				1.87-2.53				26.9-42.6							Ott, et al., 1990	
AG	CT	mon/model			0.54	0.39-0.69			7.60	5.4-9.8							Frink, 1991	lake/land use studies
81% AG	NY	mon			0.19				6.61								EPA, 1974	NES
66% AG	VT	mon		11.2-292.5		0.22-0.90		0.11-0.45				1.7-5.2					Meals, 1990	LPws3, lo intensity
82% AG	VT	mon		11.2-697.0		0.22-2.46		0.11-0.78				1.4-20.2					Meals, 1990	LPws4, hi intensity
86% Ag	VT	mon		7.8-60.5		1.23-7.17		0.67-4.48				3.7-26.9					VTRCWPCC, 1991	StA JB, hi intensity
AG	U.S.	Lit. Rev.			0.300	0.10-1.00			5.00	2.0-10.0							Uttormark, et al. 1974	
AG	U.S.	Lit. Rev.			0.630	0.25-5.04			9.60	1.2-37.0							USEPA 1976	
RURAL/AG	U.S.	Lit. Rev.			0.500	-			5.00	-							Rast & Lee 1983	
AG	NC	Lit. Rev.			0.056						1.20		3.40				Taylor, et al., 1971	
AG	WI	Lit. Rev.							6.60								Sawyer, 1947	
AG	WI	Lit. Rev.			1.300				7.50								Sawyer, 1947	
AG	WI	Lit. Rev.			0.450				9.20								Sawyer, 1947	
AG	WI	Lit. Rev.			0.110				1.20								Minshall, et al., 1969	*Stream Base Flow
>50% AG	Eastern U.S.	mon.			0.212		0.088		5.36								Omernik, 1977	
>75% AG	Eastern U.S.	mon.			0.255		0.094		5.55								Omernik, 1977	
>90% AG	Eastern U.S.	mon.			0.266		0.118		9.54								Omernik, 1977	
>75% AG	WI	Lit. Rev.			0.262	.14-.384	0.126	.063-0.189	6.65	1.87-11.51	4.59	0-9.63					Clesceri, et al,1986	
RURAL/AG	U.S.	Lit. Rev.			0.520				5.00								Rast & Lee, 1978	
MIXED	WI	Lit. Rev.			0.176	0.144-0.208	0.091	0.07-0.112	4.07	3.06-5.08	1.43	0.52-2.34					Clesceri, et al,1986	

AGRICULTURE

EXPORT - kg/ha/yr

AGEXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	TSS Range	TP Med/Mean	TP Range	SRP Med/Mean	SRP Range	TN Med/Mean	TN Range	TKN Med/Mean	TKN Range	NO3-N Med/Mean	NO3-N Range	NH3-N Med/Mean	NH3-N Range	REFERENCE	COMMENTS
ROW CROP LAND																		
CORN	WI	mon							14.00								Keeney & Walsh, 1971	Continuous corn
CORN	VT	mon		352.-2709.		4.7-35.0		1.5-5.8								44.00	Clausen, 1987	Bushey fields
CORN	VT	mon		5051.-8595.		6.0-8.0											Jamieson & Clausen, 1989	Bushey fields
CORN	WI	mon								8.9-42.0							Eck, 1957	Rotation
CORN	WI	mon			1.900				4.40								Minshall et al., 1970	
CORN	NY	Lit. Rev.			6.60				23.50								Haith & Shoemaker, 1987	
CROPLANI	Chesapeake ws	mon				0.6-5.6		0.3-1.7		5.6-78.0				2.2-16.8		0.2-1.1	Donigian, et al., 1990	Conventional tillage
CROPLANI	Chesapeake ws	mon				0.3-1.7		0.06-0.6		5.6-22.4				2.8-16.8		0.2-0.7	Donigian, et al., 1990	Conservation tillage
CROPLANI	Chesapeake ws	mon			5.200		0.340		16.95				0.44		0.65		Donigian, et al., 1991	High tillage
CROPLANI	Chesapeake ws	mon			1.840		0.520		11.08								Donigian, et al., 1991	Low tillage
CROPLANI	Chesapeake ws	CB model			2.420	0.36-8.73	0.850	0.23-2.85	22.80	5.2-62.8			13.26	4.16-42.91	2.30	0.28-10.79	Donigian, et al., 1991	Conventional tillage
CROPLANI	Chesapeake ws	CB model			1.790	0.20-5.69	0.910	0.13-3.05	18.05	3.69-58.06			11.92	3.06-43.08	1.85	0.13-8.76	Donigian, et al., 1991	Conservation tillage
ROW CRO	NC	Lit. Rev.			0.90				14.00								Levi, et al., 1990	
CROPLANI	Gt Lakes	mon		400.-600.		0.9-1.5		0.3-0.4									Task Group B, 1977	
ROW CRO	US	Lit. med			2.24				9.00								Reckhow, et al., 1980	
		Lit. mean			4.46				16.09									
CROPLANI	US	Lit. Rev.			5.00	1.25-16.3			3.20	0.8-10.4							McElroy, et al., 1976	
CROPLANI	US	mon				0.05-3.02				0.11-13.4							USGS, 1984	
ROW CRO	US	Lit. Rev.			2.30	0.18-18.6			9.10	2.0-79.6							Beaulac & Reckhow, 1982	
CROPLANI	Chesapeake ws	mon				1.68-5.60				9.0-20.2							EPA, 1982	
CROPLAND					0.97				11.90								Hartigan, et al., 1983	low till
CROPLAND					6.32				20.00								Hartigan, et al., 1983	high till
CROPLANI	PA	mon							22.30								Pionke & Urban, 1984	
CORN	WI	plot-3yr			1.220	1.22-1.49			3.96	3.61-5.53							Minshall, et al 1970	no fert appl
CORN	WI	plot-3yr			2.000	1.03-5.77			7.97	3.05-26.88							Minshall, et al 1970	manure appl-winter
CORN	WI	plot-3yr			0.750	0.68-0.96			3.38	3.35-5.32							Minshall, et al 1970	manure appl-spring
CORN	WI	plot-3yr			0.950	0.76-1.18			2.88	2.81-5.07							Minshall, et al 1970	liq manure appl-spring
CORN	WI	plot-2yr			1.300	1.00-1.60			4.33	4.08-4.58							Hensler, et al. 1970	no fert appl
CORN	WI	plot-2yr			3.400	1.13-5.66			15.25	4.44-26.06							Hensler, et al. 1970	manure appl-winter
CORN	WI	plot-2yr			0.810	0.73-0.90			4.22	3.68-4.76							Hensler, et al. 1970	manure appl-spring
CORN	WI	plot-2yr			0.940	0.91-0.97			3.88	3.70-4.07							Hensler, et al. 1970	liq manure appl-spring
CORN	MN	plot-2yr			18.600				79.60								Young & Holt, 1977	some fert appl.
CORN	MN	plot-3yr			14.000				44.20								Young & Holt, 1977	some fert appl
CORN	MN	plot-3yr			6.600				27.90								Young & Holt, 1977	surface appl manure
CORN	MN	plot-3yr			9.800				33.00								Young & Holt, 1977	plowdown manure
CORN	MN	plot-6yr			3.140				14.24								Burwell, et al. 1975	some fert appl
CORN	MN	plot-6yr			5.550				23.83								Burwell, et al. 1975	some fert appl
CORN	IA	mon.-7yr			0.590	0.092-2.118			8.69	2.2-72.47							Alberts, et al., 1978	contour planting
CORN	IA	mon.-7yr			0.350	0.083-1.288			5.36	1.69-43.71							Alberts, et al., 1978	contour planting
CORN	IA	mon.-7yr			0.260	0.024-0.613			2.10	0.67-26.7							Alberts, et al., 1978	contour planting
CROPLANI	NE	Lit. Rev.	191		0.150		0.110				3.80						Madeira Netto, 1978	Corn,soybns,sorghum
CROPLANI	NE	Lit. Rev.	2566		0.160		0.080				7.80						Madeira Netto, 1978	Conventional tillage
CROPLANI	IA	Lit. Rev.			0.270		0.160				14.10						Burwell, et al. 1974	Rotn corn,con.terr,no-til
CORN	OH	Lit. Rev.			6.200								43.00				Schwab, et al., 1969	incl. 11 in. rain & flood
CORN	OH	Lit. Rev.			3.000								53.00				Schwab, et al., 1969	incl. 11 in. rain & flood
CORN	WI	Lit. Rev.							5.50								Keeney & Walsh, 1971	2 yr mean, loam soil
CROP LAND		Lit. Rev.				0.06-2.9				0.1-13							Loehr, 1974	
CORN	IA	mon-5yr			0.952	0.01-2.20	0.150	0-0.24	50.19	11.65-76.18			1.25	0-1.79	0.78	0-2.11	Burwell, et al., 1977	annual means w/ranges
CORN	IA	mon-5yr			0.605	0.03-1.31	0.120	0.01-0.22	28.05	4.53-45.38			0.59	0.78-0.94	0.45	0.03-1.46	Burwell, et al., 1977	annual means w/ranges
CORN	IA	mon-5yr			0.269	0.02-0.53	0.160	0-0.38	14.11	1.06-42.30			0.56	0-0.96	0.17	0-0.43	Burwell, et al., 1977	annual means w/ranges
CORN	IA	mon-5yr			0.493	0.01-0.74	0.100	0-0.22	44.73	7.07-93.08			1.25	0.02-3.26	0.27	0-0.58	Burwell, et al., 1977	annual means w/ranges
RURL/CRO	NC	Lit. Rev.			0.033				0.80				0.06				Kilmer & Joyce, 1971	Unfertlzd (April - Octobe
RURL/CRO	NC	Lit. Rev.			0.045				0.90				0.07				Kilmer & Joyce, 1971	Fertlzd(October- April)
HAY LAND																		
HAY	WI	mon								1.6-4.8							Eck, 1957	rotation
HAY	WI	mon							3.50								Keeney & Walsh, 1971	
HAY	Chesapeake ws	CB model			1.270	0.12-3.88	0.730	0.07-3.24	9.45	2.32-25.5			6.04	1.24-19.10	0.48	0.04-3.17	Donigian, et al., 1991	
HAY		mon				1.6-3.8				9.1-18.7							Converse, et al., 1976	manured
HAY		mon								4.2-29.6							Long, 1979	manured
HAY		mon						1.4-9.0		6.5-18.3							McCaskey, et al., 1971	manured
HAY		mon				6.6-13.5				8.0-16.6							Reese, et al., 1962	manured
HAY		mon				0.1-7.4				0.4-37.6							Young & Mutchler, 1976	winter manured
HAY	NY	Lit. Rev.			0.45				3.60								Haith & Shoemaker, 1987	
NONROW CROPS	US	Lit. med			0.76				6.08								Reckhow, et al., 1980	
		Lit. mean			1.08				5.19									

AGRICULTURE

EXPORT - kg/ha/yr

AGEXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	Range	TP Med/Mean	Range	SRP Med/Mean	Range	TN Med/Mean	Range	TKN Med/Mean	Range	NO3-N Med/Mean	Range	NH3-N Med/Mean	Range	REFERENCE	COMMENTS
PASTURE																		
PASTURE	WI	mon			1.30	1.2-1.5					4.40	3.6-5.5					Powell & Dunsmore, 1971	
PASTURE	OH	mon			0.10				4.10				1.50				Owens, et al., 1983	
PASTURE	Chesapeake ws	mon				0.11-1.01		0.11-0.34		1.68-7.8				0.7-0.8		0.1-0.7	Donigian, et al., 1990	
PASTURE	Chesapeake ws	mon			0.270				3.73				0.94		0.37		Donigian, et al., 1990	
PASTURE	Chesapeake ws	CB model			0.400	0.03-2.30	0.060	0.004-0.69	6.99	1.32-23.14			4.44	0.72-10.66	0.11	0.02-0.49	Donigian, et al., 1991	
PASTURE	FRANCE	mon			0.61												CIPEL, 1988	+Forest
PASTURE	US	Lit. med			0.81				5.19								Reckhow, et al., 1980	
		Lit. mean			1.50				8.65									
PASTURE	US	Lit. Rev.			0.32	0.26-0.64			5.10	2.5-8.5							EPA, 1976	
PASTURE	US	Lit. Rev.			0.46	0.13-1.19			0.30	0.1-0.8							McElroy, et al., 1976	
PASTURE	US	Lit. Rev.			0.62	<0.01-4.9			6.00	2.0-30.8							Beaulac & Reckhow, 1982	
PASTURE	Chesapeake ws	mon				0.34-0.56				2.2-6.7							EPA, 1982	
PASTURE					0.50				2.90								Hartigan, et al., 1983	
PASTURE	PA	mon							5.30								Pionke & Urban, 1984	
PASTURE	NY	Lit. Rev.			0.55				2.90								Haith & Shoemaker, 1987	
PASTURE	SD	Lit. Rev.			0.250				1.52								Harms, et al., 1974	
WINT. GRA	OH	Lit. Rev.			3.600				30.85								Chichester, et al., 1979	
SUMM. GR	OH	Lit. Rev.			0.85*				21.85								Chichester, et al., 1979	Contr from spring
ROTAT. GF	IA	mon.-3 yr			0.251	0.081-0.512			2.32	0.47-4.28							Schuman, et al., 1973	
CONTIN. G	MD	Lit. Rev.			3.800				13.00								Correll, et al., 1977	
PASTURE	NE	mon.-3 yr	196		0.690		0.380				2.80						Doran, et al,1981	Rotational grazing
PASTURE	NE	Lit. Rev.	290		0.190		0.070				1.90						Madeira Netto, 1978	Rotational grazing
PASTURE	OH	Lit. Rev.				0.3-1.3						0.6-3.3					Chichester, et al. 1979	Rotational grazing
PASTURE	MN	Lit. Rev.			0.110		0.030				0.80						Timmons & Holt, 1977	Prairie
UNIMPROV	OH	mon.-11 yr.			0.100	0-0.2					0.70	0.3-1.1	0.70	0.4-1.0			Owens, et al, 1989	2 yr ungrazed
UNIMPROV	OH	mon.-11 yr.			0.100	0-<0.2					2.30	1.2-3.4	1.40	1.1-1.7			Owens, et al, 1989	3 yr summer grazed
UNIMPROV	OH	mon.-11 yr.			0.100	0-<0.2					3.60	1.8-5.4	1.00	0.5-1.5			Owens, et al, 1989	6 yr all-yr grazed
PASTURE	WI	mon.-3 yr			1.300	1.2-1.5			4.40	3.6-5.5							Powell & Dunsmore, 1971	Manure not app
PASTURE	WI	mon.-3 yr			2.900	1.0-5.8			12.70	3.0-27							Powell & Dunsmore, 1971	Manure app-Winter
PASTURE	WI	mon.-3 yr			0.800	0.7-1.0			3.80	3.0-5.2							Powell & Dunsmore, 1971	Manure app-Spring
RANGE LAND		Lit. Rev.			0.080								0.70				Loehr, 1974	
UNIMPR. R	OH	mon.-11yr			0.900	0.4-0.14							9.10	7.7-10.5			Owens, et al., 1989	
UNIMPR. R	OH	mon.-10yr			0.100	0-0.2			4.50	1.9-7.1							Owens, et al., 1991	Stormflow
UNIMPR. R	OH	mon.-10yr			0.100	0-<0.2			2.30	1.1-3.5			1.70	0.90-2.5			Owens, et al., 1991	Baseflow
PASTURE	VA	Lit/model	613		19.210				19.21								Biggers, et al., 1980	pervious surfaces
PASTURE	VA	Lit/model	204		0.530				5.13								Biggers, et al., 1980	impervious surfaces
PASTURE	VT/QUE	Lit/Calc			0.03												Spiller, et al., 1970?	L. Memphremagog ws
OTHER AG LAND																		
RANGE	US	mon				0.08-0.09											USGS, 1984	
ORCHARD	OH	mon			1.40				0.91								Weidner, et al., 1969	
OTHER AG	NC	Lit. Rev.			0.50				7.00								Levi, et al., 1990	
UNDEVLPI	NC	Lit. Rev.			0.10				3.80								Levi, et al., 1990	
RURAL LAI	FRANCE	mon			0.95	0.3-4.4			3.14	3.0-12.5							CIPEL, 1988	
INACTIV A	NY	Lit. Rev.			0.52				2.00								Haith & Shoemaker, 1987	
CLEARED	Eastern U.S.	mon.			0.070		0.047		1.95		0.34						Omernik, 1977	*>75%
CLEARED	Eastern U.S.	mon.			0.417		0.171		5.45		1.40						Omernik, 1977	*>50%
MANURED	U.S.	Lit. Rev.				0.8-2.9				4-13							Loehr, 1974	Land used for manure a
FEEDLOT	U.S.	Lit. Rev.				10-620				100-1600							Loehr, 1974	Conf animal hldng area
MIXED	Eastern U.S.	mon.			0.138		0.063		3.84		1.86						Omernik, 1977	
RANGE/FO	Eastern U.S.	mon.			0.042		0.015		1.20		0.42						Omernik, 1977	>50% Range+forest
MIX- RANG	Eastern U.S.	mon.			0.065		0.030		1.04		0.29						Omernik, 1977	>75% Range
RANGE/AG	Eastern U.S.	mon.			0.107		0.053		1.91		0.81						Omernik, 1977	>50% Range+ag

AGRICULTURE

CONCENTRATION - mg/l

AGCONCF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	Range	TP Med/Mean	Range	SRP Med/Mean	Range	TN Med/Mean	Range	TKN Med/Mean	Range	NO3-N Med/Mean	Range	NH3-N Med/Mean	Range	REFERENCE	COMMENTS
GENERAL/MIXED AGRICULTURE																		
AG	NE/NCent US	mean			0.151				2.02								EPA, 1974	NES
MOSTLY A	NE/NCent US	mean			0.080				3.10								EPA, 1974	NES
>90% AG	Eastern U.S.	mean			0.132		0.067		6.08								Omernik, 1977	NES
>50% AG	Eastern U.S.	mean			0.070		0.029		1.86								Omernik, 1977	NES
>75% AG	Eastern U.S.	mean			0.134		0.052		3.00								Omernik, 1977	NES
77% AG	MI	mon			0.080				1.86								EPA, 1974	NES
80% AG	WI	mon			0.240				3.70								EPA, 1974	NES
81% AG	NY	mon			0.050				1.74								EPA, 1974	NES
81% AG	WI	mon			0.180				2.08								EPA, 1974	NES
83% AG	WI	mon			0.160				3.15								EPA, 1974	NES
84% AG	WI	mon			0.130				6.42								EPA, 1974	NES
84% AG	WI	mon			0.200				3.64								EPA, 1974	NES
85% AG	WI	mon			0.100				1.60								EPA, 1974	NES
89% AG	WI	mon			0.180				3.37								EPA, 1974	NES
94% AG	WI	mon			0.230				2.52								EPA, 1974	NES
88% AG	IN	mon	905		1.510		0.160								0.77		Monke, et al, 1981	44% row/44% gr+past
89% AG	IN	mon	625		1.370		0.050								0.50		Monke, et al, 1981	63% row/26% gr+past
AG	So. ONTARIO	mon	91	10.0-364.0	0.220	0.03-0.57	0.068	0.004-0.136			1.11	0.42-2.54			0.21	0.02-0.46	Coote et al, 1982	11 ws,22-90% cultivd
66% AG	VT	mon	6	2.8-19.7	0.060	0.03-0.13	0.020	0.01-0.04			0.54	0.46-0.63					Meals, 1990	LP ws 3, lo intensity
82% Ag	VT	mon	14	4.2-26.2	0.170	0.08-0.22	0.060	0.03-0.10			1.10	0.85-1.15					Meals, 1990	LP ws 4, hi intensity
86% AG	VT	mon	20	14.6-24.9	0.840	0.68-1.04	0.500	0.33-0.61	3.28	2.4-4.1	2.75	2.0-3.7					VTRCWPCC, 1991	StA JB ws, hi intensity
ROW CROP LAND																		
CORN	US	mon			0.260				2.90								Dornbush, et al., 1974	Conventional tillage
CORN		mon			1.000				5.30								Baker & Johnson, 1983	Conventional tillage
CORN	NY	mon					0.240						1.30		0.50		Klausner, et al., 1974	
CORN	VT	mon					0.700						2.30				Benoit, 1973	
CORN	VT	mon		5.9-131.2		0.12-0.59		0.03-0.21									Broido, 1983	
CORN	var.	Lit. Rev.					0.200										Haith & Tubbs, 1981	warm weather
CORN	var.	Lit. Rev.					0.300										Haith & Tubbs, 1981	cold weather
ROW CRP	var.	Lit. Rev.				0.02-1.7			9.00				0.40				Loehr, 1974	
ROW CRP	PA	CB Model			0.014		0.010		2.09				2.05		0.03		Donigian, et al., 1991	Conventional tillage
ROW CRP	PA	CB Model			0.011		0.008		1.84				1.79		0.04		Donigian, et al., 1991	Conservation tillage
ROW CRP	MD	CB Model			0.056		0.009		1.50				1.41		0.02		Donigian, et al., 1991	Conventional tillage
ROW CRP	MD	CB Model			0.042		0.007		1.41				1.26		0.02		Donigian, et al., 1991	Conservation tillage
ROW CRP	MD	CB Model			0.039		0.023		1.76				1.55		0.04		Donigian, et al., 1991	Conventional tillage
ROW CRP	MD	CB Model			0.040		0.029		1.59				1.51		0.04		Donigian, et al., 1991	Conservation tillage
HITILL CR	Chesapeake Bay w	mon.	829		4.700				19.20								Hartigan, et al,1983	115 ac. ws
HITILL CR	Chesapeake Bay w	mon.	222		0.620				1.30								Hartigan, et al,1983	16 ac. ws
LOTILL CR	Chesapeake Bay w	mon.	361		1.670				6.60								Hartigan, et al,1983	27 ac. ws
LOTILL CR	Chesapeake Bay w	mon.	121		0.400				3.80								Hartigan, et al,1983	26 ac. ws
SM. GRAIN	var.	Lit. Rev.					0.300										Haith & Tubbs, 1981	warm weather
SM. GRAIN	var.	Lit. Rev.					0.300										Haith & Tubbs, 1981	cold weather
HAY LAND																		
HAY	US	mon			0.150				2.80								Dornbush, et al., 1974	
HAY	VT	mon		9.1-19.3		0.49-0.64		0.40-0.51				2.28-4.44				0.37-1.97	King, 1991	Unmanured
HAY	VT	mon	16		0.990		0.540				2.86				0.66		King, 1991	Manured
HAY	VT	mon	51		0.820		0.490				2.66				0.43		King, 1991	Mostly unmanured
HAY	PA	CB Model			0.007		0.005		3.63				3.60		0.02		Donigian, et al., 1991	
HAY	MD	CB Model			0.023		0.004		1.07				0.99		0.01		Donigian, et al., 1991	
HAY	MD	CB Model			0.023		0.020		0.94				0.90		0.02		Donigian, et al., 1991	
HAY/PAST	VT	mon			0.900								0.60				Benoit, 1973	
HAY	var.	Lit. Rev.					0.200										Haith & Tubbs, 1981	warm weather
PASTURE																		
PASTURE	US	mon			0.250				3.00								Dornbush, et al., 1974	
PASTURE	OH	mon			0.100				2.60				0.70				Owens, et al., 1983	With grazing
PASTURE	UT	mon					0.250						0.14				Coltharp & Darling, 1975	Cattle grazing
PASTURE	UT	mon					0.160						0.22				Coltharp & Darling, 1975	Sheep grazing
PASTURE	UT	mon					0.160						0.15				Coltharp & Darling, 1975	Ungrazed
PASTURE	CT	Lit. Rev.					0.010			0.04							Doenges, et al., 1990	
PASTURE	Chesapeake Bay w	mon.	670		1.120				6.20								Hartigan, et al, 1983	31 ac ws
PASTURE	Chesapeake Bay w	mon.	145		0.380				2.20								Hartigan, et al, 1983	19 ac ws
PASTURE	var.	Lit. Rev.					0.300										Haith & Tubbs, 1981	warm weather
PASTURE	var.	Lit. Rev.					0.300										Haith & Tubbs, 1981	cold weather
UNIMPR. P	OH	mon.			0.100	0-0.2							0.60	0.6-1.0			Owens, et al, 1989	
OTHER AG LAND																		
FEEDLOT	var.	Lit. Rev.				290-360				920-2100				10-23			Loehr, 1974	
IDLE	US	mon			0.100				2.60								Dornbush, et al., 1974	
INACT. AG		Lit. Rev.					0.200			1.1-1.6							Delwiche & Haith, 1983	
CLR/UNPR	Eastern U.S.	mon.			0.050		0.038		1.01		0.20						Omernik, 1977	>75%
CLR/UNPR	Eastern U.S.	mon.			0.084		0.029		0.97		0.23						Omernik, 1977	>50%
MIXED	Eastern U.S.	mon.			0.049		0.021		1.22		0.55						Omernik, 1977	
RANGE4/F	Eastern U.S.	mon.			0.057		0.018		1.31		0.48						Omernik, 1977	>50% Range
MIX/RANG	Eastern U.S.	mon.			0.097		0.037		1.30		0.45						Omernik, 1977	>75% Range
RANGE/AG	Eastern U.S.	mon.			0.070		0.025		1.38		0.50						Omernik, 1977	>50% Range

FOREST
EXPORT - kg/ha/yr

FOREXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	TSS Range	TP Med/Mean	TP Range	SRP Med/Mean	SRP Range	TN Med/Mean	TN Range	TKN Med/Mean	TKN Range	NO3-N Med/Mean	NO3-N Range	NH3-N Med/Mean	NH3-N Range	REFERENCE	COMMENTS
FOREST	VT/QUE	Lit/Calc				0.04-0.06											Spiller, et al., 1970?	L Memph. basin
FOREST	NE/NCent U.S.	mon.			0.080				4.32								EPA, 1974	NES ave
FOREST	ME	mon.			0.050				2.01								EPA, 1974	NES
FOREST	ME	mon.			0.060				3.32								EPA, 1974	NES
FOREST	NH	mon.			0.100				3.31								EPA, 1974	NES
FOREST	NH	mon.			0.120				5.20								EPA, 1974	NES
FOREST	NH	mon.			0.110				2.25								EPA, 1974	NES
FOREST	NH	mon.			0.120				1.85								EPA, 1974	NES
FOREST	NY	mon.			0.080				2.54								EPA, 1974	NES
FOREST	NY	mon.			0.090				5.22								EPA, 1974	NES
FOREST	NY	mon.			0.110				6.95								EPA, 1974	NES
FOREST	NY	mon.			0.080				5.70								EPA, 1974	NES
FOREST	NY	mon.			0.070				5.01								EPA, 1974	NES
FOREST	NY	mon.			0.060				4.60								EPA, 1974	NES
FOREST	NY	mon.			0.070				6.87								EPA, 1974	NES
FOREST	NY	mon.			0.070				4.58								EPA, 1974	NES
FOREST	SWITZERLAND	Lit.Rev.			0.040					0.80-9.6							CIPEL, 1988	
FOREST	Chesapeake WS	mon.				0.06-0.34		0.04-0.17		0.22-5.6				0.56-2.80		0.11-0.22	Donigian,et al, 1990	
FOREST	Chesapeake WS	mon.			0.162		0.100		0.39				1.70		0.18		Donigian,et al, 1991	
FOREST	Chesapeake WS	simulation			0.060		0.010		2.74				2.56		0.07		Donigian,et al, 1991	
FOREST	Chesapeake WS	simulation				0.10-0.35		0.001-0.12		0.53-7.33				0.45-6.28		0.02-0.17	Donigian,et al, 1991	
FOREST	Genesee,NY	mon.		7-820		0.02-0.67		0.01-0.03									TaskGroup B, 1977	
FOREST	Gt Lakes WS	mon.		1-5		0.04-0.20		0.03-0.10									TaskGroup B, 1977	
FOREST	?	?				0.34-0.90				3.02-13.45							USGS, 1984	
FOREST	Finland	mon.	0.18		0.001												Ahl, 1988	
FOREST	IL	mon.				0.01-0.11											Brozka,et al, 1981	Hardwoods
FOREST	U.S.	Lit Rev			0.100				3.00								Rast & Lee, 1978	
FOREST	So. Ontario	mon				0.05-0.107											Dillon & Kirchner, 1975	31 ws
FOREST	NH	mon.			0.020								1.30		0.60		Bormann, et al, 1968	
WOODLND	OH	mon.					0.050		0.29				1.00				Taylor, et al, 1971	
FOREST	U.S. ave.	Lit.Rev.			0.200	0.05-0.80	0.100		2.50	1.00-5.00							Uttormark,et al,1974	
FOREST	Ontario	mon.			0.090								1.26				Schindler & Nighswander,1970	(hrdwds,brch,hmlck)
FOREST	So. Ontario	20 ws			0.047												Dillon & Kirchner, 1975	(mixed deciduous)
FOREST	So. Ontario	4 ws			0.107												Dillon & Kirchner, 1975	
FOREST	NH(Hub.Br)	mon.			0.019		0.007		4.01								Likens, et al., 1977	(Maple,birch,beech)
FOREST	OH	mon.			0.035				2.82								Taylor, et al., 1971	(deciduous+pine)
FOREST	MD	mon.			0.200				1.50								Correll, et al., 1977	(hardwood+pine)
FOREST	NH	mon.											6.60		0.04		Martin, 1978	(Mpl/bch/sprc/fir)
FOREST	VA/NC	Lit.Rev.			0.134	0.09-0.21			2.33	0.69-3.80							Dodd, et al., 1992	+wetland
FOREST	U.S.	Lit-median			0.206				2.46								Reckhow, et al., 1980	
		Lit-mean			0.236				2.86									
FOREST	U.S.	Lit.Rev.			0.160	0.01-0.89			2.60	0.80-10.2							U.S.EPA, 1976	
FOREST	U.S.	Lit.Rev.			0.280				0.20	0.10-0.50							McElroy, et al., 1976	
FOREST	NE U.S.	NES data			0.080				4.40	1.20-12.8							Omernik, 1976	>75% Forest
FOREST	CT	mon.			0.070				2.20								Aylor & Frink, 1980	+Rural
FOREST	U.S.	Lit.Rev.			0.230	0.01-0.88			2.50	1.60-6.50							Beaulac & Reckhow, 1982	
FOREST	Chesapeake WS	mon.				0.06-0.11				0.60-2.20							U.S.EPA, 1982	
FOREST	?	?			0.090				0.70								Hartigan et al, 1983	
FOREST	U.S.	Lit.Rev.				0.05-0.10			3.00								Rast & Lee, 1983	
FOREST	?	?							7.60								Pionke & Urban, 1984	
FOREST	WI	Lit.Rev.			0.110	0.09-0.13			3.70	3.50-3.90	0.77						Clesceri et al, 1986	
FOREST	NY	Lit.Rev.			0.010				0.10								Haith & Shoemaker,1987	
FOREST	PA	mon				0.03-0.05				2.00-3.10							Ott, et al, 1990	
FOREST	CT	mon/modl			0.100	0.07-0.13			2.40	1.9-2.9							Frink, 1991	lake/land use studies
BIOGEOCH	CT	Lit. Rev.			0.130	-			12.00	-							Johnson et al. 1976	
FOREST	CT	Lit. Rev.			<0.01	-			0.10	-							Farrow et al. 1986	
FOREST	US	Lit. Rev.				0.03-0.9				3-13				0.7-8.8			Loehr, 1974	
WOODED	OH	mon.			0.100	0-<0.2					2.6	0.9-4.3	3.20	2.9-3.5			Owens, et al. 1989	17.7 ha. ws
WOODED	OH	mon.			0.100	0-<0.2					0.9	0.1-1.7	2.50	0.9-4.1			Owens, et al. 1989	17.7 ha. ws
FOREST	OR	mon.							3.30								Sylvester, 1961	
FOREST	NH-Hubbard Br	mon.			0.026				0.11				8.80		0.39		Hobbie & Likens, 1973	
WOODED	OH	mon.			0.600	0.3-0.9							9.60	7.9-11.3			Owens, et al., 1989	
WOODED	OH	mon.			<0.1				3.00	0.8-5.2			2.10	0.6-3.6			Owens, et al., 1991	Stormflow
WOODED	OH	mon.			<0.1				2.30	1.1-3.5			1.30	0.9-1.7			Owens, et al., 1991	Baseflow
FOREST	WI	Lit. Rev.			0.112	0.089-0.135	0.057		3.72	3.42-4.02	0.77						Clesceri, et al. (1986)	
FOREST (U	VA	Lit. Val.-mo	408.80		0.164				2.45								Biggers, et al., 1980	pervious surfaces
FOREST (U	VA	Lit. Val.-mo	204.40		0.531				6.13								Biggers, et al., 1980	impervious surfaces
FOREST ((	VA	Lit. Val.-mo	816.00		0.204				3.43								Biggers, et al., 1980	pervious surfaces
>90%FOR	Eastern U.S.	mon.			0.091		0.050		3.47								Omernik, 1977	NES
>75%FOR	Eastern U.S.	mon.			0.129		0.068		3.54								Omernik, 1977	NES
>50%FOR	Eastern U.S.	mon.			0.166		0.067		4.03								Omernik, 1977	NES

FOREST

CONCENTRATION - mg/l

FORCONCF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	Range	TP Med/Mean	Range	SRP Med/Mean	Range	TN Med/Mean	Range	TKN Med/Mean	Range	NO3-N Med/Mean	Range	NH3-N Med/Mean	Range	REFERENCE	COMMENTS
FOREST	IL	mon.				0.002-0.03											Brozka, et al,1981	
FOREST	NH(Hub.Br.)	mon.			0.028										0.39		Hobbie & Likens,1973	
FOREST	NE & NCent US	mon.			0.014				0.77								EPA, 1974	NES ave.
FOREST	VT/QUE	Lit/Calc			0.046												Spiller, et al., 1970?	Memphr. basin
FOREST	ME	mon.			0.008				0.66								EPA, 1974	NES
FOREST	ME	mon.			0.010				0.59								EPA, 1974	NES
FOREST	NH	mon.											2.50		0.05		Martin, 1979	
FOREST	NH	mon.			0.017				0.54								EPA, 1974	NES
FOREST	NH	mon.			0.020				0.86								EPA, 1974	NES
FOREST	NH	mon.			0.017				0.34								EPA, 1974	NES
FOREST	NH	mon.			0.020				0.30								EPA, 1974	NES
FOREST	NY	mon.			0.016				0.49								EPA, 1974	NES
FOREST	NY	mon.			0.014				0.80								EPA, 1974	NES
FOREST	NY	mon.			0.018				1.17								EPA, 1974	NES
FOREST	NY	mon.			0.015				1.11								EPA, 1974	NES
FOREST	NY	mon.			0.012				0.86								EPA, 1974	NES
FOREST	NY	mon.			0.010				0.90								EPA, 1974	NES
FOREST	NY	mon.			0.013				1.29								EPA, 1974	NES
FOREST	NY	mon.			0.013				0.90								EPA, 1974	NES
FOREST	Chesapeake WS	mon.	169		0.130				3.60								Hartigan, et al,1983	128 ac ws
FOREST	Chesapeake WS	mon.	79		0.130				0.90								Hartigan, et al,1983	76 ac ws
FOREST	Chesapeake WS	mon.	71		0.060				0.40								Hartigan, et al,1983	17 ac ws
FOREST	Chesapeake WS	mon.	71		0.060				0.40								Hartigan, et al,1983	17 ac ws
FOREST	NY	Lit. Rev.					0.001										D.Delwiche & Haith, 1983	warm weather
FOREST	NY	Lit. Rev.					0.001										D.Delwiche & Haith, 1983	cold weather
FOREST	WA	mon.			0.070	0.02-0.14	0.009	0-0.023			0.08	0-0.22	0.20	0.05-0.5			Sylvester, 1961	
FOREST	OH	mon.			0.015						0.46		1.30				Taylor, et al., 1971	
FOREST	var.	Lit. Rev.				0.01-0.11				0.3-1.8				0.1-1.3			Loehr, 1974	
WOODED	OH	mon.			<0.1								0.90	0.8-1.0			Owens, et al., 1989	
WOODED	OH	mon.			<0.1				1.90				1.40				Owens, et al., 1991	Stormflow
WOODED	OH	mon.			<0.1				1.00				0.70				Owens, et al., 1991	Baseflow
>90%FOR	Eastern US	mon.			0.011		0.006		0.66								Omernik, 1977	>90% Forest
>75%FOR	Eastern US	mon.			0.015		0.007		0.72								Omernik, 1977	>75% Forest
>50%FOR	Eastern US	mon.			0.036		0.013		0.91								Omernik, 1977	>50% Forest

URBAN

EXPORT - kg/ha/yr

URBEXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	Range	TP Med/Mean	Range	SRP Med/Mean	Range	TN Med/Mean	Range	TKN Med/Mean	Range	NO3-N Med/Mean	Range	NH3-N Med/Mean	Range	REFERENCE	COMMENTS
GENERAL/MIXED URBAN																		
MSTLY UR	NE/NCent US	NES			0.28				6.78								EPA, 1974	
URBAN	All NURP sites	med EMC	640		1.50		0.56		10.20		6.60		3.60				EPA, 1983	med. site
URBAN	US	ave			1.50	1.0-5.0	1.00	0.5-2.0	5.00	2.5-10.0							Uttormark et al, 1974	
URBAN	US	Lit. med			1.10				5.50								Reckhow, et al, 1980	
		Lit. mean			1.91				9.97									
URBAN	US	Lit. Rev.			1.00				5.00								Rast & Lee, 1978	
MSTLY UR	US	mon			0.30				7.90	2.0-17.0							Omernik, 1976	NES
URBAN	US	Lit. Rev.			0.64	0.03-2.48			5.10	2.1-17.9							EPA, 1976	
URBAN	US	Lit Rev.			1.12	0.33-6.23			5.00	1.6-38.5							Beaulac & Reckhow, 1982	
URBAN	Chesapeake ws	mon				1.10-2.24				4.5-11.2							EPA, 1982	
URBAN	DC				1.50						2.90		12.00				Jaworski & Hetling, 1970	60% Urb/30% Ag
URBAN	NC				3.00												Bryan, 1970	
URBAN		Lit Rev				1.1-5.6				7-9							Loehr, 1974	
>40% URB	Eastern US	mon.			0.35		0.17		7.30		4.88						Omernik, 1977	NES
LO DEN U	US	mon			0.99				5.40								EPA, 1983	
M DEN U	US	mon			1.48				9.60								EPA, 1983	
HI DEN U	US	mon			2.45				18.00								EPA, 1983	
URBAN	US	Lit. Rev.			1.00				5.00								Rast & Lee, 1983	
URBAN	CT	Lit. Rev.			1.50				9.60								Farrow, et al, 1986	
LO DEN U	NY	Lit. Rev			2.20				28.00								Haith & Shoemaker, 1987	
71% URB	PA	mon				0.70-0.75				9.0-9.8							Ott, et al., 1990	
URBAN	US	Lit.Rev.			1.00				5.00								Rast & Lee, 1978	
URBAN	Chesapeake ws	mon.				0.56-3.36		0.34-1.66		5.60-28.0				1.12-7.80		0.56-3.36	Donigian et al, 1990	region. mon.
URBAN	Chesapeake ws	mon.			1.90		1.00		12.12				4.11		2.05		Donigian et al, 1991	fld. studies
URBAN (perv.)	Chesapeake ws	simulated			0.62	0.10-3.80	0.21	0.03-1.99	10.20	2.34-33.6							Donigian et al, 1991	Bay Model
URBAN (IMPERV.)	Chesapeake ws	simulated			1.29	0.92-1.96	0.59	0.39-1.14	9.48	7.56-15.7			3.27	1.83-5.94	1.33	0.83-2.40	Donigian et al, 1991	Bay Model
-With storm sewers																		
LU 1	Can G Lakes ws	mon	390		1.60				9.00								Marsalak, 1978	m Res/I Ind
LU 2	Can G Lakes ws	mon	360		3.40				11.20								Marsalak, 1978	h Res/Comm
-With combined sewers																		
LU 1	Can G Lakes ws	mon	773		10.20				31.50								Marsalak, 1978	m Res/I Ind
LU 2	Can G Lakes ws	mon	672		11.60				36.50								Marsalak, 1978	h Res/Comm
MIXED UR	VT	calc.	404		1.00				6.50								Schwindt, 1992	Burlington,VT
TOWNS	G Lakes ws				2.50												Gregor & Johnson, 1980	1-10k pop
MIXED UR	Ontario	mon			0.76												O'Neill, 1979	958 ha ws
DEVELOPE	VA/NC	Lit.Rev.			1.06	0.45-1.5			7.50	5.0-9.7							Dodd, et al, 1992	
URBAN	CT	mon/model			1.70	1.49-1.91			13.40	10.8-16.0							Frink, 1991	lake/land use studies
RESIDENTIAL																		
RES.	All NURP sites	med EMC	550		1.30		0.50		8.40		5.80		2.60				EPA, 1983	med site
RES.	MN	calc.	319		1.05		0.37		5.38		2.24						MPCA, 1989	NURP method
RES.	NC	Lit.Rev.	550		1.00				5.80								Levi, et al, 1990	(Reckhow,etal,1989)
RES.	WI	mon			0.35				3.67		2.48		1.19		0.72		Much & Kemp, 1978	42 ha ws
RES.					0.96				6.70								Hartigan, et al., 1983	
RES					2.80				3.64		10.00						Weibel, 1964	
RES	WI	mon.	95		0.17												Novotny, et al. 1985	Freq sweep 50%imp
RES	WI	mon.	132		0.24												Novotny, et al. 1985	Occas sweep 57%imp
RES	WI	mon.	144		0.39												Novotny, et al. 1985	Freq sweep 52%imp
RES	WI	mon.	147		0.36												Novotny, et al. 1985	Occas sweep 51%imp
RES	WI	mon.	105		0.23												Novotny, et al. 1985	Freq sweep 47%imp
RES	WI	mon.	105		0.44												Novotny, et al. 1985	Occas sweep 55%imp
URB/RES	VT/QUE	Lit/Calc				0.03-0.09											Spiller, et al., 1970?	L. Memphremagog ws
VLO DENS	No. VA	Lit/Model	491		0.57				0.45								Biggers, et al., 1980	perv surf
VLO DENS	No. VA	Lit/Model	899		1.64				16.35								Biggers, et al., 1980	imperv surf
LOW DENS	No. VA	Lit/Model	409		1.43				8.18								Biggers, et al., 1980	perv surf
LOW DENS	No. VA	Lit/Model	2248		4.09				32.70								Biggers, et al., 1980	imperv surf
LOW DENS	VT	calc.	341		0.78				5.27								Schwindt, 1992	Simple Meth.
LOW DENS	var	mon				0.42-0.52											Lynard & Field, 1980	
LOW DENS	MI	mon			0.19				1.52		0.70		0.62				Landon, 1977	large lot,veg
LOW DENS	MI	mon			2.70				6.90		4.00		2.90				Landon, 1977	sml lot,veg
LOW DENS	DC/VA	mon			0.34												RRD, 1979	0.1 du/ac
LOW DENS	DC/VA	mon				0.67-0.9											RRD, 1979	1.0 du/ac
LOW DENS	VA	mon			1.91				33.76								Grizzard, et al, 1978	48k ha ws
MED DENS	WI	mon			1.10				5.00		0.67		0.50				Kluesner & Lee, 1974	27% imperv.
MED DENS	var	mon				0.87-1.27											Lynard & Field, 1980	
MED DENS	DC/VA	mon				0.78-1.01				7.51-8.40							RRD, 1979	2.0 du/ac
MED DENS	DC/VA	mon				1.01-1.46				7.96-11.65							RRD, 1979	3-6 du/ac
HI DENS	var	mon				1.3-1.44											Lynard & Field, 1980	
HI DENS	VT	calc.	678		1.80				10.40								Schwindt, 1992	Simple Meth.
HI DENS	DC/VA	mon				1.3-2.0				11.1-15.6							RRD, 1979	6-20 du/ac
HI DENS	MI	mon			0.56				5.50		2.30		2.20				Landon, 1977	hi open space
HI DENS	MI	mon			1.10				4.80		2.80		2.00				Landon, 1977	lo open space
HI DENS	No. VA	Lit/Model	818		2.66				16.35								Biggers, et al., 1980	perv surf
HI DENS	No. VA	Lit/Model	286		0.70				4.50								Biggers, et al., 1980	perv surf
HI DENS	No. VA	Lit/Model	1431		2.45				20.44								Biggers, et al., 1980	imperv surf

URBAN

EXPORT - kg/ha/yr

URBEXPF.WK3

LAND USE	LOCATION	TYPE	TSS Med/Mean	Range	TP Med/Mean	Range	SRP Med/Mean	Range	TN Med/Mean	Range	TKN Med/Mean	Range	NO3-N Med/Mean	Range	NH3-N Med/Mean	Range	REFERENCE	COMMENTS
COMMERCIAL/INDUSTRIAL																		
LT COMM	OH/NE	Lit Rev			2.60				3.64		10.00						Weibel, 1964	
COMM	All NURP sites	med EMC	1460		3.40		1.20		22.40		15.40		7.00				EPA, 1983	med site
COMM	WI	mon			0.88				4.54		2.80		1.74		0.59		Much & Kemp, 1978	16 ha ws
COMM	MN	calc.	549		1.45		0.59		8.52				3.80				MPCA, 1989	NURP method
COMM	NC	Lit.Rev.	1640		3.40				15.40								Levi, et al, 1990	(Reckhow,etal,1989)
COMM	VT	calc.	699		2.20				14.68								Schwindt, 1992	Simple Meth.
COMM	var	mon				2.11-2.88											Lynard & Field, 1980	
COMM					1.44				12.00								Hartigan, et al., 1983	
COMM-T	WI	mon.	694		1.33												Novotny, et al. 1985	Freq sweep 95%imperv
COMM-C	WI	mon.	984		1.60												Novotny, et al. 1985	Occas sweep 98%imperv
COMM(r)-T	WI	mon.	1220		1.93												Novotny, et al. 1985	Freq sweep 100%imperv
COMM(s)-T	WI	mon.	360		0.67												Novotny, et al. 1985	Freq sweep 100%imperv
COMM-C	WI	mon.	752		0.66												Novotny, et al. 1985	Freq sweep 100%imperv
COMM II	WI	mon.	719		1.27												WI DNR	81% imperv
COMM			1198		1.46												Bannerman, 1984	95-100% imprtv
CBD	DC/VA	mon			3.00				27.60								RRD, 1979	
CBD	WI	mon			4.08				38.47		28.11		10.36		6.96		Much & Kemp, 1978	9.3 ha ws
IND/CBD	No VA	Lit/Model	286		0.70				4.50								Biggers, et al., 1980	perv surf
IND/CBD	No VA	Lit/Model	1022		4.09				36.79								Biggers, et al., 1980	imperv surf
SHOP CTR	DC/VA	mon			1.79				14.79								RRD, 1979	Suburb shp ctr
SHOP CTR	MI	mon			1.70				20.50		8.50		12.00				Landon, 1977	18 ha ws
SHOP CTR	VT	calc	1658		1.82		0.73		18.60								Grizzard, 1978	Williston Mall est.
SHOP CTR	No VA	Lit/Model	286		0.70				4.50								Biggers, et al., 1980	perv surf
SHOP CTR	No VA	Lit/Model	1022		2.45				20.44								Biggers, et al., 1980	imperv surf
COMM/IND	MI	mon			0.66				4.00		2.20		1.80				Landon, 1977	4 ha ws
COMM/IND	CT	Lit Rev			2.22						16.30						USEPA 1983c	
IND/COMM	WI	mon.	537		0.37												Novotny, et al. 1985	Occas sweep 82%imperv
IND	GtLakes					9.0-11.0											Gregor & Johnson, 1980	comb. sewer
IND	GtLakes					1.25-3.0											Gregor & Johnson, 1980	sep. sewer
IND	VT	calc	1029		2.50				15.80								Schwindt, 1992	Simple Meth.
-With storm sewers																		
LU 3	Can G Lakes ws	mon	672		2.20				7.80								Marsalak, 1978	med-hi ind
-With combined sewers																		
LU 3	Can G Lakes ws	mon	740		10.90				34.50								Marsalak, 1978	med-hi ind
IND	WI	mon			0.75				6.53		4.49		2.04		2.36		Much & Kemp, 1978	8 ha ws
IND	DC/VA	mon				1.3-1.7				11.3-13.7							RRD, 1979	
SERVICE	NC	Lit Rev	640		1.50				6.60								Levi, et al, 1990	
MUNICIPL	NC	Lit Rev	1460		3.40				15.40								Levi, et al, 1990	
INST.	VT	calc	686		1.57				15.80								Schwindt, 1992	Simple Meth.
HIGHWAYS & PARKING LOTS																		
ROADS	VT	calc	587		1.23				12.78								Schwindt, 1992	Simple Meth.
OTHER																		
UNSEWER	GtLakes				1.25												Gregor & Johnson, 1980	
SUBURBAI	MN	calc	188		0.18		0.05		1.01				0.55				MPCA, 1989	Open land
-With storm sewers																		
LU 4	Can G Lakes ws	mon	11		0.04				0.22								Marsalak, 1978	
-With combined sewers																		
LU 4	Can G Lakes ws	mon	11		0.34				1.16								Marsalak, 1978	
GOLF/PAR	VT	calc	205		0.45				3.14								Schwindt, 1992	Simple Meth.
DEVELOP.	Gt Lakes	mon			25.00												Lynard & Field, 1980	
INST	No VA	Lit/Model	286		0.70				4.50								Biggers, et al., 1980	perv surf
INST	No VA	Lit/Model	1022		2.45				20.44								Biggers, et al., 1980	imperv surf
IDLE	No VA	Lit/Model	409		0.20				3.27								Biggers, et al., 1980	perv surf
IDLE	No VA	Lit/Model	204		0.53				6.13								Biggers, et al., 1980	perv surf

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

BOQUET-AUSABLE - 02010004

YEAR	HU #4010	HU #4020	HU #4030	HU #4040	HU #4050	HU #4060	HU #4070	HU #4080	HU #4090
1951									
1952						32.51	26.11	26.40	27.29
1953	34.56	34.37	35.16	27.27	35.48	32.97	25.35	25.90	27.58
1954	44.72	44.99	45.42	40.23	49.68	50.00	39.66	39.96	40.68
1955	36.03	34.16	35.15	29.26	38.14	37.28	24.80	25.20	26.00
1956	26.23	25.42	25.57	25.93	29.26	30.53	24.56	24.40	24.68
1957	29.84	29.09	29.38	28.16	32.61	33.36	26.64	26.93	27.78
1958	33.69	33.84	33.56	36.08	38.35	41.59	36.80	36.38	35.42
1959	37.56	37.09	37.96	29.95	41.55	40.50	27.45	27.55	28.34
1960	30.60	30.26	30.73	26.64	32.22	31.64	25.13	24.91	25.13
1961	27.35	26.93	26.96	27.73	28.59	28.92	27.16	27.21	26.78
1962	30.05	29.11	29.73	25.53	31.22	30.43	23.13	23.92	26.02
1963	34.16	34.53	35.20	27.22	35.20	32.50	26.22	26.51	28.45
1964	34.89	35.02	35.57	29.41	34.96	32.68	28.31	28.24	29.94
1965	26.52	25.75	26.20	23.33	28.36	27.87	21.42	21.87	24.24
1966	25.78	25.38	25.41	26.01	27.56	28.18	25.38	25.02	24.38
1967	32.37	32.02	32.39	29.36	37.88	39.58	28.08	27.88	28.42
1968	33.11	32.75	33.16	29.70	33.46	31.87	28.37	28.62	29.68
1969	36.24	36.17	36.46	33.55	38.42	38.36	32.76	32.38	32.14
1970	29.74	29.02	29.31	27.97	31.01	30.84	26.37	26.04	27.80
1971	32.86	32.59	32.98	29.57	36.55	37.11	28.42	28.76	30.98
1972	42.45	42.65	43.03	38.61			38.09	38.52	40.32
1973	44.85	44.04	44.66	40.05			37.79	38.71	41.09
1974	34.52	33.90	34.50	29.61			27.61	28.49	30.98
1975	32.75	32.22	32.79	28.10	32.76	30.22	26.25	26.75	28.80
1976	40.05	39.64	40.04	36.78	42.36	41.72	35.52	36.42	38.94
1977	45.86	45.67	46.58	37.47	44.86	40.93	35.66	38.57	44.76
1978	31.76	31.50	31.85	28.77	34.25	34.24	28.00	30.17	33.69
1979	37.26	37.52	38.01	32.15	39.69	38.49	31.56	32.93	35.75
1980						33.08	25.21	26.60	29.59
1981	37.46	36.14	36.85	32.59	40.09	39.96	29.40	29.64	32.23
1982	31.94	31.29	31.89	27.16	32.93	31.33	25.04	25.24	
1983	51.90	51.15	52.12	43.64	47.20	42.08	40.55	40.66	41.25
1984	37.83	37.41	38.10	31.80		31.62			
1985									
1986	38.30		38.08						
1987	31.58		32.13						
1988	28.31	28.32	28.53	26.33		28.44	25.88	25.85	27.19
1989	39.59	39.38	40.06	33.40	40.70	38.85	31.53	31.00	31.00
1990	49.19	49.15	50.12	40.04	48.93	45.04	37.84	37.89	39.43
1991						34.24	24.89	25.12	26.03
1992	32.81	32.50	33.07	27.81	34.25	32.95	26.18	26.43	27.99
n	37	35	37	35	30	35	37	37	36
MIN	25.78	25.38	25.41	23.33	27.56	27.87	21.42	21.87	24.24
MAX	51.90	51.15	52.12	43.64	49.68	50.00	40.55	40.66	44.76
MEAN	**35.26**	**34.88**	**35.37**	**31.06**	**36.62**	**35.20**	**29.17**	**29.54**	**31.13**
STD DEV	6.30	6.52	6.54	5.07	5.95	5.31	5.11	5.24	5.65
-95%CI	22.91	22.11	22.56	21.13	24.95	24.78	19.14	19.28	20.05
+95%CI	47.61	47.66	48.19	41.00	48.29	45.61	39.19	39.81	42.21
C.V.	0.18	0.19	0.18	0.16	0.16	0.15	0.18	0.18	0.18

ALL VALUES IN INCHES

HU4PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

LAMOILLE-GRAND ISLE - 02010005

YEAR	HU #5010	HU #5020	HU #5030	HU # 5040	HU #5050	HU #5060	HU #5070	HU #5080	HU #5090
1951						41.61	41.90		42.20
1952						35.50	36.43	31.17	37.40
1953						30.31	34.54	33.09	38.94
1954						48.41	51.41	44.00	54.53
1955		44.99	43.80			37.65	36.27	30.29	34.84
1956		36.93							
1957		41.10	40.24			30.96	35.37	31.08	39.96
1958		44.53	43.34			39.57			
1959		43.96	39.81			21.03			
1960		39.23						27.06	33.19
1961						30.39			
1962			47.25			32.78			
1963	33.13		41.22			32.19	36.27	32.94	40.51
1964						30.61	32.22	29.02	33.90
1965	35.82		44.75			33.27	36.49	31.84	39.84
1966	35.30					32.2	33.43	28.59	34.72
1967	40.22		51.75			29.61	32.99	31.59	36.50
1968	40.82		52.97			29.4	32.90	32.51	36.54
1969	44.91		54.16			36.68	37.07	32.33	37.48
1970	37.18			32.78	30.43	30.25	35.18	33.13	40.31
1971	40.99			31.75	31.37	32.01			
1972	44.28		56.60	37.69	36.52	37.45	42.23		47.20
1973	56.63		68.07			43.12			
1974			54.90	34.49	36.73	38.17			
1975				32.45	31.96	31.97			
1976				39.58	34.85	34.84			
1977	44.26			40.31					
1978	37.99		52.53	30.83	31.39	32.42	38.37		44.57
1979	40.72		53.69	31.57	34.56	35.59			
1980			49.96	30.50	27.95	28.33			
1981			66.04	41.40	37.56	38.59	41.50	37.42	44.53
1982				31.64	29.56	31.11	33.13		35.24
1983				48.81	45.08	48.17			
1984					39.23	43.57	42.11		40.59
1985				32.78	30.95	32.16	36.85		41.73
1986				38.81	31.82	33.31	40.52		48.03
1987				27.16	27.13	27.94	33.08		38.43
1988		48.35	48.09	26.19	28.86	31.40	33.59		35.87
1989		42.30		35.15					36.73
1990		40.57		41.54					48.07
1991	30.65			32.37	32.98	33.69			
1992	41.30	52.07	49.63	30.67	33.24	34.73			
n	15	10	19	21	19	36	23	15	26
MIN	30.65	36.93	39.81	26.19	27.13	21.03	32.22	27.06	33.19
MAX	56.63	52.07	68.07	48.81	45.08	48.41	51.41	44.00	54.53
MEAN	**40.28**	**43.40**	**50.46**	**34.69**	**33.27**	**34.15**	**37.12**	**32.40**	**40.07**
STD DEV	6.13	4.44	7.80	5.46	4.37	5.52	4.49	4.00	5.18
-95%CI	28.27	34.70	35.18	23.99	24.71	23.33	28.32	24.56	29.91
+95%CI	52.29	52.11	65.75	45.39	41.84	44.97	45.92	40.25	50.23
C.V.	0.15	0.10	0.15	0.16	0.13	0.16	0.12	0.12	0.13

ALL VALUES IN INCHES

HU5PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

OTTER-LEWIS - 02010002

YEAR	HU #2010	HU #2020	HU #2030	HU #2040	HU #2050	HU #2060	HU #2070	HU #2080	HU #2090	HU #2100
1951	46.68									
1952	40.22				37.13					
1953		34.56	33.84	37.29	31.13	31.17		31.56		
1954	51.96	43.81	42.94	46.52	37.92	37.85		38.33		
1955	39.76	33.94	33.60	35.33	33.19	33.20		33.41		
1956		32.56	31.87	34.63	30.08	30.27	34.72	30.01	29.76	29.59
1957		33.17	32.66	34.48	28.89	28.93	33.47	28.87	31.92	33.58
1958			35.37		31.37	31.45		31.63		
1959	43.79	43.85	43.58	43.43	38.85	38.94	45.98	38.78	37.11	35.74
1960	40.20				31.01			31.36		
1961	32.50	31.76	31.50	33.42	28.66	28.73	35.17	28.52	32.05	33.98
1962		30.73	30.20		28.55	28.94	36.85	29.70		
1963		27.28	26.79		25.11	24.98	29.93	25.79	29.90	31.69
1964	31.24		34.10	33.95	31.40	31.50	34.67	32.03	34.86	36.31
1965	31.13		28.75	30.77	23.60	23.74	31.60	24.03	31.91	36.32
1966	38.03	39.31	39.15	37.84	32.47	32.77	39.74	32.22	35.44	37.51
1967		38.09	37.87	37.04	30.95	31.21	37.87	31.49	36.99	40.11
1968			35.07		33.99	33.85	38.98	33.45	36.10	37.45
1969			37.38		40.38	40.30	43.97	39.87	46.89	51.15
1970			33.82		32.39	32.52	36.83	32.34	35.08	36.71
1971	38.90	36.55	36.21	37.80	36.40	36.49	41.27	36.28	37.31	37.81
1972	49.57	44.11	43.50	45.13	40.06	40.16	46.08	40.52	42.02	42.52
1973	46.28	46.24	45.85	46.24	40.31	40.56	50.64	41.21		
1974		44.05	43.35	44.96	34.92	35.26	43.35	35.41		
1975	51.47	44.94	44.52	45.57	37.55	37.68	45.85	37.06		
1976	55.88	53.39	52.96	54.65	47.08	47.50	56.43	47.21	49.88	51.47
1977	47.60	40.32	39.61	42.62	34.97	34.96	45.50	36.02	43.40	46.89
1978	38.10	36.24	35.63	37.24	31.15	31.29	39.49	31.41	35.39	37.42
1979		37.15	36.43	39.69	35.68	35.75	41.12	36.11	38.67	39.84
1980		31.52	31.04	33.04	27.01	27.27	34.44			33.09
1981		45.18	44.12	50.09			46.76	40.87	45.82	48.83
1982		24.30	23.98	25.32			31.77	25.68	30.78	33.19
1983		33.00	32.53	34.09				39.65		
1984								25.76		
1985		29.45	29.13							
1986		27.62	26.50				37.48	24.03	35.60	41.23
1987		32.57	32.31				41.74	25.17	33.54	37.45
1988		22.94	22.56	23.04			31.69	22.59	30.33	34.24
1989		29.43	29.08	29.96			40.12	25.22	34.62	38.78
1990		41.94	42.12	37.55			52.98	37.56	36.56	34.32
1991										
1992										
n	17	30	36	27	29	27	30	36	25	26
MIN	31.13	22.94	22.56	23.04	23.60	23.74	29.93	22.59	29.76	29.59
MAX	55.88	53.39	52.96	54.65	47.08	47.50	56.43	47.21	49.88	51.47
MEAN	**42.55**	**36.33**	**35.55**	**38.21**	**33.52**	**33.60**	**40.22**	**32.81**	**36.48**	**38.35**
STD DEV	7.44	7.30	6.76	7.30	5.15	5.29	6.59	5.93	5.40	5.73
-95%CI	27.97	22.03	22.31	23.91	23.43	23.23	27.30	21.18	25.89	27.12
+95%CI	57.12	50.64	48.80	52.52	43.62	43.98	53.14	44.44	47.06	49.59
C.V.	0.17	0.20	0.19	0.19	0.15	0.16	0.16	0.18	0.15	0.15

ALL VALUES IN INCHES

HU2PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

WINOOSKI - 02010003

YEAR	HU #3010	HU #3020	HU #3030	HU #3040	HU #3050	HU #3060	HU #3070	HU #3080
1951	38.23			35.87				
1952	36.44			29.99				
1953	31.54			29.98				
1954	42.68			39.37				
1955	30.34			42.67				
1956	35.74		36.01	31.22	34.74	29.42	30.18	
1957	26.36			33.34		33.38	33.36	
1958	35.77			34.66		35.96	35.41	
1959				34.54	39.23	33.98	34.21	
1960				29.66	37.27	29.99	29.85	
1961				30.38	38.75	32.20	31.43	
1962				32.49				
1963		28.66		26.23	36.15	29.57	28.17	
1964		32.39		29.71		33.96	32.17	
1965		30.97		29.01	39.97	33.81	31.79	
1966		32.74		28.54	40.88	33.82	31.60	
1967		34.55		32.22	46.83	37.32	35.18	
1968		35.89		32.74	46.85	35.23	34.18	
1969	40.27	41.45	44.51	34.52	53.10	45.28	40.76	
1970	28.22	31.60	35.44	32.98	44.71	35.07	34.19	32.95
1971	34.90	36.91	41.41	31.99	46.63	34.92	33.69	31.96
1972	36.66	38.65	43.70	38.10	50.26	40.27	39.36	38.04
1973	43.43	48.52	53.45	46.28				
1974				34.69				34.66
1975				32.51				32.50
1976				40.08		46.41	43.75	40.01
1977		40.76		40.44	58.11	44.11	42.57	40.42
1978		36.73		31.08	46.00	34.49	33.06	31.04
1979		37.69		31.56	46.87	36.27	34.29	31.56
1980				30.89	43.16	31.82	31.43	30.83
1981				42.13	59.22	46.32	44.56	42.02
1982				32.34		32.43	32.39	32.24
1983				50.16		51.70	51.05	49.97
1984				35.81		33.03	34.20	35.68
1985				33.34		36.71	35.29	33.26
1986				40.02		40.24	40.15	39.85
1987		31.30		27.41		32.44	30.33	27.37
1988	29.54	28.87	35.85	26.68	41.98	30.99	29.18	26.61
1989	42.05	41.30	47.10	36.03	40.66	36.67	36.40	35.90
1990	49.17		56.24	42.18	37.60	34.36	37.64	42.09
1991	35.05		40.31	32.52				32.50
1992	32.80			30.85				30.82
n	18	17	10	42	21	31	31	22
MIN	26.36	28.66	35.44	26.23	34.74	29.42	28.17	26.61
MAX	49.17	48.52	56.24	50.16	59.22	51.70	51.05	49.97
MEAN	**36.07**	**35.82**	**43.40**	**34.22**	**44.24**	**36.20**	**35.22**	**35.10**
STD DEV	5.91	5.27	7.22	5.29	6.76	5.46	5.15	5.52
-95%CI	24.49	25.48	29.25	23.85	30.99	25.49	25.13	24.29
+95%CI	47.64	46.16	57.56	44.59	57.48	46.91	45.31	45.92
C.V.	0.16	0.15	0.17	0.15	0.15	0.15	0.15	0.16

ALL VALUES IN INCHES

HU3PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

POULTNEY-METAWEE - 02010001

YEAR	HU# 1010	HU# 1020	HU#1030	HU #1050	HU #1070	HU #1090	HU #1270
1951	43.22	40.06	42.59			52.36	
1952	38.32	35.18	37.86		40.74	45.31	
1953	36.82	36.76	38.42	34.96	36.88	45.40	32.12
1954	41.75	45.99	45.35	40.53	38.87	49.76	40.18
1955	34.54	34.61	35.39	34.11	34.52	41.83	33.37
1956		31.95	33.48	30.01	31.09		28.17
1957		33.87	34.78	31.95	33.08		29.67
1958	30.58				31.44	42.08	31.43
1959	38.34	37.67	40.19	39.70	39.60	46.50	38.74
1960	33.18	33.63	35.43		32.90	48.26	29.67
1961	28.67	28.98	31.05	29.31	29.11	38.30	28.37
1962				27.59	30.91	37.53	24.80
1963				31.98	35.00	38.30	28.67
1964	27.29	27.29	29.48	29.61	28.31	33.84	30.61
1965	28.82	30.59	30.75	25.96	27.23	35.19	23.59
1966	32.64	31.78	34.20	32.24	33.56	42.96	29.98
1967		31.22	34.96	33.55	36.40		30.16
1968	35.50				36.09	43.25	35.98
1969	37.08				35.93	49.58	39.87
1970	31.75				32.96	42.21	31.05
1971	36.93	35.68	37.55	36.74	38.00	45.32	35.30
1972	45.03	43.47	45.78	43.57	46.17	53.29	40.44
1973	38.64	40.58	41.71	38.47	37.72		38.53
1974	42.53	43.33	44.66	38.21	41.58		33.55
1975	44.54	45.13	45.90	41.65	43.73		37.79
1976	50.27	51.52	52.74	46.62	49.07		43.23
1977	41.68	40.26	43.34	40.79	43.05		37.60
1978	32.77	33.53	35.19	32.21	32.70		30.65
1979		35.19	39.33	38.27	40.45		35.72
1980		31.88	32.47	27.59	29.37	47.39	
1981		43.94	46.86			49.19	
1982		23.73	26.98			53.10	
1983		33.76	39.35			59.60	
1984		36.55	37.45			53.88	
1985						38.11	
1986							
1987							
1988		29.51					
1989		36.01	36.64				
1990		40.71	44.37				
1991	35.93	36.18	37.07			43.94	
1992							
n	24	32	31	23	29	26	27
MIN	27.29	23.73	26.98	25.96	27.23	33.84	23.59
MAX	50.27	51.52	52.74	46.62	49.07	59.60	43.23
MEAN	**36.95**	**36.27**	**38.43**	**35.03**	**36.08**	**45.25**	**33.31**
STD DEV	5.81	6.01	5.85	5.60	5.45	6.35	5.05
-95%CI	25.55	24.48	26.95	24.05	25.40	32.81	23.41
+95%CI	48.35	48.06	49.91	46.00	46.77	57.69	43.20
C.V.	0.16	0.17	0.15	0.16	0.15	0.14	0.15

ALL VALUES IN INCHES

HU1PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

SOUTH BASIN, NY - 02010001

YEAR	HU #1080	HU #1110	HU #1120	HU #1130	HU #1140	HU #1150	HU #1160	HU #1170	HU #1180	HU #1190	HU #1200	HU #1210	HU #1220	HU #1230	HU #1240	HU #1250	HU #1260
1951	46.02	46.02	46.43	46.02	42.87	45.91											
1952	41.23	41.23	42.11	41.23	40.40	41.16	40.60	35.82	35.22	38.74	35.22	35.22	35.22	35.54			
1953	37.38	37.38	38.99	37.38	36.31	37.33	36.74	31.87	31.26	36.33	31.26	31.26	31.26	31.24	33.83	35.01	35.23
1954	38.69	38.69	42.67	38.69	42.30	38.82	38.92	40.71	40.93	41.67	40.93	40.93	40.93	40.42	43.78	45.25	45.50
1955	34.65	34.65	37.19	34.65	38.01	34.86	34.49	33.24	33.08	38.50	33.08	33.08	33.08	33.10	34.36	34.94	35.05
1956	31.45	31.45		31.45	29.93	31.45	30.99	27.49	27.05		27.05	27.05	27.05	27.57	26.16	25.59	25.50
1957	33.40	33.40		33.40	32.66	33.35	32.98	29.79	29.39		29.39	29.39	29.39	29.30	29.33	29.33	29.33
1958	31.46	31.46	34.27	31.46	32.35	31.51	31.44	31.29	31.27		31.27	31.27	31.27	31.29	32.75	33.42	33.55
1959	39.68	39.68	40.79	39.68	37.86	39.59	39.57	38.76	38.66	39.87	38.66	38.66	38.66	38.69	38.24	38.04	38.00
1960	33.30	33.30	38.40	33.30	36.63	33.36	32.78	28.83	28.33	33.51	28.33	28.33	28.33	28.79	30.00	30.61	30.74
1961	29.18	29.18	30.11	29.18	24.58	28.94	29.09	28.39	28.30	30.49	28.30	28.30	28.30	28.36	27.41	26.99	26.91
1962	31.75	31.75	32.33	31.75	29.34	31.66	30.67	22.40	21.36	28.48	21.36	21.36	21.36	22.59	27.05	29.23	29.69
1963	35.60	35.60	36.12	35.60	34.66	35.52	34.83	28.96	28.22	35.35	28.22	28.22	28.22	27.69	32.71	34.93	35.32
1964	28.14	28.14	30.03	28.14	29.32	28.16	28.36	30.03	30.24	31.78	30.24	30.24	30.24	30.44	33.80	35.35	35.65
1965	27.64	27.64	28.70	27.64	25.65	27.59	27.11	23.08	22.57	30.77	22.57	22.57	22.57	22.75	24.94	25.96	26.16
1966	33.99	33.99	36.05	33.99	33.11	33.92	33.44	29.22	28.69	34.63	28.69	28.69	28.69	29.33	26.68	25.55	25.37
1967	37.12	37.12		37.12	36.59	36.92	36.20	29.17	28.29	36.59	28.29	28.29	28.29	28.74	31.06	32.16	32.39
1968	35.99	35.99	39.23	35.99	38.58	35.96	36.12	37.09	37.21	40.44	37.21	37.21	37.21	36.66	34.46	33.39	33.17
1969	35.49	35.49	39.05	35.49	34.76	35.38	36.05	40.38	40.92	41.26	40.92	40.92	40.92	40.83	38.02	36.73	36.49
1970	33.19	33.19	35.43	33.19	31.76	33.02	32.89	30.60	30.31	36.50	30.31	30.31	30.31	30.66	29.71	29.32	29.26
1971	38.30	38.30	39.98	38.30	36.72	38.13	37.91	34.94	34.57	39.98	34.57	34.57	34.57	34.88	33.62	33.08	32.99
1972	46.79	46.79	49.86	46.79	49.20	46.73	46.00	39.93	39.17	49.13	39.17	39.17	39.17	39.32	41.75	42.87	43.09
1973	37.76	37.76	40.62	37.76	39.22	37.81	37.71	37.35	37.30	40.34	37.30	37.30	37.30	37.81	42.18	44.24	44.64
1974	42.49	42.49	43.59	42.49	40.34	42.36	41.32	32.33	31.20	40.42	31.20	31.20	31.20	31.84	33.49	34.32	34.50
1975	44.30	44.30	44.19	44.30	39.78	44.28	43.57	37.97	37.27	45.82	37.27	37.27	37.27	37.32	34.37	33.04	32.79
1976	49.81	49.81	51.43	49.81	47.35	49.70	48.87	41.64	40.73	48.45	40.73	40.73	40.73	41.81	40.53	40.08	40.04
1977	43.61	43.61	45.81	43.61	44.67	43.80	42.89	37.36	36.66	45.41	36.66	36.66	36.66	36.37	43.08	46.11	46.66
1978	32.94	32.94	36.44	32.94	40.39	33.29	32.63	30.22	29.92	35.68	29.92	29.92	29.92	30.13	31.23	31.75	31.86
1979	40.97	40.97		40.97	39.56	40.88	40.30	35.18	34.54		34.54	34.54	34.54	34.73	36.90	37.90	38.10
1980	29.90	29.90		29.90		29.78	29.22	24.01	23.36		23.36	23.36	23.36	23.98			
1981	41.44	41.44		41.44		41.25											36.78
1982	31.40	31.40		31.40		31.47											31.88
1983	50.66	50.66		50.66		50.78											52.15
1984	40.39	40.39		40.39		40.35											38.13
1985	29.15	29.15		29.15		29.17											
1986																	38.05
1987																	32.19
1988																	28.55
1989	40.50	40.50		40.50		40.47											40.11
1990	57.36	57.36		57.36		57.07											50.22
1991	35.95	35.95		35.95		35.83											
1992	40.40	40.40		40.40		40.24											33.10
n	39	39	25	39	29	39	29	29	29	24	29	29	29	29	27	27	37
MIN	27.64	27.64	28.70	27.64	24.58	27.59	27.11	22.40	21.36	28.48	21.36	21.36	21.36	22.59	24.94	25.55	25.37
MAX	57.36	57.36	51.43	57.36	49.20	57.07	48.87	41.64	40.93	49.13	40.93	40.93	40.93	41.81	43.78	46.11	52.15
MEAN	37.68	37.68	39.19	37.68	36.72	37.64	35.99	32.69	32.28	38.34	32.28	32.28	32.28	32.49	33.76	34.27	35.38
STD DEV	6.67	6.67	5.86	6.67	5.91	6.65	5.42	5.37	5.49	5.46	5.49	5.49	5.49	5.36	5.39	5.82	6.57
-95%CI	24.60	24.60	27.71	24.60	25.14	24.61	25.36	22.18	21.51	27.64	21.51	21.51	21.51	21.99	23.20	22.86	22.51
+95%CI	50.75	50.75	50.67	50.75	48.30	50.66	46.62	43.21	43.04	49.03	43.04	43.04	43.04	42.98	44.31	45.67	48.25
C.V.	0.18	0.18	0.15	0.18	0.16	0.18	0.15	0.16	0.17	0.14	0.17	0.17	0.17	0.16	0.16	0.17	0.19

ALL VALUES IN INCHES

HU1NYPRC.W

APPENDIX D

Area-Weighted HU Annual Total Precipitation

LAKE CHAMPLAIN BASIN PRECIPITATION STATIONS

VERMONT

ALL VALUES IN INCHES

YEAR	BURL 1081	CHITT 1433	CORNWL 1580	DORSET 1786	ENOSBRG 2769	ESSXJCT 2843	HUNTCTR 4052	MPLR 5278	MORRSVL 5376	MTMNSFL 5416	NEWPORT 5542	NRTHFLD 5740	PERU 6335	ROCHSTR 6893	RUTLAND 6995	STALBANS 7032	STJOHNSB 7054	SALISBRY 7098	SOHERO 7607	WATTSFLD 8637	WATRBRY 8815
1951	35.87	42.40	39.34	53.95	39.49	37.05		38.41			37.37	37.69	59.98	42.83	39.68	41.61	38.38				
1952	29.99	37.98	37.43	46.33	41.30	32.58		37.29			36.58	33.89	50.15	39.83	34.73	35.50	40.12				38.33
1953	29.98	42.49	31.11	47.41	33.87	29.99		32.61				28.32		42.21	35.83	30.31	37.08	33.84			35.75
1954	39.37	52.81	37.44	52.53	51.81	41.79		43.22			46.68	41.06	65.18	53.42	44.89	48.41	43.64	42.95			47.36
1955	42.67	37.62	33.21	43.63	35.81	39.30		30.45		50.46	33.56	30.01	50.51	37.67	34.12	37.65	31.86	33.6			39.87
1956	31.22	38.59	30.57		30.08	30.16	28.37	36.63		43.44	31.09	33.06	53.41	41.83	30.88		33.89	31.87		37.09	36.07
1957	33.34	38.05	28.81		35.57	33.87	33.40	25.15		48.05	37.78	29.99	45.41	39.49	33.19	30.96	30.67	32.66		34.71	
1958	34.66		31.39	44.73	37.62	39.38	36.72	34.97		49.47	39.36	38.16	43.38	41.52	29.12	39.57	36.11	35.37			
1959	34.54	45.02	38.88	48.20	39.20	37.90	33.65	34.82		49.78	40.36		56.37	48.89	36.48	21.03	39.97	43.58		48.55	37.05
1960	29.66	41.13	31.44	52.00	31.20	24.71	30.19	32.38		53.19	36.87		51.93	36.83	32.42		34.22				31.96
1961	30.38	36.88	28.72	40.58			33.26	29.96		51.98	37.52		38.14	31.52	27.70	30.39	30.49	31.5		38.41	36.16
1962	32.49	35.94	29.70	38.97	37.92			34.02		61.18	42.48		43.19	37.11		32.78	36.66	30.2		41.98	43.93
1963	26.23	31.98	24.61	38.97	38.44		31.53	24.61	33.30	49.75	38.66		44.22	33.32		32.19	29.77	26.79		32.66	33.08
1964	29.71	34.83	31.58	35.26	35.32		36.44	31.94	32.49		30.60		38.91		26.07	30.61	31.63	34.1		35.5	35.39
1965	29.01	34.96	23.77	37.08	44.08		36.61	26.96	36.28	53.60	37.16		30.61		29.89	33.27	30.52	28.75		34.57	35.63
1966	28.54	38.46	33.07	45.20			36.91	30.84	35.49	56.27	33.77		50.25	44.09	30.70	32.2	31.18	39.16		41.16	36.29
1967	32.22	38.39	31.38		46.10		40.31	30.49	40.78	68.52	42.93		42.92	42.91	30.06	29.61	32.83	37.88		38.9	38.66
1968	32.74		33.48	45.07	41.29		36.68	32.06	40.35	73.27	35.49		50.17	43.23	34.63	29.4	39.02	35.07		42.2	36.76
1969	34.52		40.29	53.10	37.93		51.58	39.22	44.73	73.61	43.18	43.40	52.07	48.24	38.38	36.68	41.91	37.38		48.52	42.04
1970	32.98		32.72	44.47			36.29	27.24	37.45	66.71	38.61	31.15	41.64	37.98	29.69	30.25	31.31	33.82	30.95	39.3	36.17
1971	31.99	39.69	36.69	47.08			36.63	33.72	41.11	70.55	42.26	38.45	44.02	40.93	35.03	32.01	36.02	36.21	29.55	45.05	41.44
1972	38.10	48.32	40.20	54.91	49.19		41.54	35.20	45.20	72.58	42.90	41.02	62.00	53.82	42.69	37.45	34.71	43.5	33.87	48.57	42.28
1973	46.28	48.62	40.79	49.80	55.56			41.37	57.27	89.70	52.47	49.62	58.07	52.44	39.28	43.12	48.09	45.86		55.08	58.31
1974	34.69	49.63	35.52	50.86	52.73			35.21	43.84	67.78	48.06			54.00	42.31	38.17		43.36	32.62	44.6	43.13
1975	32.51	49.21	37.59	55.30	43.25			39.55			45.01		64.90	49.53	44.47	31.97		44.53	31.93	47.97	40.94
1976	40.08	58.48	48.10	62.05	49.87		50.11	43.82			50.91		63.98	57.52	50.40	34.84	44.46	52.96	34.89	59.85	
1977	40.44	48.08	34.70	56.45	47.31		46.26	36.89	43.60	88.06	45.44		61.84	47.79	39.00		41.98	39.61	39.14	50.76	49.42
1978	31.08	40.80	31.35	39.40	40.79		36.49	36.73	37.80	71.54	41.80		47.88	45.41	32.36	32.42	34.37	35.63	28.47	43.11	37.2
1979	31.56	44.08	35.86		45.76		39.03	36.07	40.85	70.19	41.31		53.75	46.07	33.75	35.59	35.72	36.43	31.62	44.78	39.27
1980	30.89	36.71	27.60		37.83		32.36	26.30		69.34	30.99			36.59	31.10	28.33	32.95	31.04	26.86	37.57	32.43
1981	42.13	58.61	41.38		51.26		48.77	38.56		90.28	45.90			53.90	41.57	38.59	38.99	44.12	34.62	49.2	44.9
1982	32.34	26.73	24.91		36.53		32.48				29.69		27.90	28.93	23.24	31.11	30.53	23.98	25.16	37.55	36.34
1983	50.16	34.16	38.11		45.71		52.60	45.00			41.12		45.90	43.28	33.69	48.17	41.2	32.52	36.29		57.06
1984	35.81	35.19	24.23				31.41	36.92			30.60			44.91	36.77	43.57	32.43		26.86		41.4
1985	33.34	28.34	25.40		37.01		38.68	30.20			31.75		38.52	38.67		32.16	26.15	29.13	27.52		39.88
1986	40.02	35.14	22.30		45.90	44.33	40.37	33.98			30.60		54.57	45.58		33.31	34.12	26.5	27.56	46.50	44.29
1987	27.41	37.79	24.30		39.19	31.88	35.38	30.54	30.73		29.65		60.28	32.05		27.94	29.45	32.32	24.81	50.19	39.48
1988	26.68	23.66	21.85		36.94	30.76	33.51	27.67	30.88	65.25	25.54	35.16	48.64	31.47	30.45	31.40	24.31	22.56	21.63	38.75	35.72
1989	36.03	32.75	23.38		37.65	40.08	37.05	40.51	41.47	44.43	19.73	46.68	54.10	33.53	36.54		39.81	29.09	26.93	49.43	46.91
1990	42.18	33.83	35.99		51.11	46.67	29.78	47.37		34.70	49.53	54.56	57.41	47.85	41.82		42.61	42.13	35.61	62.21	52.97
1991	32.52	39.97		45.94	36.85	38.64		33.49			40.87	39.72		43.77	35.57	33.69	35.80		30.94	44.30	38.18
1992	30.85				36.14	37.09		31.66		66.47	31.29	36.22		42.87	35.14	34.73	32.37	35.12	28.98	41.76	
n	42	36	40	26	37	17	31	41	18	28	41	18	35	40	37	37	40	37	22	32	37
MIN	26.23	23.66	21.85	35.26	30.08	24.71	28.37	24.61	30.73	34.70	19.73	28.32	27.90	28.93	23.24	21.03	24.31	22.56	21.63	32.66	31.96
MAX	50.16	58.61	48.10	62.05	55.56	46.67	52.60	47.37	57.27	90.28	52.47	54.56	65.18	57.52	50.40	48.41	48.09	52.96	39.14	62.21	58.31
MEAN	**34.22**	**39.86**	**32.48**	**47.28**	**41.45**	**36.25**	**37.56**	**34.49**	**39.65**	**62.51**	**38.23**	**38.23**	**50.06**	**42.85**	**35.23**	**34.35**	**35.43**	**35.54**	**30.31**	**44.09**	**40.60**
STD DEV	5.29	7.96	6.23	6.65	6.40	5.73	6.38	5.42	6.39	14.26	7.14	7.09	9.32	7.03	5.72	5.58	5.20	6.67	4.33	7.11	6.25
-95%CI	23.85	24.26	20.26	34.24	28.90	25.01	25.05	23.87	27.12	34.55	24.24	24.33	31.80	29.07	24.02	23.41	25.25	22.48	21.83	30.15	28.34
+95%CI	44.59	55.46	44.70	60.32	54.00	47.48	50.07	45.11	52.17	90.46	52.22	52.14	68.33	56.62	46.45	45.29	45.62	48.61	38.79	58.02	52.85
C.V.	0.15	0.20	0.19	0.14	0.15	0.16	0.17	0.16	0.16	0.23	0.19	0.19	0.19	0.16	0.16	0.16	0.15	0.19	0.14	0.16	0.15

VTPRCP.WK3

LAKE CHAMPLAIN BASIN PRECIPITATION STATIONS

NEW YORK

ALL VALUES IN INCHES

YEAR	CHAZY 1401	DNMORA 1966	E'TOWN 2554	EBRG DEP 2574	G FALLS 3294	L PLACID 4555	NEWCMB 5714	NO CREEK 5925	PERU 6538	P'BURGH 6659	RAYBRK 6957	SMITHBSN 7818	TICOND 8507	TUPPER L 8631	WHITEHLL 9389	WRNBRG 8959
1951	33.94	31.71		32.64	42.69	41.98	44.16					41.76		40.70	46.02	47.91
1952	30.08	28.65		27.14	39.04	35.51	43.04		26.06	28.39		40.81	35.22	34.57	41.23	39.68
1953	32.72	30.07	35.23	31.07	35.95	36.56	40.17		25.26	29.66		36.09	31.26	33.56	37.38	39.56
1954	39.99	41.26	45.50	46.90	42.67	54.85	55.48		39.61	42.01		43.49	40.93	50.75	38.69	43.48
1955	29.76	26.07	35.05	26.23	41.18	43.14	39.16		24.74	27.94		37.59	33.08	35.86	34.65	43.38
1956	25.48	27.06	25.50	25.04	31.47	33.30	34.58	42.60	24.58	23.37		28.51	27.05	34.17	31.45	
1957	28.05	28.91	29.33	27.01	31.92	36.52	36.30	37.58	26.59	28.95		32.77	29.39	33.21	33.40	
1958	38.09	34.88	33.55	34.91	33.07	43.78	37.81	38.35	36.87	33.49		32.31	31.27	38.64	31.46	
1959	33.61	30.79	38.00	30.20	36.98	46.60	47.10	49.03	27.43	28.24		37.63	38.66	44.51	39.68	42.25
1960	26.77	27.83	30.74	24.28	35.06	34.66	33.06	34.75	25.17	23.37		38.75	28.33	33.38	33.30	36.64
1961	27.88	24.61	26.91	23.41	21.76	29.73	35.79	31.83	27.15	27.55		24.33	28.30	31.69	29.18	37.07
1962	35.34	28.28	29.69	33.49	28.92	33.90	31.76	29.11	23.00	29.35		28.64	21.36	34.90	31.75	31.51
1963	32.45	34.04	35.32	34.35	33.21	35.45	42.17	33.83	26.17	28.54		35.07	28.22	39.73	35.60	41.39
1964	27.42	37.53	35.65	25.69	28.90	34.71	38.29	34.96	28.32	27.77		30.00	30.24	37.18	28.14	36.42
1965	33.13	30.45	26.16	27.26	25.94	30.91	34.78	27.43	21.35	24.92		24.73	22.57	36.05	27.64	40.86
1966	30.17	24.60	25.37	22.59	31.75	29.45	33.86	32.84	25.44	22.57		33.50	28.69	28.83	33.99	40.69
1967	33.06	32.28	32.39	31.98	30.74	44.94	39.19	39.92	28.11	26.51		39.54	28.29	37.81	37.12	45.12
1968	32.09	32.03	33.17	28.87	35.05	33.52	41.34	32.19	28.33	30.35		41.48	37.21	37.91	35.99	47.98
1969	31.61	34.14	36.49	28.36	31.97	40.93	41.08		32.82	29.81		35.98	40.92	44.72	35.49	49.38
1970	36.83	37.75	29.26	33.24	27.80	32.90	36.20		26.42	23.78		33.34	30.31	36.13	33.19	47.13
1971		37.46	32.99	30.40	32.89	41.18	39.04	41.51	28.37	31.04	40.52	38.18	34.57	43.57	38.30	48.30
1972		44.31	43.09	36.35	45.07		49.27	52.38	38.02	41.45	40.47	52.36	39.17	43.53	46.79	59.66
1973	44.61	43.48	44.64	38.78	39.38		45.63	45.80	37.64	45.03	42.18	39.69	37.30	41.00	37.76	44.51
1974	33.84	34.15	34.50	28.27	38.52		41.84		27.47	34.52	40.56	40.50	31.20	41.55	42.49	46.79
1975	30.51	33.20	32.79	26.43	43.83	32.10	45.41		26.17	30.18	34.56	35.86	37.27	41.25	44.30	53.86
1976	37.57	41.99	40.04	37.54	46.34	44.68	51.70		35.37	42.64	47.76	46.94	40.73	47.19	49.81	54.27
1977	41.38	46.80	46.66	37.52	49.50	43.60	49.84	50.45	35.19	58.53	47.00	42.47	36.66	46.09	43.61	50.83
1978		30.71	31.86	29.63	43.97	37.31	37.62	42.77	27.65	45.03	36.98	41.32	29.92	40.46	32.94	37.45
1979	32.90	36.34	38.10	30.85	38.18	41.82	45.47	46.10	31.34	42.30	38.60	39.76	34.54	37.58	40.97	
1980	26.67	30.76		24.20	26.05	36.86	39.04	36.48	24.99	36.10	35.28		23.36	36.33	29.90	
1981	38.56	41.00	36.78	31.91	35.41	44.90	41.74	39.97	29.36	31.29	41.22			46.07	41.44	
1982			31.88	25.89	33.49	34.27	40.07	32.36	25.01	26.63	36.64				31.40	
1983		42.78	52.15		54.40	42.79	46.73	52.89	40.53	41.43	45.22				50.66	
1984		35.46	38.13	27.51	39.15	32.50		40.39	29.70					38.32	40.39	
1985		34.90			29.87		44.62	37.38		25.27	38.01				29.15	
1986		38.67	38.05	37.74	43.41	42.97	41.68	45.80			37.91					
1987		37.53	32.19	29.84	40.86	34.86	40.74	42.41		29.35	31.16			32.03		
1988		32.90	28.55	32.86	32.02	29.63			25.88	25.70	31.30					
1989		35.24	40.11	28.89	39.69	42.23	43.28	40.51	31.61	27.40	39.27			50.88	40.50	
1990		45.37	50.22	38.55	48.21	48.40	54.12	55.47	37.83	38.26	46.70			53.81	57.36	
1991	21.27	27.91		26.96	32.15	38.62	36.61	35.46	24.85	26.71	39.86				35.95	
1992	30.15	32.38	33.10	29.12	35.38	36.12	38.12	38.60	26.14	28.15	37.34			44.97	40.40	
n	30	41	37	40	42	38	40	31	38	39	21	29	29	36	39	25
MIN	21.27	24.60	25.37	22.59	21.76	29.45	31.76	27.43	21.35	22.57	31.16	24.33	21.36	28.83	27.64	31.51
MAX	44.61	46.80	52.15	46.90	54.40	54.85	55.48	55.47	40.53	58.53	47.76	52.36	40.93	53.81	57.36	59.66
MEAN	**32.53**	**34.30**	**35.38**	**30.60**	**36.52**	**38.37**	**41.45**	**40.04**	**29.12**	**31.89**	**39.45**	**37.01**	**32.28**	**39.69**	**37.68**	**44.24**
STD DEV	5.07	5.78	6.57	5.13	6.98	5.90	5.61	7.15	5.03	7.79	4.62	6.26	5.49	5.89	6.67	6.52
-95%CI	22.59	22.96	22.51	20.54	22.84	26.81	30.46	26.03	19.25	16.63	30.41	24.75	21.51	28.16	24.60	31.47
+95%CI	42.48	45.64	48.25	40.65	50.20	49.93	52.43	54.04	38.98	47.15	48.50	49.28	43.04	51.23	50.75	57.02
C.V.	0.16	0.17	0.19	0.17	0.19	0.15	0.14	0.18	0.17	0.24	0.12	0.17	0.17	0.15	0.18	0.15

NYPRCPF.WK

LAKE CHAMPLAIN BASIN PRECIPITATION STATIONS

QUEBEC

ALL VALUES IN INCHES

YEAR	ABRCRN 7020040	BROME 7020840	FRNHAM 7022320	GRGVLLE 7022720	HMNGFD 7023075	IBRVLLE 7023270	MAGOG 7024440	PPSBURG 7026040	SUTTON 7028295	WARDEN 7028890
1951	44.65		42.68				43.46	42.20		
1952	45.91		43.23	39.72			36.93	37.40		
1953	41.54		36.54	46.10			37.20	38.94		
1954	57.48		50.47	56.89			48.11	54.53		
1955	40.67		32.95	41.85			37.20	34.84		
1956	36.18		32.99	37.87						
1957	49.41		38.07	50.59			42.17	39.96		
1958	45.71	46.69	41.73	47.80			49.49			
1959	43.70	43.35	43.70				43.98			
1960	41.97		34.69				43.31	33.19		
1961			38.78							
1962	48.11						51.06			
1963	49.72		36.93					40.51		
1964	41.57						37.99	33.90		
1965	48.03		37.13	45.28	30.68	35.55		39.84	44.88	
1966	47.05		37.13	41.97	29.88	35.39	45.24	34.72		
1967	50.75		38.58	46.73		35.63	42.72	36.50	50.24	
1968	45.59		37.60	42.44	37.28	36.10	43.11	36.54	43.82	
1969	48.74	45.98	41.30	45.12		33.70	45.91	37.48	46.06	46.65
1970	46.61	45.67	42.91	43.15	35.83	36.69	42.80	40.31	46.50	46.34
1971	45.31	46.06	47.64	42.72		40.75	45.12		49.13	51.81
1972	50.98	45.31	49.09	48.11		47.48	47.87	47.20	49.76	54.76
1973	59.06	52.36	44.69	54.72					53.94	57.44
1974	57.17	54.21	47.87			40.08	51.61			56.10
1975		49.41	43.31			41.30	44.72		51.46	44.25
1976	55.39	55.35	53.90			47.13	50.91		61.89	63.23
1977	53.50	48.15	47.56			43.50	40.28		52.64	46.22
1978	48.94	49.49	43.15				39.92	44.57	47.28	50.75
1979	46.61		44.80		38.12	38.98	38.35		40.43	48.31
1980			40.91	38.50	28.90	37.17	37.36		37.99	44.41
1981	49.37	56.65	50.55	51.81		46.38	47.48	44.53	52.95	51.57
1982	47.40		38.19	42.52		35.28	37.44	35.24	44.33	41.50
1983	61.34	56.61	53.78	57.32	43.85	50.67	51.61		60.39	61.02
1984	49.37	47.44	39.09	44.69	29.79	35.43	42.36	40.59	50.47	44.09
1985		52.68	44.29	47.09		38.70	42.95	41.73	47.95	46.97
1986		51.06	51.30	48.54		45.87	42.36	48.03	51.30	
1987		44.06	37.20	42.76	33.81	36.50	43.39	38.43	42.36	41.73
1988		45.75	35.79	41.26	29.36	34.21		35.87	43.62	
1989		45.35	41.46	44.41		41.10	41.14	36.73	46.50	44.17
1990		57.64	54.53	56.69	41.20	52.68	55.55	48.07	58.11	
1991										
1992										
n	31	21	38	27	11	24	34	26	24	19
MIN	36.18	43.35	32.95	37.87	28.90	33.70	36.93	33.19	37.99	41.50
MAX	61.34	57.64	54.53	57.32	43.85	52.68	55.55	54.53	61.89	63.23
MEAN	**48.32**	**49.49**	**42.54**	**46.17**	**34.43**	**40.26**	**43.86**	**40.07**	**48.92**	**49.54**
STD DEV	5.64	4.55	5.92	5.49	5.21	5.50	4.86	5.18	5.92	6.41
-95%CI	37.27	40.57	30.93	35.41	24.22	29.48	34.34	29.91	37.31	36.99
+95%CI	59.36	58.41	54.14	56.94	44.63	51.05	53.37	50.23	60.52	62.10
C.V.	0.12	0.09	0.14	0.12	0.15	0.14	0.11	0.13	0.12	0.13

QUEPRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

SARANAC-CHAZY - 02010006

YEAR	HU #6010	HU #6020	HU #6030	HU #6040	HU #6050	HU #6060	HU #6070	HU #6080	HU #6090	HU #6100	HU #6110	HU #6120
1951			31.71			33.94	33.55	32.26	33.83	33.94	34.15	
1952			28.65	28.52	28.89	30.08	29.76	27.52	29.82	30.08	30.27	29.13
1953			30.07	29.87	30.56	32.72	32.25	30.67	32.57	32.72	32.88	31.00
1954			41.26	41.62	41.37	39.99	40.41	45.03	40.60	39.99	40.37	41.13
1955			26.07	26.98	28.27	29.76	29.06	26.10	29.45	29.76	29.89	28.74
1956			27.06	25.27	24.32	25.48	25.72	25.58	25.44	25.48		24.29
1957			28.91	28.93	28.69	28.05	28.15	27.51	27.96	28.05	28.36	28.56
1958			34.88	34.20	34.91	38.09	37.48	34.80	37.81	38.09		35.50
1959			30.79	29.55	29.99	33.61	33.06	30.29	33.31	33.61		30.59
1960			27.83	25.66	24.75	26.77	26.86	25.29	26.55	26.77	26.94	24.86
1961			24.61	26.04	27.36	27.88	27.22	23.71	27.49	27.88		27.69
1962			28.28	28.80	30.92	35.34	34.17	31.80	35.18	35.34		31.97
1963			34.04	31.37	30.17	32.45	32.76	34.15	32.62	32.45	32.66	30.25
1964			37.53	32.79	28.62	27.42	28.96	29.24	27.27	27.42	27.59	27.62
1965			30.45	27.76	27.76	33.13	32.52	28.15	32.61	33.13	33.30	28.51
1966			24.60	23.61	24.89	30.17	29.05	23.14	29.50	30.17	30.29	25.89
1967			32.28	29.48	28.90	33.06	32.90	31.98	32.96	33.06	33.15	29.37
1968			32.03	31.21	31.00	32.09	31.98	29.75	31.81	32.09	32.21	31.11
1969			34.14	32.04	30.73	31.61	31.91	30.04	31.32	31.61	31.76	30.60
1970			37.75	30.96	28.79	36.83	36.86	34.52	36.51	36.83	36.92	29.48
1971	40.91	39.04	37.46	34.34				32.47				
1972		42.33	44.31	42.92				38.68				
1973		42.81	43.48	44.23	44.76	44.61	44.24	40.10	44.10	44.61		44.85
1974		37.46	34.15	34.33	34.29	33.84	33.71	29.98	33.35	33.84		34.22
1975	35.55	33.90	33.20	31.73	30.57	30.51	30.80	28.42	30.15	30.51		30.32
1976	47.12	44.97	41.99	42.31	41.16	37.57	38.27	38.79	37.57	37.57		40.42
1977	46.64	46.90	46.80	52.50	52.59	41.38	42.11	40.25	41.04	41.38		51.04
1978	37.23	33.95	30.71	37.67				29.87				
1979	38.44	37.51	36.34	39.24	39.09	32.90	33.38	32.44	32.72	32.90		38.19
1980	35.27	33.09	30.76	33.36	32.94	26.67	27.24	26.13	26.45	26.67		31.98
1981	42.28	41.11	41.00	36.28	34.27	38.56	38.73	34.60	37.97	38.56	38.72	34.47
1982												
1983		44.04	42.78	42.12								
1984			35.46					29.86				
1985		36.50	34.90	30.22								
1986		38.28	38.67					37.91				
1987	31.92	34.24	37.53	33.55				32.10				
1988		32.07	32.90	29.40				32.77				
1989	41.27	37.32	35.24	31.43				30.75				
1990	47.99	46.06	45.37	41.91				40.52				
1991		34.08	27.91	27.33	25.30	21.27	22.50	27.17	21.77	21.27		24.33
1992	38.34	34.94	32.38	30.32	29.12	30.15	30.47	30.03	30.06	30.15		29.02
n	12	20	41	38	29	30	30	39	30	30	16	29
MIN	31.92	32.07	24.60	23.61	24.32	21.27	22.50	23.14	21.77	21.27	26.94	24.29
MAX	47.99	46.90	46.80	52.50	52.59	44.61	44.24	45.03	44.10	44.61	40.37	51.04
MEAN	**40.25**	**38.53**	**34.30**	**33.15**	**31.90**	**32.53**	**32.54**	**31.65**	**32.33**	**32.53**	**32.47**	**31.90**
STD DEV	5.10	4.65	5.78	6.33	6.45	5.07	4.98	5.02	5.02	5.07	3.77	6.17
-95%CI	30.26	29.41	22.96	20.75	19.26	22.59	22.78	21.81	22.48	22.59	25.07	19.82
+95%CI	50.24	47.65	45.64	45.56	44.53	42.48	42.30	41.49	42.17	42.48	39.86	43.98
C.V.	0.13	0.12	0.17	0.19	0.20	0.16	0.15	0.16	0.16	0.16	0.12	0.19

ALL VALUES IN INCHES

HU6PRCP.WK

HYDROLOGIC UNIT AREA-WEIGHTED PRECIPITATION

MISSISQUOI - 02010007

YEAR	HU #7010	HU #7020	HU #7030	HU #7040	HU #7050	HU #7060	HU #7070	HU #7080	HU #7090	HU # 7150	HU #7160	HU #7170	HU #7190
1951		41.80		39.49		40.97	42.22			42.41	42.67	42.22	42.20
1952	38.82	43.36		41.30		37.79	40.79			39.91	43.06	37.64	37.40
1953		37.30		33.87		32.86	38.23			37.91	36.61	38.84	38.94
1954	49.72	54.34		51.81		50.52	54.30			52.78	50.59	54.36	54.53
1955	35.60	37.98		35.81	38.40	36.59	36.30			34.03	33.01	34.76	34.84
1956	32.44	32.81		30.08									
1957	40.67	41.76		35.57	34.68	33.93	41.09			39.15	38.13	39.88	39.96
1958	41.01	41.24		37.62	39.95			42.79	47.55				
1959		41.21		39.20	31.30								
1960		36.01		31.20			34.97			33.84	34.65	33.25	33.19
1961													
1962				37.92	38.00								
1963				38.44	36.60	35.62	41.96			38.97	37.04	40.36	40.51
1964				35.32		32.74							33.90
1965	40.19			44.08	39.75	38.00	42.54			38.67	37.21	39.73	39.84
1966										35.76	37.06	34.82	34.72
1967	44.84			46.10	40.39	36.35	42.25			37.39	38.52	36.59	36.50
1968	38.22			41.29	38.98	34.59	39.87			37.00	37.57	36.58	36.54
1969	43.98	42.47	47.94	37.93	41.37	37.23	40.59	45.91	45.31	39.12	41.19	37.64	37.48
1970		43.48	46.44					44.29	43.72	41.43	42.83	40.42	40.31
1971		38.11	45.98					46.58	43.47				
1972	45.17	45.85	50.08	49.19	45.97	42.99	48.71	49.85	47.48	48.01	49.03	47.28	47.20
1973	54.04		57.40	55.56	53.22				54.19				
1974		48.18		52.73	47.15								
1975		43.21		43.25									
1976		42.76	56.40	49.87									
1977			52.70	47.31									
1978			48.68	40.79	40.10	37.17	44.65			43.96	43.19	44.51	44.57
1979		49.99		45.76	43.45								
1980		57.12		37.83	36.66								
1981	47.32	54.71	50.74	51.26	49.36	43.87	47.69	50.97	52.90	47.12	50.37	44.78	44.53
1982	34.30			36.53		33.61	38.69			36.51	38.10	35.36	35.24
1983	46.27	52.34	60.58	45.71				56.77	57.16				
1984		50.08	49.28					44.10	45.31	39.95	39.14	40.53	40.59
1985		44.43		37.01		35.30		46.41	48.35	42.83	44.21	41.84	41.73
1986		46.14		45.90		39.91			49.11	49.44	51.20	48.17	48.03
1987				39.19		33.43		42.75	43.05	37.90	37.24	38.38	38.43
1988		50.42		36.94	37.39	34.00			42.27	35.84	35.79	35.87	35.87
1989		41.39		37.65				43.49	44.62	38.76	41.32	36.93	36.73
1990		52.70		51.11				54.16	56.90	50.85	54.34	48.34	48.07
1991				36.85									
1992				36.14	38.89								
n	15	27	11	37	19	20	16	12	15	25	25	25	26
MIN	32.44	32.81	45.98	30.08	31.30	32.74	34.97	42.75	42.27	33.84	33.01	33.25	33.19
MAX	54.04	57.12	60.58	55.56	53.22	50.52	54.30	56.77	57.16	52.78	54.34	54.36	54.53
MEAN	**42.17**	**44.86**	**51.47**	**41.45**	**40.61**	**37.37**	**42.18**	**47.34**	**48.09**	**40.78**	**41.36**	**40.36**	**40.07**
STD DEV	5.94	6.20	4.76	6.40	5.26	4.46	4.84	4.62	4.99	5.22	5.76	5.13	5.18
-95%CI	30.52	32.70	42.14	28.90	30.30	28.63	32.69	38.28	38.30	30.56	30.07	30.32	29.91
+95%CI	53.82	57.02	60.81	54.00	50.92	46.12	51.67	56.39	57.88	51.00	52.66	50.41	50.23
C.V.	0.14	0.14	0.09	0.15	0.13	0.12	0.11	0.10	0.10	0.13	0.14	0.13	0.13

ALL VALUES IN INCHES

HU7PRCP.WK

APPENDIX E

Export Coefficient NPS Load Estimates for TP, SRP, and TN

EXPORT COEFFICIENT ESTIMATES vs D/F DATA

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.04	0.25	1

LOW-END COEFFCIENTS + 10%AG==>URB

METTAWEE/BARGE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Mettawee River	02010001-090	29650	20088	8647	412	804	1946	1277	4026					
Hampton	02010001-110	2097	640	1363	93	26	307	229	562					
Mettawee River	02010001-120	22752	11026	11207	423	441	2522	1544	4506					
Whitehall	02010001-130	2741	911	1753	78	36	394	253	684					
Halfway Ck/Ch Car	02010001-140	52585	26621	23107	2111	1065	5199	4422	10686					
TOTALS		109825	59286	46077	3117	2371	10367	7725	20463	33700	45800	0.19	0.31	0.42

POULTNEY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Upper Poultney R.	02010001-010	20104	13163	6713	218	527	1510	889	2926					
Castleton	02010001-020	8301	6719	1108	474	269	249	585	1103					
Lake Bomoseen	02010001-030	17407	11585	3896	672	463	877	1062	2402					
Hubbardton River	02010001-050	14560	7800	5986	190	312	1347	789	2447					
Main Stem Poultne	02010001-070	4756	2381	2302	25	95	518	255	868					
	02010001-080	2814	1222	1591	0	49	358	159	566					
TOTALS		67942	42870	21596	1579	1715	4859	3739	10313	14100	29300	0.15	0.21	0.43

OTTER

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Otter/Rutland	02010002-010	93760	70126	20548	2464	2805	4623	4519	11947					
Neshobe River	02010002-020	5254	3997	1072	185	160	241	292	693					
Middlebury River	02010002-030	16274	13407	2538	259	536	571	513	1620					
Mid-Otter Creek	02010002-040	47937	23315	18112	585	933	4075	2396	7404					
Bridport	02010002-050	2847	265	2126	19	11	478	232	721					
Lemon Fair River	02010002-060	20670	3952	16661	18	158	3749	1684	5591					
New Haven River	02010002-070	30131	21644	8029	286	866	1807	1089	3761					
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	97	5277	2987	8360					
TOTALS		244725	139120	92538	4458	5565	20821	13712	40098	48100	80100	0.16	0.20	0.33

LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Lewis Creek	02010002-100	20999	10704	9356	203	428	2105	1139	3672	5200	10400	0.17	0.25	0.50

LITTLE OTTER

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Little Otter Creek	02010002-090	18738	4737	13171	203	189	2963	1520	4673	5400	9800	0.25	0.29	0.52

LAPLATTE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
LaPlatte River	02010003-060	13722	3409	9459	541	136	2128	1487	3752	7600	10300	0.27	0.55	0.75

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	599	2744	3608	6951					
N Branch	02010003-020	72520	53735	16514	987	2149	3716	2638	8503					
Dog/Mad River	02010003-030	79983	62258	14574	3130	2490	3279	4587	10357					
Shelburne Pond	02010003-040	5505	1257	3520	284	50	792	636	1478					
Lower Winooski R.	02010003-050	87539	64007	15865	5865	2560	3570	7452	13581					
TOTALS		275389	196238	62670	12654	7850	14101	18921	40871	59500	129400	0.15	0.22	0.47

LAMOILLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	2794	5364	3638	11795					
Lee/Browns River	02010005-020	23908	15951	7207	605	638	1622	1326	3585					
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	1797	4110	3086	8993					
TOTALS		187497	130722	49312	3118	5229	11095	8049	24373	26600	44200	0.13	0.14	0.24

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	3724	6996	3780	14500					
Trout River	02010007-020	21647	17688	3773	186	1769	1698	845	4312					
Mid Mississquoi R.	02010007-030	42526	29698	11084	794	2970	4988	2854	10811					
Tyler Branch	02010007-040	22444	12452	9712	204	1245	4370	1763	7378					
Black Creek	02010007-050	31105	15910	14025	152	1591	6311	2332	10234					
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	864	5276	3401	9541					
Bolton, Que	02010007-080	17713	12753	4074	354	1275	1833	1142	4251					
Mansonville, Que	02010007-090	10222	7360	2351	204	736	1058	659	2453					
	TOTALS	223261	141744	72290	3954	14174	32531	16775	63479	76300	107800	0.28	0.34	0.48

PUTNAM CREEK

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Putnam Br/Crown	02010001-220	16005	13992	1546	14	1399	696	253	2348	1300	2300	0.15	0.08	0.14

MILL BROOK (Pt. Henry)

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Port Henry	02010001-250	7203	6105	639	366	611	288	645	1543	600	1300	0.21	0.08	0.18

BOQUET

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
No Branch Boquet	02010004-020	25496	23286	1697	446	2329	764	924	4016					
Boquet River	02010004-030	45185	37277	6336	948	3728	2851	2372	8951					
	TOTALS	70681	60563	8033	1394	6056	3615	3296	12967	13500	21700	0.18	0.19	0.31

AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	4756	983	1219	6958					
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	5722	818	3259	9799					
Lower Ausable R.	02010004-070	20733	15189	3493	1253	1519	1572	2403	5494					
	TOTALS	135135	119963	7496	3838	11996	3373	6881	22251	11200	18600	0.16	0.08	0.14

LITTLE AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Little Ausable R.	02010004-080	20856	14015	6343	460	1402	2854	1641	5897	3800	3200	0.28	0.18	0.15

SALMON

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Salmon River	02010004-090	18592	13157	3547	1581	1316	1596	2904	5815	1700	2000	0.31	0.09	0.11

SARANAC

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Upper Saranac R.	02010006-010	91342	77268	1564	1467	7727	704	2435	10866					
N Branch	02010006-020	33202	30549	922	161	3055	415	380	3850					
Mid Saranac R.	02010006-030	26587	19890	6017	478	1989	2708	1620	6316					
Lower Saranac R.	02010006-040	8593	4991	1611	1747	499	725	2862	4086					
	TOTALS	159724	132698	10114	3853	13270	4551	7297	25118	7700	10500	0.16	0.05	0.07

LITTLE CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED BASE YEAR	NPS LOAD (kg/yr) D/F MEASURED 1990-1992	AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F BASE YEAR	AREAL LOAD (kg/ha/yr) MEASURED D/F 1990-1992
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN						
Chazy River	02010006-070	16565	8028	7728	333	803	3478	1659	5939	3200	4200	0.36	0.19	0.25

EXDFVAG1.WK3

EXPORT COEFFICIENT ESTIMATES vs D/F DATA

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.1	0.5	1.5

BASELINE COEFFCIENTS + 10% AG==>URB

METTAWEE/BARGE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Mettawee River	02010001-090	29650	20088	6647	412	2009	3891	1915	7815					
Hampton	02010001-110	2097	640	1363	93	64	613	344	1021					
Mettawee River	02010001-120	22752	11026	11207	423	1103	5043	2316	8461					
Whitehall	02010001-130	2741	911	1753	78	91	789	380	1260					
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	2662	10398	6633	19693					
	TOTALS	109825	59286	46077	3117	5929	20735	11587	38250	33700	45800	0.35	0.31	0.42

POULTNEY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Upper Poultney R.	02010001-010	20104	13163	6713	218	1316	3021	1334	5671					
Castleton	02010001-020	8301	6719	1108	474	672	499	877	2048					
Lake Bomoseen	02010001-030	17407	11585	3896	672	1159	1753	1592	4504					
Hubbardton River	02010001-050	14560	7800	5986	190	780	2694	1183	4657					
Main Stem Poultney	02010001-070	4756	2381	2302	25	238	1036	383	1657					
	02010001-080	2814	1222	1591	0	122	716	239	1077					
	TOTALS	67942	42870	21596	1579	4287	9718	5608	19613	14100	29300	0.29	0.21	0.43

OTTER

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Otter/Rutland	02010002-010	93760	70126	20548	2464	7013	9247	6778	23037					
Neshobe River	02010002-020	5254	3997	1072	185	400	482	438	1320					
Middlebury River	02010002-030	16274	13407	2538	259	1341	1142	769	3252					
Mid-Otter Creek	02010002-040	47937	23315	18112	585	2332	8150	3594	14076					
Bridport	02010002-050	2847	265	2126	19	27	957	347	1331					
Lemon Fair River	02010002-060	20670	3952	16661	18	395	7497	2526	10419					
New Haven River	02010002-070	30131	21644	8029	286	2164	3613	1633	7411					
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	241	10553	4481	15276					
	TOTALS	244725	139120	92538	4458	13912	41642	20568	76122	48100	80100	0.31	0.20	0.33

LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Lewis Creek	02010002-100	20999	10704	9356	203	1070	4210	1708	6989	5200	10400	0.33	0.25	0.50

LITTLE OTTER

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Little Otter Creek	02010002-090	18738	4737	13171	203	474	5927	2260	8661	5400	9800	0.46	0.29	0.52

LAPLATTE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
LaPlatte River	02010003-060	13722	3409	9459	541	341	4257	2230	6828	7600	10300	0.50	0.55	0.75

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	1498	5489	5412	12398					
N Branch	02010003-020	72520	53735	16514	987	5374	7431	3958	16762					
Dog/Mad River	02010003-030	79983	62258	14574	3130	6226	6558	6881	19665					
Shelburne Pond	02010003-040	5505	1257	3520	284	126	1584	954	2664					
Lower Winooski R.	02010003-050	87539	64007	15865	5865	6401	7139	11177	24717					
	TOTALS	275389	196238	62670	12654	19624	28202	28382	76207	59500	129400	0.28	0.22	0.47

LAMOILLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	6985	10727	5457	23168					
Lee/Browns River	02010005-020	23908	15951	7207	605	1595	3243	1989	6827					
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	4493	8220	4629	17341					
	TOTALS	187497	130722	49312	3118	13072	22190	12074	47336	26600	44200	0.25	0.14	0.24

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	1490	3498	2520	7507					
Trout River	02010007-020	21647	17688	3773	186	708	849	563	2120					
Berkshire/Sutton	02010007-030	42526	29698	11084	794	1188	2494	1902	5584					
Mid Missisquoi R.	02010007-040	22444	12452	9712	204	498	2185	1175	3858					
Black Creek	02010007-050	31105	15910	14025	152	636	3156	1555	5347					
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	346	2638	2267	5251					
Bolton, Que	02010007-080	17713	12753	4074	354	510	917	761	2188					
Mansonville, Que	02010007-090	10222	7360	2351	204	294	529	439	1262					
	TOTALS	223261	141744	72290	3954	5670	16265	11183	33118	76300	107800	0.15	0.34	0.48

PUTNAM CREEK

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Putnam Br/Crown	02010001-220	16005	13992	1546	14	560	348	169	1076	1300	2300	0.07	0.08	0.14

MILL BROOK (Pt. Henry)

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Port Henry	02010001-250	7203	6105	639	366	244	144	430	818	600	1300	0.11	0.08	0.18

BOQUET

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
No Branch Boquet	02010004-020	25496	23286	1697	446	931	382	616	1929					
Boquet River	02010004-030	45185	37277	6336	948	1491	1426	1582	4498					
	TOTALS	70681	60563	8033	1394	2423	1807	2197	6427	13500	21700	0.09	0.19	0.31

AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	1902	492	813	3206					
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	2289	409	2173	4871					
Lower Ausable R.	02010004-070	20733	15189	3493	1253	608	786	1602	2996					
	TOTALS	135135	119963	7496	3838	4799	1687	4588	11073	11200	18600	0.08	0.08	0.14

LITTLE AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Little Ausable R.	02010004-080	20856	14015	6343	460	561	1427	1094	3082	3800	3200	0.15	0.18	0.15

SALMON

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Salmon River	02010004-090	18592	13157	3547	1581	526	798	1936	3260	1700	2000	0.18	0.09	0.11

SARANAC

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Upper Saranac R.	02010006-010	91342	77268	1564	1467	3091	352	1623	5066					
N Branch	02010006-020	33202	30549	922	161	1222	207	253	1683					
Mid Saranac R.	02010006-030	26587	19890	6017	478	796	1354	1080	3229					
Lower Saranac R.	02010006-040	8593	4991	1611	1747	200	362	1908	2470					
	TOTALS	159724	132698	10114	3853	5308	2276	4864	12448	7700	10500	0.08	0.05	0.07

LITTLE CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			NPS LOAD (kg/yr) ESTIMATED	NPS LOAD (kg/yr) D/F MEASURED		AREAL LOAD (kg/ha/yr) ESTIMATED	AREAL LOAD (kg/ha/yr) MEASURED D/F	
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN		BASE YEAR	1990-1992		BASE YEAR	1990-1992
Chazy River	02010006-070	16565	8028	7728	333	321	1739	1106	3166	3200	4200	0.19	0.19	0.25

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NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.24	0.81	1.91

HIGH LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	3159	5438	416	9013	35.1	60.3	4.6
Castleton	02010001-020	8301	6719	1108	474	1613	897	905	3415	47.2	26.3	26.5
Lake Bomoseen	02010001-030	17407	11585	3896	672	2780	3156	1284	7220	38.5	43.7	17.8
Hubbardton River	02010001-050	14560	7800	5986	190	1872	4849	363	7084	26.4	68.4	5.1
Main Stem Poultney	02010001-070	4756	2381	2302	25	571	1865	48	2484	23.0	75.1	1.9
Mettawee River	02010001-090	29650	20088	8647	412	4821	7004	787	12612	38.2	55.5	6.2
Direct to L CH	02010001-270	24849	5198	18867	101	1248	15282	193	16723	7.5	91.4	1.2
TOTALS		**119627**	**66934**	**47519**	**2092**	**16064**	**38490**	**3996**	**58550**	**27.4**	**65.7**	**6.8**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	16830	16644	4706	38180	44.1	43.6	12.3
Neshobe River	02010002-020	5254	3997	1072	185	959	868	353	2181	44.0	39.8	16.2
Middlebury River	02010002-030	16274	13407	2538	259	3218	2056	495	5768	55.8	35.6	8.6
Mid-Otter Creek	02010002-040	47937	23315	18112	585	5596	14671	1117	21384	26.2	68.6	5.2
Bridport	02010002-050	2847	265	2126	19	64	1722	36	1822	3.5	94.5	2.0
Lemon Fair River	02010002-060	20670	3952	16661	18	948	13495	34	14478	6.6	93.2	0.2
New Haven River	02010002-070	30131	21644	8029	286	5195	6503	546	12244	42.4	53.1	4.5
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	579	18996	1226	20802	2.8	91.3	5.9
Little Otter Creek	02010002-090	18738	4737	13171	203	1137	10669	388	12193	9.3	87.5	3.2
Lewis Creek	02010002-100	20999	10704	9356	203	2569	7578	388	10535	24.4	71.9	3.7
TOTALS		**284462**	**154561**	**115065**	**4864**	**37095**	**93203**	**9290**	**139588**	**26.6**	**66.8**	**6.7**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	3595	9880	4561	18036	19.9	54.8	25.3
N Branch	02010003-020	72520	53735	16514	987	12896	13376	1885	28158	45.8	47.5	6.7
Dog/Mad River	02010003-030	79983	62258	14574	3130	14942	11805	5978	32725	45.7	36.1	18.3
Shelburne Pond	02010003-040	5505	1257	3520	284	302	2851	542	3695	8.2	77.2	14.7
Lower Winooski R.	02010003-050	87539	64007	15865	5865	15362	12851	11202	39414	39.0	32.6	28.4
LaPlatte River	02010003-060	13722	3409	9459	541	818	7662	1033	9513	8.6	80.5	10.9
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	84	4608	21	4713	1.8	97.8	0.4
Dir L Ch Burl	02010003-080	5615	337	2438	2782	81	1975	5314	7369	1.1	26.8	72.1
TOTALS		**300825**	**200335**	**80256**	**15988**	**48080**	**65007**	**30537**	**143625**	**33.5**	**45.3**	**21.3**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	16763	19309	2395	38467	43.6	50.2	6.2
Lee/Browns River	02010005-020	23908	15951	7207	605	3828	5838	1156	10821	35.4	53.9	10.7
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	10782	14796	2405	27983	38.5	52.9	8.6
Malletts Bay	02010005-040	13643	5829	5648	1606	1399	4575	3067	9041	15.5	50.6	33.9
Direct to L Ch	02010005-050	6091	1903	3979	152	457	3223	290	3970	11.5	81.2	7.3
St. Albans Bay	02010005-060	12966	2113	8968	1369	507	7264	2615	10386	4.9	69.9	25.2
Swanton	02010005-070	5488	504	2789	325	121	2259	621	3001	4.0	75.3	20.7
Islands	02010005-080	25328	5796	15884	1016	1391	12866	1941	16198	8.6	79.4	12.0
Foucault, Que	02010005-090	23	17	5	1	4	4	2	10	40.6	40.3	19.0
TOTALS		**251036**	**146884**	**86585**	**7587**	**35252**	**70134**	**14491**	**119877**	**29.4**	**58.5**	**12.1**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	8938	12593	1843	23374	38.2	53.9	7.9
Trout River	02010007-020	21647	17688	3773	186	4245	3056	355	7657	55.4	39.9	4.6
Mid-Missisquoi R.	02010007-030	42526	29698	11084	794	7128	8978	1517	17622	40.4	50.9	8.6
Mid Missisquoi R.	02010007-040	22444	12452	9712	204	2988	7867	390	11245	26.6	70.0	3.5
Black Creek	02010007-050	31105	15910	14025	152	3818	11360	290	15469	24.7	73.4	1.9
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	2074	9496	2091	13662	15.2	69.5	15.3
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	7973	15264	2028	25266	31.6	60.4	8.0
Bolton, Que	02010007-080	17713	12753	4074	354	3061	3300	676	7037	43.5	46.9	9.6
Mansonville, Que	02010007-090	10222	7360	2351	204	1766	1904	390	4060	43.5	46.9	9.6
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	1224	1320	271	2816	43.5	46.9	9.6
Morpion, Que	02010007-160	11529	8301	2652	231	1992	2148	441	4582	43.5	46.9	9.6
Pike R., Que	02010007-170	8557	6161	1968	171	1479	1594	327	3399	43.5	46.9	9.6
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	833	897	183	1914	43.5	46.9	9.6
TOTALS		**310528**	**197999**	**98493**	**5656**	**47520**	**79779**	**10803**	**138102**	**34.4**	**57.8**	**7.8**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**184011**	**346614**	**69117**	**599742**	**30.7**	**57.8**	**11.5**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.24	0.81	1.91

HIGH LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	293	1289	0	1582	18.5	81.5	0.0
Hampton	02010001-110	2097	640	1363	93	154	1104	178	1435	10.7	76.9	12.4
Mettawee River	02010001-120	22752	11026	11207	423	2646	9078	808	12532	21.1	72.4	6.4
Whitehall	02010001-130	2741	911	1753	78	219	1420	149	1788	12.2	79.4	8.3
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	6389	18717	4032	29138	21.9	64.2	13.8
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	2744	15	0	2759	99.4	0.6	0.0
Clemons	02010001-160	5081	4448	493	0	1068	399	0	1467	72.8	27.2	0.0
Putnam	02010001-170	4795	3060	1677	0	734	1358	0	2093	35.1	64.9	0.0
	02010001-180	2283	1605	678	0	385	549	0	934	41.2	58.8	0.0
Lake George	02010001-190	59888	45736	926	1059	10977	750	2023	13749	79.8	5.5	14.7
Ticonderoga	02010001-200	7385	5890	1121	354	1414	908	676	2998	47.2	30.3	22.6
Fort Ticonderoga	02010001-210	4879	2007	2712	137	482	2197	262	2940	16.4	74.7	8.9
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	3358	1252	27	4637	72.4	27.0	0.6
Bulwaga Bay	02010001-230	4793	2915	1874	0	700	1518	0	2218	31.5	68.5	0.0
Moriah	02010001-240	3015	1975	800	241	474	648	460	1582	30.0	41.0	29.1
Port Henry	02010001-250	7203	6105	639	366	1465	518	699	2682	54.6	19.3	26.1
Westport	02010001-260	10885	7697	2913	242	1847	2360	462	4669	39.6	50.5	9.9
TOTALS		**221315**	**147282**	**54419**	**5118**	**35348**	**44079**	**9775**	**89202**	**39.6**	**49.4**	**11.0**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	227	1797	164	2189	10.4	82.1	7.5
No Branch Boquet	02010004-020	25496	23286	1697	446	5589	1375	852	7815	71.5	17.6	10.9
Boquet River	02010004-030	45185	37277	6336	948	8946	5132	1811	15889	56.3	32.3	11.4
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	1720	1208	367	3295	52.2	36.7	11.1
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	11413	1770	1135	14318	79.7	12.4	7.9
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	13733	1473	3803	19008	72.2	7.7	20.0
Lower Ausable R.	02010004-070	20733	15189	3493	1253	3645	2829	2393	8868	41.1	31.9	27.0
Little Ausable R.	02010004-080	20856	14015	6343	460	3364	5138	879	9380	35.9	54.8	9.4
Salmon River	02010004-090	18592	13157	3547	1581	3158	2873	3020	9050	34.9	31.7	33.4
	TOTALS	**257595**	**215812**	**29129**	**7551**	**51795**	**23594**	**14422**	**89812**	**57.7**	**26.3**	**16.1**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	18544	1267	2802	22613	82.0	5.6	12.4
N Branch	02010006-020	33202	30549	922	161	7332	747	308	8386	87.4	8.9	3.7
Mid Saranac R.	02010006-030	26587	19890	6017	478	4774	4874	913	10560	45.2	46.2	8.6
Lower Saranac R.	02010006-040	8593	4991	1611	1747	1198	1305	3337	5840	20.5	22.3	57.1
Beekmantown	02010006-050	11346	3424	6292	1164	822	5097	2223	8142	10.1	62.6	27.3
Ingraham	02010006-060	2596	575	1818	123	138	1473	235	1846	7.5	79.8	12.7
Chazy River	02010006-070	16565	8028	7728	333	1927	6260	636	8822	21.8	71.0	7.2
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	8421	10336	701	19459	43.3	53.1	3.6
Corbeau Creek	02010006-090	27162	10033	12833	787	2408	10395	1503	14306	16.8	72.7	10.5
Rouses Pt Direct	02010006-100	1185	0	771	142	0	625	271	896	0.0	69.7	30.3
Lacolle, Que.	02010006-110	4415	2822	1384	92	677	1121	176	1974	34.3	56.8	8.9
North Plattsburg	02010006-120	2904	31	2095	123	7	1697	235	1939	0.4	87.5	12.1
TOTALS		**275331**	**192699**	**55796**	**6984**	**46248**	**45195**	**13339**	**104782**	**44.1**	**43.1**	**12.7**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**133390**	**112869**	**37537**	**283796**	**47.0**	**39.8**	**13.2**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**317401**	**459482**	**106654**	**883538**	**35.9**	**52.0**	**12.1**

EXPTPHLWK

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.04	0.25	1

LOW LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	527	1678	218	2423	21.7	69.3	9.0
Castleton	02010001-020	8301	6719	1108	474	269	277	474	1020	26.4	27.2	46.5
Lake Bomoseen	02010001-030	17407	11585	3896	672	463	974	672	2109	22.0	46.2	31.9
Hubbardton River	02010001-050	14560	7800	5986	190	312	1497	190	1999	15.6	74.9	9.5
Main Stem Poultney	02010001-070	4756	2381	2302	25	95	576	25	696	13.7	82.7	3.6
Mettawee River	02010001-090	29650	20088	8647	412	804	2162	412	3377	23.8	64.0	12.2
Direct to L CH	02010001-270	24849	5198	18867	101	208	4717	101	5026	4.1	93.9	2.0
TOTALS		**119627**	**66934**	**47519**	**2092**	**2677**	**11880**	**2092**	**16649**	**16.1**	**71.4**	**12.6**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	2805	5137	2464	10406	27.0	49.4	23.7
Neshobe River	02010002-020	5254	3997	1072	185	160	268	185	613	26.1	43.7	30.2
Middlebury River	02010002-030	16274	13407	2538	259	536	635	259	1430	37.5	44.4	18.1
Mid-Otter Creek	02010002-040	47937	23315	18112	585	933	4528	585	6046	15.4	74.9	9.7
Bridport	02010002-050	2847	265	2126	19	11	532	19	561	1.9	94.7	3.4
Lemon Fair River	02010002-060	20670	3952	16661	18	158	4165	18	4341	3.6	95.9	0.4
New Haven River	02010002-070	30131	21644	8029	286	866	2007	286	3159	27.4	63.5	9.1
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	97	5863	642	6602	1.5	88.8	9.7
Little Otter Creek	02010002-090	18738	4737	13171	203	189	3293	203	3685	5.1	89.3	5.5
Lewis Creek	02010002-100	20999	10704	9356	203	428	2339	203	2970	14.4	78.7	6.8
TOTALS		**284462**	**154561**	**115065**	**4864**	**6182**	**28766**	**4864**	**39813**	**15.5**	**72.3**	**12.2**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	599	3049	2388	6036	9.9	50.5	39.6
N Branch	02010003-020	72520	53735	16514	987	2149	4129	987	7265	29.6	56.8	13.6
Dog/Mad River	02010003-030	79983	62258	14574	3130	2490	3644	3130	9264	26.9	39.3	33.8
Shelburne Pond	02010003-040	5505	1257	3520	284	50	880	284	1214	4.1	72.5	23.4
Lower Winooski R.	02010003-050	87539	64007	15865	5865	2560	3966	5865	12392	20.7	32.0	47.3
LaPlatte River	02010003-060	13722	3409	9459	541	136	2365	541	3042	4.5	77.7	17.8
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	14	1422	11	1447	1.0	98.3	0.8
Dir L Ch Burl	02010003-080	5615	337	2438	2782	13	610	2782	3405	0.4	17.9	81.7
TOTALS		**300825**	**200335**	**80256**	**15988**	**8013**	**20064**	**15988**	**44065**	**18.2**	**45.5**	**36.3**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	2794	5960	1254	10007	27.9	59.6	12.5
Lee/Browns River	02010005-020	23908	15951	7207	605	638	1802	605	3045	21.0	59.2	19.9
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	1797	4567	1259	7623	23.6	59.9	16.5
Malletts Bay	02010005-040	13643	5829	5648	1606	233	1412	1606	3251	7.2	43.4	49.4
Lwr NE Arm Direct	02010005-050	6091	1903	3979	152	76	995	152	1223	6.2	81.3	12.4
St. Albans Bay	02010005-060	12966	2113	8968	1369	85	2242	1369	3696	2.3	60.7	37.0
So Main Lake Direc	02010005-070	5488	504	2789	325	20	697	325	1042	1.9	66.9	31.2
Islands	02010005-080	25328	5796	15884	1016	232	3971	1016	5219	4.4	76.1	19.5
Foucault, Que	02010005-090	23	17	5	1	1	1	1	3	23.2	42.7	34.1
TOTALS		**251036**	**146884**	**86585**	**7587**	**5875**	**21646**	**7587**	**35109**	**16.7**	**61.7**	**21.6**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	1490	3887	965	6341	23.5	61.3	15.2
Trout River	02010007-020	21647	17688	3773	186	708	943	186	1837	38.5	51.4	10.1
Mid-Missisquoi R.	02010007-030	42526	29698	11084	794	1188	2771	794	4753	25.0	58.3	16.7
Tyler Branch	02010007-040	22444	12452	9712	204	498	2428	204	3130	15.9	77.6	6.5
Black Creek	02010007-050	31105	15910	14025	152	636	3506	152	4295	14.8	81.6	3.5
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	346	2931	1095	4372	7.9	67.0	25.0
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	1329	4711	1062	7102	18.7	66.3	15.0
Bolton, Que	02010007-080	17713	12753	4074	354	510	1019	354	1883	27.1	54.1	18.8
Mansonville, Que	02010007-090	10222	7360	2351	204	294	588	204	1086	27.1	54.1	18.8
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	204	408	142	754	27.1	54.1	18.8
Morpion, Que	02010007-160	11529	8301	2652	231	332	663	231	1226	27.1	54.1	18.8
Pike R., Que	02010007-170	8557	6161	1968	171	246	492	171	909	27.1	54.1	18.8
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	139	277	96	512	27.1	54.1	18.8
TOTALS		**310528**	**197999**	**98493**	**5656**	**7920**	**24623**	**5656**	**38199**	**20.7**	**64.5**	**14.8**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**30669**	**106980**	**36187**	**173835**	**17.6**	**61.5**	**20.8**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.04	0.25	1

LOW LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	49	398	0	447	10.9	89.1	0.0
Hampton	02010001-110	2097	640	1363	93	26	341	93	459	5.6	74.2	20.2
Mettawee River	02010001-120	22752	11026	11207	423	441	2802	423	3666	12.0	76.4	11.5
Whitehall	02010001-130	2741	911	1753	78	36	438	78	553	6.6	79.3	14.1
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	1065	5777	2111	8953	11.9	64.5	23.6
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	457	5	0	462	99.0	1.0	0.0
Clemons	02010001-160	5081	4448	493	0	178	123	0	301	59.1	40.9	0.0
Putnam	02010001-170	4795	3060	1677	0	122	419	0	542	22.6	77.4	0.0
	02010001-180	2283	1605	678	0	64	170	0	234	27.5	72.5	0.0
Lake George	02010001-190	59888	45736	926	1059	1829	232	1059	3120	58.6	7.4	33.9
Ticonderoga	02010001-200	7385	5890	1121	354	236	280	354	870	27.1	32.2	40.7
Fort Ticonderoga	02010001-210	4879	2007	2712	137	80	678	137	895	9.0	75.7	15.3
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	560	387	14	960	58.3	40.3	1.5
Bulwaga Bay	02010001-230	4793	2915	1874	0	117	469	0	585	19.9	80.1	0.0
Moriah	02010001-240	3015	1975	800	241	79	200	241	520	15.2	38.5	46.3
Port Henry	02010001-250	7203	6105	639	366	244	160	366	770	31.7	20.7	47.5
Westport	02010001-260	10885	7697	2913	242	308	728	242	1278	24.1	57.0	18.9
	TOTALS	**221315**	**147282**	**54419**	**5118**	**5891**	**13605**	**5118**	**24614**	**23.9**	**55.3**	**20.8**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	38	555	86	679	5.6	81.8	12.7
No Branch Boquet	02010004-020	25496	23286	1697	446	931	424	446	1802	51.7	23.5	24.8
Boquet River	02010004-030	45185	37277	6336	948	1491	1584	948	4023	37.1	39.4	23.6
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	287	373	192	851	33.7	43.8	22.5
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	1902	546	594	3042	62.5	18.0	19.5
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	2289	455	1991	4734	48.3	9.6	42.1
Lower Ausable R.	02010004-070	20733	15189	3493	1253	608	873	1253	2734	22.2	31.9	45.8
Little Ausable R.	02010004-080	20856	14015	6343	460	561	1586	460	2606	21.5	60.8	17.6
Salmon River	02010004-090	18592	13157	3547	1581	526	887	1581	2994	17.6	29.6	52.8
	TOTALS	**257595**	**215812**	**29129**	**7551**	**8632**	**7282**	**7551**	**23466**	**36.8**	**31.0**	**32.2**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	3091	391	1467	4949	62.5	7.9	29.6
N Branch	02010006-020	33202	30549	922	161	1222	231	161	1613	75.7	14.3	10.0
Mid Saranac R.	02010006-030	26587	19890	6017	478	796	1504	478	2778	28.6	54.2	17.2
Lower Saranac R.	02010006-040	8593	4991	1611	1747	200	403	1747	2349	8.5	17.1	74.4
Beekmantown	02010006-050	11346	3424	6292	1164	137	1573	1164	2874	4.8	54.7	40.5
Ingraham	02010006-060	2596	575	1818	123	23	455	123	601	3.8	75.7	20.5
Chazy River	02010006-070	16565	8028	7728	333	321	1932	333	2586	12.4	74.7	12.9
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	1404	3190	367	4961	28.3	64.3	7.4
Corbeau Creek	02010006-090	27162	10033	12833	787	401	3208	787	4397	9.1	73.0	17.9
Rouses Pt Direct	02010006-100	1185	0	771	142	0	193	142	335	0.0	57.6	42.4
Lacolle, Que.	02010006-110	4415	2822	1384	92	113	346	92	551	20.5	62.8	16.7
North Plattsburg	02010006-120	2904	31	2095	123	1	524	123	648	0.2	80.8	19.0
	TOTALS	**275331**	**192699**	**55796**	**6984**	**7708**	**13949**	**6984**	**28641**	**26.9**	**48.7**	**24.4**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**22232**	**34836**	**19653**	**76721**	**29.0**	**45.4**	**25.6**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**52900**	**141816**	**55840**	**250556**	**21.1**	**56.6**	**22.3**

EXPTPLO.WK

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.1	0.5	1.5

BASELINE COEFFCIENTS
AG -20% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6042	889	1316	5370.4	1560.6	8247	16.0	65.1	18.9
Castleton	02010001-020	8301	6719	997	585	672	886.4	695.6	2254	29.8	39.3	30.9
Lake Bomoseen	02010001-030	17407	11585	3506	1062	1159	3116.8	1451.2	5727	20.2	54.4	25.3
Hubbardton River	02010001-050	14560	7800	5387	789	780	4788.8	1387.2	6956	11.2	68.8	19.9
Main Stem Poultney	02010001-070	4756	2381	2072	255	238	1841.6	485.4	2565	9.3	71.8	18.9
Mettawee River	02010001-090	29650	20088	7782	1277	2009	6917.6	2141.4	11068	18.1	62.5	19.3
Direct to L CH	02010001-270	24849	5198	16980	1988	520	15093.6	3874.4	19488	2.7	77.5	19.9
TOTALS		**119627**	**66934**	**42767**	**6844**	**6693**	**38015**	**11596**	**56304**	**11.9**	**67.5**	**20.6**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	16438.4	6573.6	7013	8219	9860	25092	27.9	32.8	39.3
Neshobe River	02010002-020	5254	3997	857.6	399.4	400	429	599	1428	28.0	30.0	42.0
Middlebury River	02010002-030	16274	13407	2030.4	766.6	1341	1015	1150	3506	38.2	29.0	32.8
Mid-Otter Creek	02010002-040	47937	23315	14489.6	4207.4	2332	7245	6311	15887	14.7	45.6	39.7
Bridport	02010002-050	2847	265	1700.8	444.2	27	850	666	1543	1.7	55.1	43.2
Lemon Fair River	02010002-060	20670	3952	13328.8	3350.2	395	6664	5025	12085	3.3	55.1	41.6
New Haven River	02010002-070	30131	21644	6423.2	1891.8	2164	3212	2838	8214	26.4	39.1	34.5
Lwr Otter/Dead Cr.	02010002-080	27852	2414	18761.6	5332.4	241	9381	7999	17621	1.4	53.2	45.4
Little Otter Creek	02010002-090	18738	4737	10536.8	2837.2	474	5268	4256	9998	4.7	52.7	42.6
Lewis Creek	02010002-100	20999	10704	7484.8	2074.2	1070	3742	3111	7924	13.5	47.2	39.3
TOTALS		**284462**	**154561**	**92052**	**27877**	**15456**	**46026**	**41816**	**103298**	**15.0**	**44.6**	**40.5**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	9757.6	4827.4	1498	4879	7241	13618	11.0	35.8	53.2
N Branch	02010003-020	72520	53735	13211.2	4289.8	5374	6606	6435	18414	29.2	35.9	34.9
Dog/Mad River	02010003-030	79983	62258	11659.2	6044.8	6226	5830	9067	21123	29.5	27.6	42.9
Shelburne Pond	02010003-040	5505	1257	2816	988	126	1408	1482	3016	4.2	46.7	49.1
Lower Winooski R.	02010003-050	87539	64007	12692	9038	6401	6346	13557	26304	24.3	24.1	51.5
LaPlatte River	02010003-060	13722	3409	7567.2	2432.8	341	3784	3649	7774	4.4	48.7	46.9
Dir L Ch Shel/Char	02010003-070	6099	351	4551.2	1148.8	35	2276	1723	4034	0.9	56.4	42.7
Dir L Ch Burl	02010003-080	5615	337	1950.4	3269.6	34	975	4904	5913	0.6	16.5	82.9
TOTALS		**300825**	**200335**	**64205**	**32039**	**20034**	**32102**	**48059**	**100195**	**20.0**	**32.0**	**48.0**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	19070.4	6021.6	6985	9535	9032	25552	27.3	37.3	35.3
Lee/Browns River	02010005-020	23908	15951	5765.6	2046.4	1595	2883	3070	7548	21.1	38.2	40.7
Lower Lamoille R.	02010005-030	66183	44926	14613.6	4912.4	4493	7307	7369	19168	23.4	38.1	38.4
Malletts Bay	02010005-040	13643	5829	4518.4	2735.6	583	2259	4103	6946	8.4	32.5	59.1
Direct to L Ch	02010005-050	6091	1903	3183.2	947.8	190	1592	1422	3204	5.9	49.7	44.4
St. Albans Bay	02010005-060	12966	2113	7174.4	3162.6	211	3587	4744	8542	2.5	42.0	55.5
Swanton	02010005-070	5488	504	2231.2	882.8	50	1116	1324	2490	2.0	44.8	53.2
Islands	02010005-080	25328	5796	12707.2	4192.8	580	6354	6289	13222	4.4	48.1	47.6
Foucault, Que	02010005-090	23	17	4	2	2	2	3	7	25.4	29.9	44.8
TOTALS		**251036**	**146884**	**69268**	**24904**	**14688**	**34634**	**37356**	**86678**	**16.9**	**40.0**	**43.1**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	12437.6	4074.4	3724	6219	6112	16055	23.2	38.7	38.1
Trout River	02010007-020	21647	17688	3018.4	940.6	1769	1509	1411	4689	37.7	32.2	30.1
Mid Mississquoi R.	02010007-030	42526	29698	8867.2	3010.8	2970	4434	4516	11920	24.9	37.2	37.9
Tyler Branch	02010007-040	22444	12452	7769.6	2146.4	1245	3885	3220	8350	14.9	46.5	38.6
Black Creek	02010007-050	31105	15910	11220	2957	1591	5610	4436	11637	13.7	48.2	38.1
Lowr Missisquoi R	02010007-060	23410	8641	9379.2	3439.8	864	4690	5160	10713	8.1	43.8	48.2
Rock R./Pike R.	02010007-070	55276	33221	15076	4831	3322	7538	7247	18107	18.3	41.6	40.0
Bolton, Que	02010007-080	17713	12753	3259.2	1168.8	1275	1630	1753	4658	27.4	35.0	37.6
Mansonville, Que	02010007-090	10222	7360	1880.8	674.2	736	940	1011	2688	27.4	35.0	37.6
Wallbridge Ck, Que	02010007-150	7086	5102	1304	468	510	652	702	1864	27.4	35.0	37.7
Morpion, Que	02010007-160	11529	8301	2121.6	761.4	830	1061	1142	3033	27.4	35.0	37.7
Pike R., Que	02010007-170	8557	6161	1574.4	564.6	616	787	847	2250	27.4	35.0	37.6
Miss. Bay Dir, Que	02010007-190	4819	3470	886.4	317.6	347	443	476	1267	27.4	35.0	37.6
TOTALS		**310528**	**197999**	**78794**	**25355**	**19800**	**39397**	**38032**	**97229**	**20.4**	**40.5**	**39.1**

TOTAL VT/QU	**1266478**	**766713**	**347086**	**117019**	**76671**	**190175**	**176858**	**443704**	**17.3**	**42.9**	**39.9**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.1	0.5	1.5

BASELINE COEFFCIENTS
AG - 20% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1272.8	318.2	122	636	477	1236	9.9	51.5	38.6
Hampton	02010001-110	2097	640	1090.4	365.6	64	545	548	1158	5.5	47.1	47.4
Mettawee River	02010001-120	22752	11026	8965.6	2664.4	1103	4483	3997	9582	11.5	46.8	41.7
Whitehall	02010001-130	2741	911	1402.4	428.6	91	701	643	1435	6.3	48.9	44.8
Halfway Ck/Ch Can	02010001-140	52585	26621	18485.6	6732.4	2662	9243	10099	22004	12.1	42.0	45.9
Mt Hope Br/So Bay	02010001-150	12114	11432	15.2	3.8	1143	8	6	1157	98.8	0.7	0.5
Clemons	02010001-160	5081	4448	394.4	98.6	445	197	148	790	56.3	25.0	18.7
Putnam	02010001-170	4795	3060	1341.6	335.4	306	671	503	1480	20.7	45.3	34.0
	02010001-180	2283	1605	542.4	135.6	161	271	203	635	25.3	42.7	32.0
Lake George	02010001-190	59888	45736	740.8	1244.2	4574	370	1866	6810	67.2	5.4	27.4
Ticonderoga	02010001-200	7385	5890	896.8	578.2	589	448	867	1905	30.9	23.5	45.5
Fort Ticonderoga	02010001-210	4879	2007	2169.6	679.4	201	1085	1019	2305	8.7	47.1	44.2
Putnam Br/Crown P	02010001-220	16005	13992	1236.8	323.2	1399	618	485	2502	55.9	24.7	19.4
Bulwaga Bay	02010001-230	4793	2915	1499.2	374.8	292	750	562	1603	18.2	46.8	35.1
Moriah	02010001-240	3015	1975	640	401	198	320	602	1119	17.6	28.6	53.8
Port Henry	02010001-250	7203	6105	511.2	493.8	611	256	741	1607	38.0	15.9	46.1
Westport	02010001-260	10885	7697	2330.4	824.6	770	1165	1237	3172	24.3	36.7	39.0
	TOTALS	**221315**	**147282**	**43535**	**16002**	**14728**	**21768**	**24003**	**60499**	**24.3**	**36.0**	**39.7**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1775.2	529.8	95	888	795	1777	5.3	50.0	44.7
No Branch Boquet	02010004-020	25496	23286	1357.6	785.4	2329	679	1178	4186	55.6	16.2	28.1
Boquet River	02010004-030	45185	37277	5068.8	2215.2	3728	2534	3323	9585	38.9	26.4	34.7
Dir to L Ch/Wboro	02010004-040	9066	7168	1192.8	490.2	717	596	735	2049	35.0	29.1	35.9
E. Br. Ausable R.	02010004-050	50716	47555	1748	1031	4756	874	1547	7176	66.3	12.2	21.6
W Br Ausable/L Pla	02010004-060	63686	57219	1454.4	2354.6	5722	727	3532	9981	57.3	7.3	35.4
Lower Ausable R.	02010004-070	20733	15189	2794.4	1951.6	1519	1397	2927	5844	26.0	23.9	50.1
Little Ausable R.	02010004-080	20856	14015	5074.4	1728.6	1402	2537	2593	6532	21.5	38.8	39.7
Salmon River	02010004-090	18592	13157	2837.6	2290.4	1316	1419	3436	6170	21.3	23.0	55.7
	TOTALS	**257595**	**215812**	**23303**	**13377**	**21581**	**11652**	**20065**	**53298**	**40.5**	**21.9**	**37.6**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1251.2	1779.8	7727	626	2670	11022	70.1	5.7	24.2
N Branch	02010006-020	33202	30549	737.6	345.4	3055	369	518	3942	77.5	9.4	13.1
Mid Saranac R.	02010006-030	26587	19890	4813.6	1681.4	1989	2407	2522	6918	28.8	34.8	36.5
Lower Saranac R.	02010006-040	8593	4991	1288.8	2069.2	499	644	3104	4247	11.8	15.2	73.1
Beekmantown	02010006-050	11346	3424	5033.6	2422.4	342	2517	3634	6493	5.3	38.8	56.0
Ingraham	02010006-060	2596	575	1454.4	486.6	58	727	730	1515	3.8	48.0	48.2
Chazy River	02010006-070	16565	8028	6182.4	1878.6	803	3091	2818	6712	12.0	46.1	42.0
Gt Chazy/Graves R	02010006-080	49434	35088	10208.8	2919.2	3509	5104	4379	12992	27.0	39.3	33.7
Corbeau Creek	02010006-090	27162	10033	10266.4	3353.6	1003	5133	5030	11167	9.0	46.0	45.0
Rouses Pt Direct	02010006-100	1185	0	616.8	296.2	0	308	444	753	0.0	41.0	59.0
Lacolle, Que.	02010006-110	4415	2822	1107.2	368.8	282	554	553	1389	20.3	39.9	39.8
North Plattsburg	02010006-120	2904	31	1676	542	3	838	813	1654	0.2	50.7	49.2
	TOTALS	**275331**	**192699**	**44637**	**18143**	**19270**	**22318**	**27215**	**68803**	**28.0**	**32.4**	**39.6**

TOTAL NY/QU	**754241**	**555793**	**111475**	**47522**	**55579**	**55738**	**71283**	**182600**	**30.4**	**30.5**	**39.0**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**458562**	**164541**	**132251**	**245912**	**248141**	**626304**	**21.1**	**39.3**	**39.6**

EXPTPAG2.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.1	0.5	1.5

BASELINE COEFFCIENTS
AG -10% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6042	889	1316	3021	1334	5671	23.2	53.3	23.5
Castleton	02010001-020	8301	6719	997	585	672	499	877	2048	32.8	24.3	42.8
Lake Bomoseen	02010001-030	17407	11585	3506	1062	1159	1753	1592	4504	25.7	38.9	35.4
Hubbardton River	02010001-050	14560	7800	5387	789	780	2694	1183	4657	16.8	57.8	25.4
Main Stem Poultney	02010001-070	4756	2381	2072	255	238	1036	383	1657	14.4	62.5	23.1
Mettawee River	02010001-090	29650	20088	7782	1277	2009	3891	1915	7815	25.7	49.8	24.5
Direct to L CH	02010001-270	24849	5198	16980	1988	520	8490	2982	11992	4.3	70.8	24.9
TOTALS		**119627**	**66934**	**42767**	**6844**	**6693**	**21384**	**10266**	**38343**	**17.5**	**55.8**	**26.8**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	18493	4519	7013	9247	6778	23037	30.4	40.1	29.4
Neshobe River	02010002-020	5254	3997	965	292	400	482	438	1320	30.3	36.5	33.2
Middlebury River	02010002-030	16274	13407	2284	513	1341	1142	769	3252	41.2	35.1	23.7
Mid-Otter Creek	02010002-040	47937	23315	16301	2396	2332	8150	3594	14076	16.6	57.9	25.5
Bridport	02010002-050	2847	265	1913	232	27	957	347	1331	2.0	71.9	26.1
Lemon Fair River	02010002-060	20670	3952	14995	1684	395	7497	2526	10419	3.8	72.0	24.2
New Haven River	02010002-070	30131	21644	7226	1089	2164	3613	1633	7411	29.2	48.8	22.0
Lwr Otter/Dead Cr.	02010002-080	27852	2414	21107	2987	241	10553	4481	15276	1.6	69.1	29.3
Little Otter Creek	02010002-090	18738	4737	11854	1520	474	5927	2280	8681	5.5	68.3	26.3
Lewis Creek	02010002-100	20999	10704	8420	1139	1070	4210	1708	6989	15.3	60.2	24.4
TOTALS		**284462**	**154561**	**103559**	**16371**	**15456**	**51779**	**24556**	**91791**	**16.8**	**56.4**	**26.8**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	10977	3608	1498	5489	5412	12398	12.1	44.3	43.6
N Branch	02010003-020	72520	53735	14863	2638	5374	7431	3958	16762	32.1	44.3	23.6
Dog/Mad River	02010003-030	79983	62258	13117	4587	6226	6558	6881	19665	31.7	33.3	35.0
Shelburne Pond	02010003-040	5505	1257	3168	636	126	1584	954	2664	4.7	59.5	35.8
Lower Winooski R.	02010003-050	87539	64007	14279	7452	6401	7139	11177	24717	25.9	28.9	45.2
LaPlatte River	02010003-060	13722	3409	8513	1487	341	4257	2230	6828	5.0	62.3	32.7
Dir L Ch Shel/Char	02010003-070	6099	351	5120	580	35	2560	870	3465	1.0	73.9	25.1
Dir L Ch Burl	02010003-080	5615	337	2194	3026	34	1097	4539	5670	0.6	19.4	80.1
TOTALS		**300825**	**200335**	**72230**	**24014**	**20034**	**36115**	**36020**	**92169**	**21.7**	**39.2**	**39.1**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	21454	3638	6985	10727	5457	23168	30.1	46.3	23.6
Lee/Browns River	02010005-020	23908	15951	6486	1326	1595	3243	1989	6827	23.4	47.5	29.1
Lower Lamoille R.	02010005-030	66183	44926	16440	3086	4493	8220	4629	17341	25.9	47.4	26.7
Malletts Bay	02010005-040	13643	5829	5083	2171	583	2542	3256	6381	9.1	39.8	51.0
Direct to L Ch	02010005-050	6091	1903	3581	550	190	1791	825	2806	6.8	63.8	29.4
St. Albans Bay	02010005-060	12966	2113	8071	2266	211	4036	3399	7646	2.8	52.8	44.5
Swanton	02010005-070	5488	504	2510	604	50	1255	906	2211	2.3	56.8	41.0
Islands	02010005-080	25328	5796	14296	2604	580	7148	3907	11634	5.0	61.4	33.6
Foucault, Que	02010005-090	23	17	5	2	2	2	2	6	27.4	36.3	36.3
TOTALS		**251036**	**146884**	**77927**	**16246**	**14688**	**38963**	**24368**	**78020**	**18.8**	**49.9**	**31.2**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	13992	2520	3724	6996	3780	14500	25.7	48.2	26.1
Trout River	02010007-020	21647	17688	3396	563	1769	1698	845	4312	41.0	39.4	19.6
Mid-Missisquoi R.	02010007-030	42526	29698	9976	1902	2970	4988	2854	10811	27.5	46.1	26.4
Tyler Branch	02010007-040	22444	12452	8741	1175	1245	4370	1763	7378	16.9	59.2	23.9
Black Creek	02010007-050	31105	15910	12623	1555	1591	6311	2332	10234	15.5	61.7	22.8
Lowr Missisquoi R	02010007-060	23410	8641	10552	2267	864	5276	3401	9541	9.1	55.3	35.6
Rock R./Pike R.	02010007-070	55276	33221	16961	2947	3322	8480	4420	16222	20.5	52.3	27.2
Bolton, Que	02010007-080	17713	12753	3667	761	1275	1833	1142	4251	30.0	43.1	26.9
Mansonville, Que	02010007-090	10222	7360	2116	439	736	1058	659	2453	30.0	43.1	26.9
Wallbridge Ck, Que	02010007-150	7086	5102	1467	305	510	734	458	1701	30.0	43.1	26.9
Morpion, Que	02010007-160	11529	8301	2387	496	830	1193	744	2768	30.0	43.1	26.9
Pike R., Que	02010007-170	8557	6161	1771	368	616	886	552	2053	30.0	43.1	26.9
Miss. Bay Dir, Que	02010007-190	4819	3470	997	207	347	499	310	1156	30.0	43.1	26.8
TOTALS		**310528**	**197999**	**88644**	**15505**	**19800**	**44322**	**23258**	**87380**	**22.7**	**50.7**	**26.6**

TOTAL VT/QU	**1266478**	**766713**	**385126**	**78979**	**76671**	**192563**	**118468**	**387703**	**19.8**	**49.7**	**30.6**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL PHOSPHORUS

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.1	0.5	1.5

BASELINE COEFFCIENTS
AG -10% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1432	159	122	716	239	1077	11.3	66.5	22.2
Hampton	02010001-110	2097	640	1227	229	64	613	344	1021	6.3	60.1	33.7
Mettawee River	02010001-120	22752	11026	10086	1544	1103	5043	2316	8461	13.0	59.6	27.4
Whitehall	02010001-130	2741	911	1578	253	91	789	380	1260	7.2	62.6	30.2
Halfway Ck/Ch Can	02010001-140	52585	26621	20796	4422	2662	10398	6633	19693	13.5	52.8	33.7
Mt Hope Br/So Bay	02010001-150	12114	11432	17	2	1143	9	3	1155	99.0	0.7	0.2
Clemons	02010001-160	5081	4448	444	49	445	222	74	741	60.1	30.0	10.0
Putnam	02010001-170	4795	3060	1509	168	306	755	252	1312	23.3	57.5	19.2
	02010001-180	2283	1605	610	68	161	305	102	567	28.3	53.8	17.9
Lake George	02010001-190	59888	45736	833	1152	4574	417	1727	6718	68.1	6.2	25.7
Ticonderoga	02010001-200	7385	5890	1009	466	589	504	699	1793	32.9	28.1	39.0
Fort Ticonderoga	02010001-210	4879	2007	2441	408	201	1220	612	2033	9.9	60.0	30.1
Putnam Br/Crown P	02010001-220	16005	13992	1391	169	1399	696	253	2348	59.6	29.6	10.8
Bulwaga Bay	02010001-230	4793	2915	1687	187	292	843	281	1416	20.6	59.6	19.9
Moriah	02010001-240	3015	1975	720	321	198	360	482	1039	19.0	34.6	46.3
Port Henry	02010001-250	7203	6105	575	430	611	288	645	1543	39.6	18.6	41.8
Westport	02010001-260	10885	7697	2622	533	770	1311	800	2881	26.7	45.5	27.8
	TOTALS	**221315**	**147282**	**48977**	**10560**	**14728**	**24489**	**15840**	**55057**	**26.8**	**44.5**	**28.8**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1997	308	95	999	462	1555	6.1	64.2	29.7
No Branch Boquet	02010004-020	25496	23286	1527	616	2329	764	924	4016	58.0	19.0	23.0
Boquet River	02010004-030	45185	37277	5702	1582	3728	2851	2372	8951	41.6	31.9	26.5
Dir to L Ch/Wboro	02010004-040	9066	7168	1342	341	717	671	512	1899	37.7	35.3	26.9
E. Br. Ausable R.	02010004-050	50716	47555	1967	813	4756	983	1219	6958	68.4	14.1	17.5
W Br Ausable/L Pla	02010004-060	63686	57219	1636	2173	5722	818	3259	9799	58.4	8.3	33.3
Lower Ausable R.	02010004-070	20733	15189	3144	1602	1519	1572	2403	5494	27.6	28.6	43.7
Little Ausable R.	02010004-080	20856	14015	5709	1094	1402	2854	1641	5897	23.8	48.4	27.8
Salmon River	02010004-090	18592	13157	3192	1936	1316	1596	2904	5815	22.6	27.4	49.9
	TOTALS	**257595**	**215812**	**26216**	**10464**	**21581**	**13108**	**15696**	**50385**	**42.8**	**26.0**	**31.2**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1408	1623	7727	704	2435	10866	71.1	6.5	22.4
N Branch	02010006-020	33202	30549	830	253	3055	415	380	3850	79.4	10.8	9.9
Mid Saranac R.	02010006-030	26587	19890	5415	1080	1989	2708	1620	6316	31.5	42.9	25.6
Lower Saranac R.	02010006-040	8593	4991	1450	1908	499	725	2862	4086	12.2	17.7	70.0
Beekmantown	02010006-050	11346	3424	5663	1793	342	2831	2690	5864	5.8	48.3	45.9
Ingraham	02010006-060	2596	575	1636	305	58	818	457	1333	4.3	61.4	34.3
Chazy River	02010006-070	16565	8028	6955	1106	803	3478	1659	5939	13.5	58.6	27.9
Gt Chazy/Graves R	02010006-080	49434	35088	11485	1643	3509	5742	2465	11716	29.9	49.0	21.0
Corbeau Creek	02010006-090	27162	10033	11550	2070	1003	5775	3105	9884	10.2	58.4	31.4
Rouses Pt Direct	02010006-100	1185	0	694	219	0	347	329	676	0.0	51.4	48.6
Lacolle, Que.	02010006-110	4415	2822	1246	230	282	623	346	1251	22.6	49.8	27.6
North Plattsburg	02010006-120	2904	31	1886	333	3	943	499	1445	0.2	65.3	34.5
	TOTALS	**275331**	**192699**	**50216**	**12564**	**19270**	**25108**	**18845**	**63224**	**30.5**	**39.7**	**29.8**

TOTAL NY/QU	**754241**	**555793**	**125410**	**33587**	**55579**	**62705**	**50381**	**168665**	**33.0**	**37.2**	**29.9**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**510536**	**112566**	**132251**	**255268**	**168849**	**556368**	**23.8**	**45.9**	**30.3**

EXPTPAG1.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS
AG -10% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6042	889	658	906	445	2009	32.8	45.1	22.1
Castleton	02010001-020	8301	6719	997	585	336	150	292	778	43.2	19.2	37.6
Lake Bomoseen	02010001-030	17407	11585	3506	1062	579	526	531	1636	35.4	32.1	32.4
Hubbardton River	02010001-050	14560	7800	5387	789	390	808	394	1592	24.5	50.7	24.8
Main Stem Poultney	02010001-070	4756	2381	2072	255	119	311	128	557	21.4	55.8	22.9
Mettawee River	02010001-090	29650	20088	7782	1277	1004	1167	638	2810	35.7	41.5	22.7
Direct to L CH	02010001-270	24849	5198	16980	1988	260	2547	994	3801	6.8	67.0	26.1
TOTALS		**119627**	**66934**	**42767**	**6844**	**3347**	**6415**	**3422**	**13184**	**25.4**	**48.7**	**26.0**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	18493	4519	3506	2774	2259	8540	41.1	32.5	26.5
Neshobe River	02010002-020	5254	3997	965	292	200	145	146	491	40.7	29.5	29.8
Middlebury River	02010002-030	16274	13407	2284	513	670	343	256	1269	52.8	27.0	20.2
Mid-Otter Creek	02010002-040	47937	23315	16301	2396	1166	2445	1198	4809	24.2	50.8	24.9
Bridport	02010002-050	2847	265	1913	232	13	287	116	416	3.2	69.0	27.8
Lemon Fair River	02010002-060	20670	3952	14995	1684	198	2249	842	3289	6.0	68.4	25.6
New Haven River	02010002-070	30131	21644	7226	1089	1082	1084	544	2711	39.9	40.0	20.1
Lwr Otter/Dead Cr.	02010002-080	27852	2414	21107	2987	121	3166	1494	4780	2.5	66.2	31.2
Little Otter Creek	02010002-090	18738	4737	11854	1520	237	1778	760	2775	8.5	64.1	27.4
Lewis Creek	02010002-100	20999	10704	8420	1139	535	1263	569	2368	22.6	53.3	24.0
TOTALS		**284462**	**154561**	**103559**	**16371**	**7728**	**15534**	**8185**	**31447**	**24.6**	**49.4**	**26.0**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	10977	3608	749	1647	1804	4199	17.8	39.2	43.0
N Branch	02010003-020	72520	53735	14863	2638	2687	2229	1319	6235	43.1	35.8	21.2
Dog/Mad River	02010003-030	79983	62258	13117	4587	3113	1967	2294	7374	42.2	26.7	31.1
Shelburne Pond	02010003-040	5505	1257	3168	636	63	475	318	856	7.3	55.5	37.1
Lower Winooski R.	02010003-050	87539	64007	14279	7452	3200	2142	3726	9068	35.3	23.6	41.1
LaPlatte River	02010003-060	13722	3409	8513	1487	170	1277	743	2191	7.8	58.3	33.9
Dir L Ch Shel/Char	02010003-070	6099	351	5120	580	18	768	290	1076	1.6	71.4	27.0
Dir L Ch Burl	02010003-080	5615	337	2194	3026	17	329	1513	1859	0.9	17.7	81.4
TOTALS		**300825**	**200335**	**72230**	**24014**	**10017**	**10835**	**12007**	**32858**	**30.5**	**33.0**	**36.5**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	21454	3638	3492	3218	1819	8529	40.9	37.7	21.3
Lee/Browns River	02010005-020	23908	15951	6486	1326	798	973	663	2433	32.8	40.0	27.2
Lower Lamoille R.	02010005-030	66183	44926	16440	3086	2246	2466	1543	6255	35.9	39.4	24.7
Malletts Bay	02010005-040	13643	5829	5083	2171	291	762	1085	2139	13.6	35.6	50.7
Direct to L Ch	02010005-050	6091	1903	3581	550	95	537	275	907	10.5	59.2	30.3
St. Albans Bay	02010005-060	12966	2113	8071	2266	106	1211	1133	2449	4.3	49.4	46.3
Swanton	02010005-070	5488	504	2510	604	25	377	302	704	3.6	53.5	42.9
Islands	02010005-080	25328	5796	14296	2604	290	2144	1302	3736	7.8	57.4	34.9
Foucault, Que	02010005-090	23	17	5	2	1	1	1	2	37.4	29.7	33.0
TOTALS		**251036**	**146884**	**77927**	**16246**	**7344**	**11689**	**8123**	**27156**	**27.0**	**43.0**	**29.9**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	13992	2520	1862	2099	1260	5221	35.7	40.2	24.1
Trout River	02010007-020	21647	17688	3396	563	884	509	282	1675	52.8	30.4	16.8
Mid Mississquoi R.	02010007-030	42526	29698	9976	1902	1485	1496	951	3932	37.8	38.1	24.2
Tyler Branch	02010007-040	22444	12452	8741	1175	623	1311	588	2521	24.7	52.0	23.3
Black Creek	02010007-050	31105	15910	12623	1555	796	1893	777	3466	23.0	54.6	22.4
Lowr Missisquoi R	02010007-060	23410	8641	10552	2267	432	1583	1134	3148	13.7	50.3	36.0
Rock R./Pike R.	02010007-070	55276	33221	16961	2947	1661	2544	1473	5678	29.3	44.8	25.9
Bolton, Que	02010007-080	17713	12753	3667	761	638	550	381	1568	40.7	35.1	24.3
Mansonville, Que	02010007-090	10222	7360	2116	439	368	317	220	905	40.7	35.1	24.3
Wallbridge Ck, Que	02010007-150	7086	5102	1467	305	255	220	153	628	40.6	35.1	24.3
Morpion, Que	02010007-160	11529	8301	2387	496	415	358	248	1021	40.6	35.1	24.3
Pike R., Que	02010007-170	8557	6161	1771	368	308	266	184	758	40.7	35.1	24.3
Miss. Bay Dir, Que	02010007-190	4819	3470	997	207	174	150	103	426	40.7	35.1	24.2
TOTALS		**310528**	**197999**	**88644**	**15505**	**9900**	**13297**	**7753**	**30949**	**32.0**	**43.0**	**25.0**

TOTAL VT/QU	**1266478**	**766713**	**385126**	**78979**	**38336**	**57769**	**39489**	**135594**	**28.3**	**42.6**	**29.1**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS
AG -10% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1432	159	61	215	80	355	17.2	60.4	22.4
Hampton	02010001-110	2097	640	1227	229	32	184	115	331	9.7	55.6	34.7
Mettawee River	02010001-120	22752	11026	10086	1544	551	1513	772	2836	19.4	53.3	27.2
Whitehall	02010001-130	2741	911	1578	253	46	237	127	409	11.1	57.9	31.0
Halfway Ck/Ch Can	02010001-140	52585	26621	20796	4422	1331	3119	2211	6661	20.0	46.8	33.2
Mt Hope Br/So Bay	02010001-150	12114	11432	17	2	572	3	1	575	99.4	0.4	0.2
Clemons	02010001-160	5081	4448	444	49	222	67	25	314	70.9	21.2	7.9
Putnam	02010001-170	4795	3060	1509	168	153	226	84	463	33.0	48.9	18.1
	02010001-180	2283	1605	610	68	80	92	34	206	39.0	44.5	16.5
Lake George	02010001-190	59888	45736	833	1152	2287	125	576	2988	76.5	4.2	19.3
Ticonderoga	02010001-200	7385	5890	1009	466	295	151	233	679	43.4	22.3	34.3
Fort Ticonderoga	02010001-210	4879	2007	2441	408	100	366	204	671	15.0	54.6	30.4
Putnam Br/Crown P	02010001-220	16005	13992	1391	169	700	209	84	993	70.5	21.0	8.5
Bulwaga Bay	02010001-230	4793	2915	1687	187	146	253	94	492	29.6	51.4	19.0
Moriah	02010001-240	3015	1975	720	321	99	108	161	367	26.9	29.4	43.7
Port Henry	02010001-250	7203	6105	575	430	305	86	215	606	50.3	14.2	35.4
Westport	02010001-260	10885	7697	2622	533	385	393	267	1045	36.8	37.6	25.5
	TOTALS	**221315**	**147282**	**48977**	**10560**	**7364**	**7347**	**5280**	**19991**	**36.8**	**36.8**	**26.4**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1997	308	47	300	154	501	9.4	59.8	30.7
No Branch Boquet	02010004-020	25496	23286	1527	616	1164	229	308	1701	68.4	13.5	18.1
Boquet River	02010004-030	45185	37277	5702	1582	1864	855	791	3510	53.1	24.4	22.5
Dir to L Ch/Wboro	02010004-040	9066	7168	1342	341	358	201	171	730	49.1	27.6	23.4
E. Br. Ausable R.	02010004-050	50716	47555	1967	813	2378	295	406	3079	77.2	9.6	13.2
W Br Ausable/L Pla	02010004-060	63686	57219	1636	2173	2861	245	1086	4193	68.2	5.9	25.9
Lower Ausable R.	02010004-070	20733	15189	3144	1602	759	472	801	2032	37.4	23.2	39.4
Little Ausable R.	02010004-080	20856	14015	5709	1094	701	856	547	2104	33.3	40.7	26.0
Salmon River	02010004-090	18592	13157	3192	1936	658	479	968	2105	31.3	22.8	46.0
	TOTALS	**257595**	**215812**	**26216**	**10464**	**10791**	**3932**	**5232**	**19955**	**54.1**	**19.7**	**26.2**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1408	1623	3863	211	812	4886	79.1	4.3	16.6
N Branch	02010006-020	33202	30549	830	253	1527	124	127	1779	85.9	7.0	7.1
Mid Saranac R.	02010006-030	26587	19890	5415	1080	995	812	540	2347	42.4	34.6	23.0
Lower Saranac R.	02010006-040	8593	4991	1450	1908	250	217	954	1421	17.6	15.3	67.1
Beekmantown	02010006-050	11346	3424	5663	1793	171	849	897	1917	8.9	44.3	46.8
Ingraham	02010006-060	2596	575	1636	305	29	245	152	427	6.7	57.5	35.7
Chazy River	02010006-070	16565	8028	6955	1106	401	1043	553	1998	20.1	52.2	27.7
Gt Chazy/Graves R	02010006-080	49434	35088	11485	1643	1754	1723	822	4299	40.8	40.1	19.1
Corbeau Creek	02010006-090	27162	10033	11550	2070	502	1732	1035	3269	15.3	53.0	31.7
Rouses Pt Direct	02010006-100	1185	0	694	219	0	104	110	214	0.0	48.7	51.3
Lacolle, Que.	02010006-110	4415	2822	1246	230	141	187	115	443	31.8	42.2	26.0
North Plattsburg	02010006-120	2904	31	1886	333	2	283	166	451	0.3	62.8	36.9
	TOTALS	**275331**	**192699**	**50216**	**12564**	**9635**	**7532**	**6282**	**23449**	**41.1**	**32.1**	**26.8**

TOTAL NY/QU	**754241**	**555793**	**125410**	**33587**	**27790**	**18811**	**16794**	**63395**	**43.8**	**29.7**	**26.5**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**510536**	**112566**	**66125**	**76580**	**56283**	**198989**	**33.2**	**38.5**	**28.3**

EXPSPAG1.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.07	0.22	1

HIGH LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	921	1477	218	2616	35.2	56.4	8.3
Castleton	02010001-020	8301	6719	1108	474	470	244	474	1188	39.6	20.5	39.9
Lake Bomoseen	02010001-030	17407	11585	3896	672	811	857	672	2340	34.7	36.6	28.7
Hubbardton River	02010001-050	14560	7800	5986	190	546	1317	190	2053	26.6	64.1	9.3
Main Stem Poultney	02010001-070	4756	2381	2302	25	167	506	25	698	23.9	72.5	3.6
Mettawee River	02010001-090	29650	20088	8647	412	1406	1902	412	3721	37.8	51.1	11.1
Direct to L CH	02010001-270	24849	5198	18867	101	364	4151	101	4616	7.9	89.9	2.2
TOTALS		**119627**	**66934**	**47519**	**2092**	**4685**	**10454**	**2092**	**17232**	**27.2**	**60.7**	**12.1**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	4909	4521	2464	11893	41.3	38.0	20.7
Neshobe River	02010002-020	5254	3997	1072	185	280	236	185	701	39.9	33.7	26.4
Middlebury River	02010002-030	16274	13407	2538	259	938	558	259	1756	53.4	31.8	14.8
Mid-Otter Creek	02010002-040	47937	23315	18112	585	1632	3985	585	6202	26.3	64.3	9.4
Bridport	02010002-050	2847	265	2126	19	19	468	19	505	3.7	92.6	3.8
Lemon Fair River	02010002-060	20670	3952	16661	18	277	3665	18	3960	7.0	92.6	0.5
New Haven River	02010002-070	30131	21644	8029	286	1515	1766	286	3567	42.5	49.5	8.0
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	169	5159	642	5970	2.8	86.4	10.8
Little Otter Creek	02010002-090	18738	4737	13171	203	332	2898	203	3432	9.7	84.4	5.9
Lewis Creek	02010002-100	20999	10704	9356	203	749	2058	203	3011	24.9	68.4	6.7
TOTALS		**284462**	**154561**	**115065**	**4864**	**10819**	**25314**	**4864**	**40998**	**26.4**	**61.7**	**11.9**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	1049	2683	2388	6120	17.1	43.8	39.0
N Branch	02010003-020	72520	53735	16514	987	3761	3633	987	8382	44.9	43.3	11.8
Dog/Mad River	02010003-030	79983	62258	14574	3130	4358	3206	3130	10694	40.8	30.0	29.3
Shelburne Pond	02010003-040	5505	1257	3520	284	88	774	284	1146	7.7	67.6	24.8
Lower Winooski R.	02010003-050	87539	64007	15865	5865	4480	3490	5865	13836	32.4	25.2	42.4
LaPlatte River	02010003-060	13722	3409	9459	541	239	2081	541	2861	8.3	72.7	18.9
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	25	1252	11	1287	1.9	97.2	0.9
Dir L Ch Burl	02010003-080	5615	337	2438	2782	24	536	2782	3342	0.7	16.0	83.2
TOTALS		**300825**	**200335**	**80256**	**15988**	**14023**	**17656**	**15988**	**47668**	**29.4**	**37.0**	**33.5**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	4889	5244	1254	11388	42.9	46.1	11.0
Lee/Browns River	02010005-020	23908	15951	7207	605	1117	1586	605	3307	33.8	47.9	18.3
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	3145	4019	1259	8423	37.3	47.7	14.9
Malletts Bay	02010005-040	13643	5829	5648	1606	408	1243	1606	3257	12.5	38.2	49.3
Direct to L Ch	02010005-050	6091	1903	3979	152	133	875	152	1161	11.5	75.4	13.1
St. Albans Bay	02010005-060	12966	2113	8968	1369	148	1973	1369	3490	4.2	56.5	39.2
Swanton	02010005-070	5488	504	2789	325	35	614	325	974	3.6	63.0	33.4
Islands	02010005-080	25328	5796	15884	1016	406	3494	1016	4916	8.3	71.1	20.7
Foucault, Que	02010005-090	23	17	5	1	1	1	1	3	36.2	33.4	30.4
TOTALS		**251036**	**146884**	**86585**	**7587**	**10282**	**19049**	**7587**	**36918**	**27.9**	**51.6**	**20.6**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	2607	3420	965	6992	37.3	48.9	13.8
Trout River	02010007-020	21647	17688	3773	186	1238	830	186	2254	54.9	36.8	8.3
Mid Missisquoi R.	02010007-030	42526	29698	11084	794	2079	2438	794	5311	39.1	45.9	14.9
Tyler Branch	02010007-040	22444	12452	9712	204	872	2137	204	3212	27.1	66.5	6.4
Black Creek	02010007-050	31105	15910	14025	152	1114	3086	152	4351	25.6	70.9	3.5
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	605	2579	1095	4279	14.1	60.3	25.6
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	2325	4146	1062	7533	30.9	55.0	14.1
Bolton, Que	02010007-080	17713	12753	4074	354	893	896	354	2143	41.7	41.8	16.5
Mansonville, Que	02010007-090	10222	7360	2351	204	515	517	204	1236	41.7	41.8	16.5
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	357	359	142	858	41.6	41.8	16.6
Morpion, Que	02010007-160	11529	8301	2652	231	581	583	231	1396	41.6	41.8	16.6
Pike R., Que	02010007-170	8557	6161	1968	171	431	433	171	1035	41.7	41.8	16.5
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	243	244	96	583	41.7	41.8	16.5
TOTALS		**310528**	**197999**	**98493**	**5656**	**13860**	**21668**	**5656**	**41184**	**33.7**	**52.6**	**13.7**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**53670**	**94142**	**36187**	**183999**	**29.2**	**51.2**	**19.7**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.07	0.22	1

HIGH LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	86	350	0	436	19.6	80.4	0.0
Hampton	02010001-110	2097	640	1363	93	45	300	93	438	10.2	68.5	21.2
Mettawee River	02010001-120	22752	11026	11207	423	772	2466	423	3660	21.1	67.4	11.6
Whitehall	02010001-130	2741	911	1753	78	64	386	78	527	12.1	73.1	14.8
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	1863	5084	2111	9058	20.6	56.1	23.3
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	800	4	0	804	99.5	0.5	0.0
Clemons	02010001-160	5081	4448	493	0	311	108	0	420	74.2	25.8	0.0
Putnam	02010001-170	4795	3060	1677	0	214	369	0	583	36.7	63.3	0.0
	02010001-180	2283	1605	678	0	112	149	0	262	43.0	57.0	0.0
Lake George	02010001-190	59888	45736	926	1059	3202	204	1059	4464	71.7	4.6	23.7
Ticonderoga	02010001-200	7385	5890	1121	354	412	247	354	1013	40.7	24.3	34.9
Fort Ticonderoga	02010001-210	4879	2007	2712	137	140	597	137	874	16.1	68.3	15.7
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	979	340	14	1334	73.4	25.5	1.0
Bulwaga Bay	02010001-230	4793	2915	1874	0	204	412	0	616	33.1	66.9	0.0
Moriah	02010001-240	3015	1975	800	241	138	176	241	555	24.9	31.7	43.4
Port Henry	02010001-250	7203	6105	639	366	427	141	366	934	45.8	15.1	39.2
Westport	02010001-260	10885	7697	2913	242	539	641	242	1422	37.9	45.1	17.0
	TOTALS	**221315**	**147282**	**54419**	**5118**	**10310**	**11972**	**5118**	**27400**	**37.6**	**43.7**	**18.7**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	66	488	86	640	10.3	76.2	13.4
No Branch Boquet	02010004-020	25496	23286	1697	446	1630	373	446	2449	66.5	15.2	18.2
Boquet River	02010004-030	45185	37277	6336	948	2609	1394	948	4951	52.7	28.2	19.1
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	502	328	192	1022	49.1	32.1	18.8
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	3329	481	594	4404	75.6	10.9	13.5
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	4005	400	1991	6396	62.6	6.3	31.1
Lower Ausable R.	02010004-070	20733	15189	3493	1253	1063	768	1253	3085	34.5	24.9	40.6
Little Ausable R.	02010004-080	20856	14015	6343	460	981	1395	460	2837	34.6	49.2	16.2
Salmon River	02010004-090	18592	13157	3547	1581	921	780	1581	3282	28.1	23.8	48.2
	TOTALS	**257595**	**215812**	**29129**	**7551**	**15107**	**6408**	**7551**	**29066**	**52.0**	**22.0**	**26.0**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	5409	344	1467	7220	74.9	4.8	20.3
N Branch	02010006-020	33202	30549	922	161	2138	203	161	2502	85.5	8.1	6.4
Mid Saranac R.	02010006-030	26587	19890	6017	478	1392	1324	478	3194	43.6	41.4	15.0
Lower Saranac R.	02010006-040	8593	4991	1611	1747	349	354	1747	2451	14.3	14.5	71.3
Beekmantown	02010006-050	11346	3424	6292	1164	240	1384	1164	2788	8.6	49.7	41.8
Ingraham	02010006-060	2596	575	1818	123	40	400	123	563	7.1	71.0	21.8
Chazy River	02010006-070	16565	8028	7728	333	562	1700	333	2595	21.7	65.5	12.8
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	2456	2807	367	5631	43.6	49.9	6.5
Corbeau Creek	02010006-090	27162	10033	12833	787	702	2823	787	4313	16.3	65.5	18.2
Rouses Pt Direct	02010006-100	1185	0	771	142	0	170	142	312	0.0	54.4	45.6
Lacolle, Que.	02010006-110	4415	2822	1384	92	198	304	92	594	33.3	51.3	15.5
North Plattsburg	02010006-120	2904	31	2095	123	2	461	123	586	0.4	78.6	21.0
	TOTALS	**275331**	**192699**	**55796**	**6984**	**13489**	**12275**	**6984**	**32748**	**41.2**	**37.5**	**21.3**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**38906**	**30656**	**19653**	**89214**	**43.6**	**34.4**	**22.0**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**92575**	**124798**	**55840**	**273213**	**33.9**	**45.7**	**20.4**

EXPSRPHI.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	658	1007	109	1774	37.1	56.8	6.1
Castleton	02010001-020	8301	6719	1108	474	336	166	237	739	45.5	22.5	32.1
Lake Bomoseen	02010001-030	17407	11585	3896	672	579	584	336	1500	38.6	39.0	22.4
Hubbardton River	02010001-050	14560	7800	5986	190	390	898	95	1383	28.2	64.9	6.9
Main Stem Poultney	02010001-070	4756	2381	2302	25	119	345	13	477	25.0	72.4	2.6
Mettawee River	02010001-090	29650	20088	8647	412	1004	1297	206	2507	40.1	51.7	8.2
Direct to L CH	02010001-270	24849	5198	18867	101	260	2830	51	3140	8.3	90.1	1.6
	TOTALS	**119627**	**66934**	**47519**	**2092**	**3347**	**7128**	**1046**	**11521**	**29.0**	**61.9**	**9.1**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	3506	3082	1232	7821	44.8	39.4	15.8
Neshobe River	02010002-020	5254	3997	1072	185	200	161	93	453	44.1	35.5	20.4
Middlebury River	02010002-030	16274	13407	2538	259	670	381	130	1181	56.8	32.2	11.0
Mid-Otter Creek	02010002-040	47937	23315	18112	585	1166	2717	293	4175	27.9	65.1	7.0
Bridport	02010002-050	2847	265	2126	19	13	319	10	342	3.9	93.3	2.8
Lemon Fair River	02010002-060	20670	3952	16661	18	198	2499	9	2706	7.3	92.4	0.3
New Haven River	02010002-070	30131	21644	8029	286	1082	1204	143	2430	44.5	49.6	5.9
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	121	3518	321	3960	3.0	88.8	8.1
Little Otter Creek	02010002-090	18738	4737	13171	203	237	1976	102	2314	10.2	85.4	4.4
Lewis Creek	02010002-100	20999	10704	9356	203	535	1403	102	2040	26.2	68.8	5.0
	TOTALS	**284462**	**154561**	**115065**	**4864**	**7728**	**17260**	**2432**	**27420**	**28.2**	**62.9**	**8.9**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	749	1830	1194	3773	19.9	48.5	31.6
N Branch	02010003-020	72520	53735	16514	987	2687	2477	494	5657	47.5	43.8	8.7
Dog/Mad River	02010003-030	79983	62258	14574	3130	3113	2186	1565	6864	45.4	31.8	22.8
Shelburne Pond	02010003-040	5505	1257	3520	284	63	528	142	733	8.6	72.0	19.4
Lower Winooski R.	02010003-050	87539	64007	15865	5865	3200	2380	2933	8513	37.6	28.0	34.4
LaPlatte River	02010003-060	13722	3409	9459	541	170	1419	271	1860	9.2	76.3	14.5
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	18	853	6	876	2.0	97.4	0.6
Dir L Ch Burl	02010003-080	5615	337	2438	2782	17	366	1391	1774	1.0	20.6	78.4
	TOTALS	**300825**	**200335**	**80256**	**15988**	**10017**	**12038**	**7994**	**30049**	**33.3**	**40.1**	**26.6**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	3492	3576	627	7695	45.4	46.5	8.1
Lee/Browns River	02010005-020	23908	15951	7207	605	798	1081	303	2181	36.6	49.6	13.9
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	2246	2740	630	5616	40.0	48.8	11.2
Malletts Bay	02010005-040	13643	5829	5648	1606	291	847	803	1942	15.0	43.6	41.4
Direct to L Ch	02010005-050	6091	1903	3979	152	95	597	76	768	12.4	77.7	9.9
St. Albans Bay	02010005-060	12966	2113	8968	1369	106	1345	685	2135	4.9	63.0	32.1
Swanton	02010005-070	5488	504	2789	325	25	418	163	606	4.2	69.0	26.8
Islands	02010005-080	25328	5796	15884	1016	290	2383	508	3180	9.1	74.9	16.0
Foucault, Que	02010005-090	23	17	5	1	1	1	1	2	40.5	35.7	23.8
	TOTALS	**251036**	**146884**	**86585**	**7587**	**7344**	**12988**	**3794**	**24125**	**30.4**	**53.8**	**15.7**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	1862	2332	483	4677	39.8	49.9	10.3
Trout River	02010007-020	21647	17688	3773	186	884	566	93	1543	57.3	36.7	6.0
Mid Missisquoi R.	02010007-030	42526	29698	11084	794	1485	1663	397	3545	41.9	46.9	11.2
Tyler Branch	02010007-040	22444	12452	9712	204	623	1457	102	2181	28.5	66.8	4.7
Black Creek	02010007-050	31105	15910	14025	152	796	2104	76	2975	26.7	70.7	2.6
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	432	1759	548	2738	15.8	64.2	20.0
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	1661	2827	531	5019	33.1	56.3	10.6
Bolton, Que	02010007-080	17713	12753	4074	354	638	611	177	1426	44.7	42.9	12.4
Mansonville, Que	02010007-090	10222	7360	2351	204	368	353	102	823	44.7	42.9	12.4
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	255	245	71	571	44.7	42.8	12.4
Morpion, Que	02010007-160	11529	8301	2652	231	415	398	116	928	44.7	42.9	12.4
Pike R., Que	02010007-170	8557	6161	1968	171	308	295	86	689	44.7	42.9	12.4
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	174	166	48	388	44.8	42.9	12.4
	TOTALS	**310528**	**197999**	**98493**	**5656**	**9900**	**14774**	**2828**	**27502**	**36.0**	**53.7**	**10.3**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**38336**	**64188**	**18094**	**120617**	**31.8**	**53.2**	**15.0**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	61	239	0	300	20.4	79.6	0.0
Hampton	02010001-110	2097	640	1363	93	32	204	47	283	11.3	72.3	16.4
Mettawee River	02010001-120	22752	11026	11207	423	551	1681	212	2444	22.6	68.8	8.7
Whitehall	02010001-130	2741	911	1753	78	46	263	39	348	13.1	75.7	11.2
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	1331	3466	1056	5853	22.7	59.2	18.0
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	572	3	0	574	99.5	0.5	0.0
Clemons	02010001-160	5081	4448	493	0	222	74	0	296	75.0	25.0	0.0
Putnam	02010001-170	4795	3060	1677	0	153	252	0	405	37.8	62.2	0.0
	02010001-180	2283	1605	678	0	80	102	0	182	44.1	55.9	0.0
Lake George	02010001-190	59888	45736	926	1059	2287	139	530	2955	77.4	4.7	17.9
Ticonderoga	02010001-200	7385	5890	1121	354	295	168	177	640	46.0	26.3	27.7
Fort Ticonderoga	02010001-210	4879	2007	2712	137	100	407	69	576	17.4	70.7	11.9
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	700	232	7	939	74.5	24.7	0.7
Bulwaga Bay	02010001-230	4793	2915	1874	0	146	281	0	427	34.1	65.9	0.0
Moriah	02010001-240	3015	1975	800	241	99	120	121	339	29.1	35.4	35.5
Port Henry	02010001-250	7203	6105	639	366	305	96	183	584	52.3	16.4	31.3
Westport	02010001-260	10885	7697	2913	242	385	437	121	943	40.8	46.3	12.8
	TOTALS	**221315**	**147282**	**54419**	**5118**	**7364**	**8163**	**2559**	**18086**	**40.7**	**45.1**	**14.1**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	47	333	43	423	11.2	78.7	10.2
No Branch Boquet	02010004-020	25496	23286	1697	446	1164	255	223	1642	70.9	15.5	13.6
Boquet River	02010004-030	45185	37277	6336	948	1864	950	474	3288	56.7	28.9	14.4
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	358	224	96	678	52.9	33.0	14.2
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	2378	328	297	3003	79.2	10.9	9.9
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	2861	273	996	4129	69.3	6.6	24.1
Lower Ausable R.	02010004-070	20733	15189	3493	1253	759	524	627	1910	39.8	27.4	32.8
Little Ausable R.	02010004-080	20856	14015	6343	460	701	951	230	1882	37.2	50.5	12.2
Salmon River	02010004-090	18592	13157	3547	1581	658	532	791	1980	33.2	26.9	39.9
	TOTALS	**257595**	**215812**	**29129**	**7551**	**10791**	**4369**	**3776**	**18935**	**57.0**	**23.1**	**19.9**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	3863	235	734	4832	80.0	4.9	15.2
N Branch	02010006-020	33202	30549	922	161	1527	138	81	1746	87.5	7.9	4.6
Mid Saranac R.	02010006-030	26587	19890	6017	478	995	903	239	2136	46.6	42.3	11.2
Lower Saranac R.	02010006-040	8593	4991	1611	1747	250	242	874	1365	18.3	17.7	64.0
Beekmantown	02010006-050	11346	3424	6292	1164	171	944	582	1697	10.1	55.6	34.3
Ingraham	02010006-060	2596	575	1818	123	29	273	62	363	7.9	75.1	16.9
Chazy River	02010006-070	16565	8028	7728	333	401	1159	167	1727	23.2	67.1	9.6
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	1754	1914	184	3852	45.5	49.7	4.8
Corbeau Creek	02010006-090	27162	10033	12833	787	502	1925	394	2820	17.8	68.3	14.0
Rouses Pt Direct	02010006-100	1185	0	771	142	0	116	71	187	0.0	62.0	38.0
Lacolle, Que.	02010006-110	4415	2822	1384	92	141	208	46	395	35.7	52.6	11.7
North Plattsburg	02010006-120	2904	31	2095	123	2	314	62	377	0.4	83.3	16.3
	TOTALS	**275331**	**192699**	**55796**	**6984**	**9635**	**8369**	**3492**	**21496**	**44.8**	**38.9**	**16.2**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**27790**	**20902**	**9827**	**58518**	**47.5**	**35.7**	**16.8**
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**66125**	**85089**	**27920**	**179135**	**36.9**	**47.5**	**15.6**

EXPSRP.WK3

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.03	0.09	0.21

LOW LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney Riv	02010001-010	20104	13163	6713	218	395	604	46	1045	37.8	57.8	4.4
Castleton	02010001-020	8301	6719	1108	474	202	100	100	401	50.3	24.9	24.8
Lake Bomoseen	02010001-030	17407	11585	3896	672	348	351	141	839	41.4	41.8	16.8
Hubbardton River	02010001-050	14560	7800	5986	190	234	539	40	813	28.8	66.3	4.9
Main Stem Poultney	02010001-070	4756	2381	2302	25	71	207	5	284	25.2	73.0	1.8
Mettawee River	02010001-090	29650	20088	8647	412	603	778	87	1467	41.1	53.0	5.9
Direct to L CH	02010001-270	24849	5198	18867	101	156	1698	21	1875	8.3	90.6	1.1
	TOTALS	**119627**	**66934**	**47519**	**2092**	**2008**	**4277**	**439**	**6724**	**29.9**	**63.6**	**6.5**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	2104	1849	517	4471	47.1	41.4	11.6
Neshobe River	02010002-020	5254	3997	1072	185	120	96	39	255	47.0	37.8	15.2
Middlebury River	02010002-030	16274	13407	2538	259	402	228	54	685	58.7	33.3	7.9
Mid-Otter Creek	02010002-040	47937	23315	18112	585	699	1630	123	2452	28.5	66.5	5.0
Bridport	02010002-050	2847	265	2126	19	8	191	4	203	3.9	94.1	2.0
Lemon Fair River	02010002-060	20670	3952	16661	18	119	1499	4	1622	7.3	92.5	0.2
New Haven River	02010002-070	30131	21644	8029	286	649	723	60	1432	45.3	50.5	4.2
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	72	2111	135	2318	3.1	91.1	5.8
Little Otter Creek	02010002-090	18738	4737	13171	203	142	1185	43	1370	10.4	86.5	3.1
Lewis Creek	02010002-100	20999	10704	9356	203	321	842	43	1206	26.6	69.8	3.5
	TOTALS	**284462**	**154561**	**115065**	**4864**	**4637**	**10356**	**1021**	**16014**	**29.0**	**64.7**	**6.4**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Branch	02010003-010	29842	14981	12197	2388	449	1098	501	2049	21.9	53.6	24.5
N Branch	02010003-020	72520	53735	16514	987	1612	1486	207	3306	48.8	45.0	6.3
Dog/Mad River	02010003-030	79983	62258	14574	3130	1868	1312	657	3837	48.7	34.2	17.1
Shelburne Pond	02010003-040	5505	1257	3520	284	38	317	60	414	9.1	76.5	14.4
Lower Winooski R.	02010003-050	87539	64007	15865	5865	1920	1428	1232	4580	41.9	31.2	26.9
LaPlatte River	02010003-060	13722	3409	9459	541	102	851	114	1067	9.6	79.8	10.6
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	11	512	2	525	2.0	97.6	0.4
Dir L Ch Burl	02010003-080	5615	337	2438	2782	10	219	584	814	1.2	27.0	71.8
	TOTALS	**300825**	**200335**	**80256**	**15988**	**6010**	**7223**	**3357**	**16591**	**36.2**	**43.5**	**20.2**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	2095	2145	263	4504	46.5	47.6	5.8
Lee/Browns River	02010005-020	23908	15951	7207	605	479	649	127	1254	38.2	51.7	10.1
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	1348	1644	264	3256	41.4	50.5	8.1
Malletts Bay	02010005-040	13643	5829	5648	1606	175	508	337	1020	17.1	49.8	33.1
Lwr NE Arm Direct	02010005-050	6091	1903	3979	152	57	358	32	447	12.8	80.1	7.1
St. Albans Bay	02010005-060	12966	2113	8968	1369	63	807	287	1158	5.5	69.7	24.8
So Main Lake Direc	02010005-070	5488	504	2789	325	15	251	68	334	4.5	75.1	20.4
Islands	02010005-080	25328	5796	15884	1016	174	1430	213	1817	9.6	78.7	11.7
Foucault, Que	02010005-090	23	17	5	1	1	0	0	1	43.6	38.5	17.9
	TOTALS	**251036**	**146884**	**86585**	**7587**	**4407**	**7793**	**1593**	**13792**	**31.9**	**56.5**	**11.6**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	1117	1399	203	2719	41.1	51.5	7.5
Trout River	02010007-020	21647	17688	3773	186	531	340	39	909	58.4	37.3	4.3
Mid Missisquoi R.	02010007-030	42526	29698	11084	794	891	998	167	2055	43.3	48.5	8.1
Tyler Branch	02010007-040	22444	12452	9712	204	374	874	43	1290	28.9	67.7	3.3
Black Creek	02010007-050	31105	15910	14025	152	477	1262	32	1771	26.9	71.3	1.8
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	259	1055	230	1544	16.8	68.3	14.9
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	997	1696	223	2916	34.2	58.2	7.6
Bolton, Que	02010007-080	17713	12753	4074	354	383	367	74	824	46.5	44.5	9.0
Mansonville, Que	02010007-090	10222	7360	2351	204	221	212	43	475	46.5	44.5	9.0
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	153	147	30	330	46.4	44.5	9.0
Morpion, Que	02010007-160	11529	8301	2652	231	249	239	49	536	46.4	44.5	9.0
Pike R., Que	02010007-170	8557	6161	1968	171	185	177	36	398	46.5	44.5	9.0
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	104	100	20	224	46.5	44.5	9.0
	TOTALS	**310528**	**197999**	**98493**	**5656**	**5940**	**8864**	**1188**	**15992**	**37.1**	**55.4**	**7.4**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**23001**	**38513**	**7599**	**69113**	**33.3**	**55.7**	**11.0**

EXPSRPLO.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.03	0.09	0.21

LOW LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	37	143	0	180	20.4	79.6	0.0
Hampton	02010001-110	2097	640	1363	93	19	123	20	161	11.9	76.0	12.1
Mettawee River	02010001-120	22752	11026	11207	423	331	1009	89	1428	23.2	70.6	6.2
Whitehall	02010001-130	2741	911	1753	78	27	158	16	201	13.6	78.3	8.1
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	799	2080	443	3322	24.0	62.6	13.3
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	343	2	0	345	99.5	0.5	0.0
Clemons	02010001-160	5081	4448	493	0	133	44	0	178	75.0	25.0	0.0
Putnam	02010001-170	4795	3060	1677	0	92	151	0	243	37.8	62.2	0.0
	02010001-180	2283	1605	678	0	48	61	0	109	44.1	55.9	0.0
Lake George	02010001-190	59888	45736	926	1059	1372	83	222	1678	81.8	5.0	13.3
Ticonderoga	02010001-200	7385	5890	1121	354	177	101	74	352	50.2	28.7	21.1
Fort Ticonderoga	02010001-210	4879	2007	2712	137	60	244	29	333	18.1	73.3	8.6
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	420	139	3	562	74.7	24.8	0.5
Bulwaga Bay	02010001-230	4793	2915	1874	0	87	169	0	256	34.1	65.9	0.0
Moriah	02010001-240	3015	1975	800	241	59	72	51	182	32.6	39.6	27.8
Port Henry	02010001-250	7203	6105	639	366	183	58	77	318	57.7	18.1	24.2
Westport	02010001-260	10885	7697	2913	242	231	262	51	544	42.5	48.2	9.3
	TOTALS	**221315**	**147282**	**54419**	**5118**	**4418**	**4898**	**1075**	**10391**	**42.5**	**47.1**	**10.3**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	28	200	18	246	11.5	81.1	7.3
No Branch Boquet	02010004-020	25496	23286	1697	446	699	153	94	945	73.9	16.2	9.9
Boquet River	02010004-030	45185	37277	6336	948	1118	570	199	1888	59.2	30.2	10.5
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	215	134	40	390	55.2	34.4	10.4
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	1427	197	125	1748	81.6	11.2	7.1
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	1717	164	418	2298	74.7	7.1	18.2
Lower Ausable R.	02010004-070	20733	15189	3493	1253	456	314	263	1033	44.1	30.4	25.5
Little Ausable R.	02010004-080	20856	14015	6343	460	420	571	97	1088	38.6	52.5	8.9
Salmon River	02010004-090	18592	13157	3547	1581	395	319	332	1046	37.7	30.5	31.7
	TOTALS	**257595**	**215812**	**29129**	**7551**	**6474**	**2622**	**1586**	**10682**	**60.6**	**24.5**	**14.8**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	2318	141	308	2767	83.8	5.1	11.1
N Branch	02010006-020	33202	30549	922	161	916	83	34	1033	88.7	8.0	3.3
Mid Saranac R.	02010006-030	26587	19890	6017	478	597	542	100	1239	48.2	43.7	8.1
Lower Saranac R.	02010006-040	8593	4991	1611	1747	150	145	367	662	22.6	21.9	55.5
Beekmantown	02010006-050	11346	3424	6292	1164	103	566	244	913	11.2	62.0	26.8
Ingraham	02010006-060	2596	575	1818	123	17	164	26	207	8.3	79.2	12.5
Chazy River	02010006-070	16565	8028	7728	333	241	696	70	1006	23.9	69.1	6.9
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	1053	1148	77	2278	46.2	50.4	3.4
Corbeau Creek	02010006-090	27162	10033	12833	787	301	1155	165	1621	18.6	71.2	10.2
Rouses Pt Direct	02010006-100	1185	0	771	142	0	69	30	99	0.0	69.9	30.1
Lacolle, Que.	02010006-110	4415	2822	1384	92	85	125	19	229	37.0	54.5	8.5
North Plattsburg	02010006-120	2904	31	2095	123	1	189	26	215	0.4	87.6	12.0
	TOTALS	**275331**	**192699**	**55796**	**6984**	**5781**	**5022**	**1467**	**12269**	**47.1**	**40.9**	**12.0**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**16674**	**12541**	**4127**	**33342**	**50.0**	**37.6**	**12.4**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**39675**	**51054**	**11726**	**102455**	**38.7**	**49.8**	**11.4**

EXPSRPLO.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS
AG -20% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	5370.4	1560.6	658	806	780	2244	29.3	35.9	34.8
Castleton	02010001-020	8301	6719	886.4	695.6	336	133	348	817	41.1	16.3	42.6
Lake Bomoseen	02010001-030	17407	11585	3116.8	1451.2	579	468	726	1772	32.7	26.4	40.9
Hubbardton River	02010001-050	14560	7800	4788.8	1387.2	390	718	694	1802	21.6	39.9	38.5
Main Stem Poultney	02010001-070	4756	2381	1841.6	485.4	119	276	243	638	18.7	43.3	38.0
Mettawee River	02010001-090	29650	20088	6917.6	2141.4	1004	1038	1071	3113	32.3	33.3	34.4
Direct to L CH	02010001-270	24849	5198	15093.6	3874.4	260	2264	1937	4461	5.8	50.8	43.4
TOTALS		**119627**	**66934**	**38015**	**11596**	**3347**	**5702**	**5798**	**14847**	**22.5**	**38.4**	**39.1**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	16438.4	6573.6	3506	2466	3287	9259	37.9	26.6	35.5
Neshobe River	02010002-020	5254	3997	857.6	399.4	200	129	200	528	37.8	24.4	37.8
Middlebury River	02010002-030	16274	13407	2030.4	766.6	670	305	383	1358	49.4	22.4	28.2
Mid-Otter Creek	02010002-040	47937	23315	14489.6	4207.4	1166	2173	2104	5443	21.4	39.9	38.7
Bridport	02010002-050	2847	265	1700.8	444.2	13	255	222	490	2.7	52.0	45.3
Lemon Fair River	02010002-060	20670	3952	13328.8	3350.2	198	1999	1675	3872	5.1	51.6	43.3
New Haven River	02010002-070	30131	21644	6423.2	1891.8	1082	963	946	2992	36.2	32.2	31.6
Lwr Otter/Dead Cr.	02010002-080	27852	2414	18761.6	5332.4	121	2814	2666	5601	2.2	50.2	47.6
Little Otter Creek	02010002-090	18738	4737	10536.8	2837.2	237	1581	1419	3236	7.3	48.8	43.8
Lewis Creek	02010002-100	20999	10704	7484.8	2074.2	535	1123	1037	2695	19.9	41.7	38.5
TOTALS		**284462**	**154561**	**92052**	**27877**	**7728**	**13808**	**13939**	**35474**	**21.8**	**38.9**	**39.3**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	9757.6	4827.4	749	1464	2414	4626	16.2	31.6	52.2
N Branch	02010003-020	72520	53735	13211.2	4289.8	2687	1982	2145	6813	39.4	29.1	31.5
Dog/Mad River	02010003-030	79983	62258	11659.2	6044.8	3113	1749	3022	7884	39.5	22.2	38.3
Shelburne Pond	02010003-040	5505	1257	2816	988	63	422	494	979	6.4	43.1	50.4
Lower Winooski R.	02010003-050	87539	64007	12692	9038	3200	1904	4519	9623	33.3	19.8	47.0
LaPlatte River	02010003-060	13722	3409	7567.2	2432.8	170	1135	1216	2522	6.8	45.0	48.2
Dir L Ch Shel/Char	02010003-070	6099	351	4551.2	1148.8	18	683	574	1275	1.4	53.6	45.1
Dir L Ch Buri	02010003-080	5615	337	1950.4	3269.6	17	293	1635	1944	0.9	15.0	84.1
TOTALS		**300825**	**200335**	**64205**	**32039**	**10017**	**9631**	**16020**	**35667**	**28.1**	**27.0**	**44.9**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	19070.4	6021.6	3492	2861	3011	9364	37.3	30.5	32.2
Lee/Browns River	02010005-020	23908	15951	5765.6	2046.4	798	865	1023	2686	29.7	32.2	38.1
Lower Lamoille R.	02010005-030	66183	44926	14613.6	4912.4	2246	2192	2456	6895	32.6	31.8	35.6
Malletts Creek	02010005-040	13643	5829	4518.4	2735.6	291	678	1368	2337	12.5	29.0	58.5
Direct to L Ch	02010005-050	6091	1903	3183.2	947.8	95	477	474	1047	9.1	45.6	45.3
St. Albans Bay	02010005-060	12966	2113	7174.4	3162.6	106	1076	1581	2763	3.8	38.9	57.2
Swanton	02010005-070	5488	504	2231.2	882.8	25	335	441	801	3.1	41.8	55.1
Islands	02010005-080	25328	5796	12707.2	4192.8	290	1906	2096	4292	6.8	44.4	48.8
Foucault, Que	02010005-090	23	17	4	2	1	1	1	2	34.7	24.5	40.8
TOTALS		**251036**	**146884**	**69268**	**24904**	**7344**	**10390**	**12452**	**30186**	**24.3**	**34.4**	**41.3**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	12437.6	4074.4	1862	1866	2037	5765	32.3	32.4	35.3
Trout River	02010007-020	21647	17688	3018.4	940.6	884	453	470	1807	48.9	25.0	26.0
Mid Missisquoi R.	02010007-030	42526	29698	8867.2	3010.8	1485	1330	1505	4320	34.4	30.8	34.8
Tyler Branch	02010007-040	22444	12452	7769.6	2146.4	623	1165	1073	2861	21.8	40.7	37.5
Black Creek	02010007-050	31105	15910	11220	2957	796	1683	1479	3957	20.1	42.5	37.4
Lowr Missisquoi R	02010007-060	23410	8641	9379.2	3439.8	432	1407	1720	3559	12.1	39.5	48.3
Rock R./Pike R.	02010007-070	55276	33221	15076	4831	1661	2261	2416	6338	26.2	35.7	38.1
Bolton, Que	02010007-080	17713	12753	3259.2	1168.8	638	489	584	1711	37.3	28.6	34.2
Mansonville, Que	02010007-090	10222	7360	1880.8	674.2	368	282	337	987	37.3	28.6	34.1
Wallbridge Ck, Que	02010007-150	7086	5102	1304	468	255	196	234	685	37.3	28.6	34.2
Morpion, Que	02010007-160	11529	8301	2121.6	761.4	415	318	381	1114	37.3	28.6	34.2
Pike R., Que	02010007-170	8557	6161	1574.4	564.6	308	236	282	827	37.3	28.6	34.2
Miss. Bay Dir, Que	02010007-190	4819	3470	886.4	317.6	174	133	159	465	37.3	28.6	34.1
TOTALS		**310528**	**197999**	**78794**	**25355**	**9900**	**11819**	**12677**	**34396**	**28.8**	**34.4**	**36.9**

TOTAL VT/QU		**1266478**	**766713**	**342334**	**121771**	**38336**	**51350**	**60885**	**150571**	**25.5**	**34.1**	**40.4**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

SOLUBLE REACTIVE P

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
0.05	0.15	0.5

BASELINE COEFFCIENTS
AG -20% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1272.8	318.2	61	191	159	411	14.9	46.4	38.7
Hampton	02010001-110	2097	640	1090.4	365.6	32	164	183	378	8.5	43.2	48.3
Mettawee River	02010001-120	22752	11026	8965.6	2664.4	551	1345	1332	3228	17.1	41.7	41.3
Whitehall	02010001-130	2741	911	1402.4	428.6	46	210	214	470	9.7	44.7	45.6
Halfway Ck/Ch Can	02010001-140	52585	26621	18485.6	6732.4	1331	2773	3366	7470	17.8	37.1	45.1
Mt Hope Br/So Bay	02010001-150	12114	11432	15.2	3.8	572	2	2	576	99.3	0.4	0.3
Clemons	02010001-160	5081	4448	394.4	98.6	222	59	49	331	67.2	17.9	14.9
Putnam	02010001-170	4795	3060	1341.6	335.4	153	201	168	522	29.3	38.6	32.1
	02010001-180	2283	1605	542.4	135.6	80	81	68	229	35.0	35.5	29.6
Lake George	02010001-190	59888	45736	740.8	1244.2	2287	111	622	3020	75.7	3.7	20.6
Ticonderoga	02010001-200	7385	5890	896.8	578.2	295	135	289	718	41.0	18.7	40.3
Fort Ticonderoga	02010001-210	4879	2007	2169.6	679.4	100	325	340	765	13.1	42.5	44.4
Putnam Br/Crown P	02010001-220	16005	13992	1236.8	323.2	700	186	162	1047	66.8	17.7	15.4
Bulwaga Bay	02010001-230	4793	2915	1499.2	374.8	146	225	187	558	26.1	40.3	33.6
Moriah	02010001-240	3015	1975	640	401	99	96	201	395	25.0	24.3	50.7
Port Henry	02010001-250	7203	6105	511.2	493.8	305	77	247	629	48.5	12.2	39.3
Westport	02010001-260	10885	7697	2330.4	824.6	385	350	412	1147	33.6	30.5	36.0
	TOTALS	**221315**	**147282**	**43535**	**16002**	**7364**	**6530**	**8001**	**21895**	**33.6**	**29.8**	**36.5**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1775.2	529.8	47	266	265	578	8.2	46.0	45.8
No Branch Boquet	02010004-020	25496	23286	1357.6	785.4	1164	204	393	1761	66.1	11.6	22.3
Boquet River	02010004-030	45185	37277	5068.8	2215.2	1864	760	1108	3732	49.9	20.4	29.7
Dir to L Ch/Wboro	02010004-040	9066	7168	1192.8	490.2	358	179	245	782	45.8	22.9	31.3
E. Br. Ausable R.	02010004-050	50716	47555	1748	1031	2378	262	516	3155	75.4	8.3	16.3
W Br Ausable/L Pla	02010004-060	63686	57219	1454.4	2354.6	2861	218	1177	4256	67.2	5.1	27.7
Lower Ausable R.	02010004-070	20733	15189	2794.4	1951.6	759	419	976	2154	35.3	19.5	45.3
Little Ausable R.	02010004-080	20856	14015	5074.4	1728.6	701	761	864	2326	30.1	32.7	37.2
Salmon River	02010004-090	18592	13157	2837.6	2290.4	658	426	1145	2229	29.5	19.1	51.4
	TOTALS	**257595**	**215812**	**23303**	**13377**	**10791**	**3495**	**6688**	**20974**	**51.4**	**16.7**	**31.9**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1251.2	1779.8	3863	188	890	4941	78.2	3.8	18.0
N Branch	02010006-020	33202	30549	737.6	345.4	1527	111	173	1811	84.4	6.1	9.5
Mid Saranac R.	02010006-030	26587	19890	4813.6	1681.4	995	722	841	2557	38.9	28.2	32.9
Lower Saranac R.	02010006-040	8593	4991	1288.8	2069.2	250	193	1035	1477	16.9	13.1	70.0
Beekmantown	02010006-050	11346	3424	5033.6	2422.4	171	755	1211	2137	8.0	35.3	56.7
Ingraham	02010006-060	2596	575	1454.4	486.6	29	218	243	490	5.9	44.5	49.6
Chazy River	02010006-070	16565	8028	6182.4	1878.6	401	927	939	2268	17.7	40.9	41.4
Gt Chazy/Graves R	02010006-080	49434	35088	10208.8	2919.2	1754	1531	1460	4745	37.0	32.3	30.8
Corbeau Creek	02010006-090	27162	10033	10266.4	3353.6	502	1540	1677	3718	13.5	41.4	45.1
Rouses Pt Direct	02010006-100	1185	0	616.8	296.2	0	93	148	241	0.0	38.5	61.5
Lacolle, Que.	02010006-110	4415	2822	1107.2	368.8	141	166	184	492	28.7	33.8	37.5
North Plattsburg	02010006-120	2904	31	1676	542	2	251	271	524	0.3	48.0	51.7
	TOTALS	**275331**	**192699**	**44637**	**18143**	**9635**	**6696**	**9072**	**25402**	**37.9**	**26.4**	**35.7**

TOTAL NY/QU	**754241**	**555793**	**111475**	**47522**	**27790**	**16721**	**23761**	**68272**	**40.7**	**24.5**	**34.8**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**453810**	**169292**	**66125**	**68071**	**84646**	**218843**	**30.2**	**31.1**	**38.7**

EXPSPAG2.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
2	4.8	6.1

LOW LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	26326	32222	1330	59878	44.0	53.8	2.2
Castleton	02010001-020	8301	6719	1108	474	13438	5318	2891	21648	62.1	24.6	13.4
Lake Bomoseen	02010001-030	17407	11585	3896	672	23170	18701	4099	45970	50.4	40.7	8.9
Hubbardton River	02010001-050	14560	7800	5986	190	15600	28733	1159	45492	34.3	63.2	2.5
Main Stem Poultney	02010001-070	4756	2381	2302	25	4762	11050	153	15964	29.8	69.2	1.0
Mettawee River	02010001-090	29650	20088	8647	412	40176	41506	2513	84195	47.7	49.3	3.0
Direct to L CH	02010001-270	24849	5198	18867	101	10396	90562	616	101574	10.2	89.2	0.6
TOTALS		**119627**	**66934**	**47519**	**2092**	**133868**	**228091**	**12761**	**374720**	**35.7**	**60.9**	**3.4**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	140252	98630	15030	253913	55.2	38.8	5.9
Neshobe River	02010002-020	5254	3997	1072	185	7994	5146	1129	14268	56.0	36.1	7.9
Middlebury River	02010002-030	16274	13407	2538	259	26814	12182	1580	40576	66.1	30.0	3.9
Mid-Otter Creek	02010002-040	47937	23315	18112	585	46630	86938	3569	137136	34.0	63.4	2.6
Bridport	02010002-050	2847	265	2126	19	530	10205	116	10851	4.9	94.0	1.1
Lemon Fair River	02010002-060	20670	3952	16661	18	7904	79973	110	87987	9.0	90.9	0.1
New Haven River	02010002-070	30131	21644	8029	286	43288	38539	1745	83572	51.8	46.1	2.1
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	4828	112570	3916	121314	4.0	92.8	3.2
Little Otter Creek	02010002-090	18738	4737	13171	203	9474	63221	1238	73933	12.8	85.5	1.7
Lewis Creek	02010002-100	20999	10704	9356	203	21408	44909	1238	67555	31.7	66.5	1.8
TOTALS		**284462**	**154561**	**115065**	**4864**	**309122**	**552312**	**29670**	**891104**	**34.7**	**62.0**	**3.3**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	29962	58546	14567	103074	29.1	56.8	14.1
N Branch	02010003-020	72520	53735	16514	987	107470	79267	6021	192758	55.8	41.1	3.1
Dog/Mad River	02010003-030	79983	62258	14574	3130	124516	69955	19093	213564	58.3	32.8	8.9
Shelburne Pond	02010003-040	5505	1257	3520	284	2514	16896	1732	21142	11.9	79.9	8.2
Lower Winooski R.	02010003-050	87539	64007	15865	5865	128014	76152	35777	239943	53.4	31.7	14.9
LaPlatte River	02010003-060	13722	3409	9459	541	6818	45403	3300	55521	12.3	81.8	5.9
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	702	27307	67	28076	2.5	97.3	0.2
Dir L Ch Burl	02010003-080	5615	337	2438	2782	674	11702	16970	29347	2.3	39.9	57.8
TOTALS		**300825**	**200335**	**80256**	**15988**	**400670**	**385229**	**97527**	**883426**	**45.4**	**43.6**	**11.0**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	139690	114422	7649	261762	53.4	43.7	2.9
Lee/Browns River	02010005-020	23908	15951	7207	605	31902	34594	3691	70186	45.5	49.3	5.3
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	89852	87682	7680	185214	48.5	47.3	4.1
Malletts Bay	02010005-040	13643	5829	5648	1606	11658	27110	9797	48565	24.0	55.8	20.2
Direct to L Ch	02010005-050	6091	1903	3979	152	3806	19099	927	23832	16.0	80.1	3.9
St. Albans Bay	02010005-060	12966	2113	8968	1369	4226	43046	8351	55623	7.6	77.4	15.0
Swanton	02010005-070	5488	504	2789	325	1008	13387	1983	16378	6.2	81.7	12.1
Islands	02010005-080	25328	5796	15884	1016	11592	76243	6198	94033	12.3	81.1	6.6
Foucault, Que	02010005-090	23	17	5	1	34	24	6	64	53.0	37.4	9.5
TOTALS		**251036**	**146884**	**86585**	**7587**	**293768**	**415608**	**46281**	**755657**	**38.9**	**55.0**	**6.1**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	74484	74626	5887	154996	48.1	48.1	3.8
Trout River	02010007-020	21647	17688	3773	186	35376	18110	1135	54621	64.8	33.2	2.1
Mid Missisquoi R.	02010007-030	42526	29698	11084	794	59396	53203	4843	117443	50.6	45.3	4.1
Tyler Branch	02010007-040	22444	12452	9712	204	24904	46618	1244	72766	34.2	64.1	1.7
Black Creek	02010007-050	31105	15910	14025	152	31820	67320	927	100067	31.8	67.3	0.9
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	17282	56275	6680	80237	21.5	70.1	8.3
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	66442	90456	6478	163376	40.7	55.4	4.0
Bolton, Que	02010007-080	17713	12753	4074	354	25506	19555	2159	47221	54.0	41.4	4.6
Mansonville, Que	02010007-090	10222	7360	2351	204	14720	11285	1244	27249	54.0	41.4	4.6
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	10204	7824	866	18894	54.0	41.4	4.6
Morpion, Que	02010007-160	11529	8301	2652	231	16602	12730	1409	30741	54.0	41.4	4.6
Pike R., Que	02010007-170	8557	6161	1968	171	12322	9446	1043	22812	54.0	41.4	4.6
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	6940	5318	586	12844	54.0	41.4	4.6
TOTALS		**310528**	**197999**	**98493**	**5656**	**395998**	**472766**	**34502**	**903266**	**43.8**	**52.3**	**3.8**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**1533426**	**2054006**	**220741**	**3808173**	**40.3**	**53.9**	**5.8**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
2	4.8	6.1

LOW LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	2444	7637	0	10081	24.2	75.8	0.0
Hampton	02010001-110	2097	640	1363	93	1280	6542	567	8390	15.3	78.0	6.8
Mettawee River	02010001-120	22752	11026	11207	423	22052	53794	2580	78426	28.1	68.6	3.3
Whitehall	02010001-130	2741	911	1753	78	1822	8414	476	10712	17.0	78.5	4.4
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	53242	110914	12877	177033	30.1	62.7	7.3
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	22864	91	0	22955	99.6	0.4	0.0
Clemons	02010001-160	5081	4448	493	0	8896	2366	0	11262	79.0	21.0	0.0
Putnam	02010001-170	4795	3060	1677	0	6120	8050	0	14170	43.2	56.8	0.0
	02010001-180	2283	1605	678	0	3210	3254	0	6464	49.7	50.3	0.0
Lake George	02010001-190	59888	45736	926	1059	91472	4445	6460	102377	89.3	4.3	6.3
Ticonderoga	02010001-200	7385	5890	1121	354	11780	5381	2159	19320	61.0	27.9	11.2
Fort Ticonderoga	02010001-210	4879	2007	2712	137	4014	13018	836	17867	22.5	72.9	4.7
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	27984	7421	85	35490	78.8	20.9	0.2
Bulwaga Bay	02010001-230	4793	2915	1874	0	5830	8995	0	14825	39.3	60.7	0.0
Moriah	02010001-240	3015	1975	800	241	3950	3840	1470	9260	42.7	41.5	15.9
Port Henry	02010001-250	7203	6105	639	366	12210	3067	2233	17510	69.7	17.5	12.8
Westport	02010001-260	10885	7697	2913	242	15394	13982	1476	30853	49.9	45.3	4.8
	TOTALS	**221315**	**147282**	**54419**	**5118**	**294564**	**261211**	**31220**	**586995**	**50.2**	**44.5**	**5.3**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	1892	10651	525	13068	14.5	81.5	4.0
No Branch Boquet	02010004-020	25496	23286	1697	446	46572	8146	2721	57438	81.1	14.2	4.7
Boquet River	02010004-030	45185	37277	6336	948	74554	30413	5783	110750	67.3	27.5	5.2
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	14336	7157	1171	22664	63.3	31.6	5.2
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	95110	10488	3623	109221	87.1	9.6	3.3
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	114438	8726	12145	135310	84.6	6.4	9.0
Lower Ausable R.	02010004-070	20733	15189	3493	1253	30378	16766	7643	54788	55.4	30.6	14.0
Little Ausable R.	02010004-080	20856	14015	6343	460	28030	30446	2806	61282	45.7	49.7	4.6
Salmon River	02010004-090	18592	13157	3547	1581	26314	17026	9644	52984	49.7	32.1	18.2
	TOTALS	**257595**	**215812**	**29129**	**7551**	**431624**	**139819**	**46061**	**617504**	**69.9**	**22.6**	**7.5**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	154536	7507	8949	170992	90.4	4.4	5.2
N Branch	02010006-020	33202	30549	922	161	61098	4426	982	66506	91.9	6.7	1.5
Mid Saranac R.	02010006-030	26587	19890	6017	478	39780	28882	2916	71577	55.6	40.4	4.1
Lower Saranac R.	02010006-040	8593	4991	1611	1747	9982	7733	10657	28372	35.2	27.3	37.6
Beekmantown	02010006-050	11346	3424	6292	1164	6848	30202	7100	44150	15.5	68.4	16.1
Ingraham	02010006-060	2596	575	1818	123	1150	8726	750	10627	10.8	82.1	7.1
Chazy River	02010006-070	16565	8028	7728	333	16056	37094	2031	55182	29.1	67.2	3.7
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	70176	61253	2239	133668	52.5	45.8	1.7
Corbeau Creek	02010006-090	27162	10033	12833	787	20066	61598	4801	86465	23.2	71.2	5.6
Rouses Pt Direct	02010006-100	1185	0	771	142	0	3701	866	4567	0.0	81.0	19.0
Lacolle, Que.	02010006-110	4415	2822	1384	92	5644	6643	561	12848	43.9	51.7	4.4
North Plattsburg	02010006-120	2904	31	2095	123	62	10056	750	10868	0.6	92.5	6.9
	TOTALS	**275331**	**192699**	**55796**	**6984**	**385398**	**267821**	**42602**	**695821**	**55.4**	**38.5**	**6.1**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**1111586**	**668851**	**119883**	**1900321**	**58.5**	**35.2**	**6.3**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**2645012**	**2722858**	**340624**	**5708494**	**46.3**	**47.7**	**6.0**

EXPTNLO.WK

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
5.5	14	10.2

HIGH LIT. COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	72397	93982	2224	168602	42.9	55.7	1.3
Castleton	02010001-020	8301	6719	1108	474	36955	15512	4835	57301	64.5	27.1	8.4
Lake Bomoseen	02010001-030	17407	11585	3896	672	63718	54544	6854	125116	50.9	43.6	5.5
Hubbardton River	02010001-050	14560	7800	5986	190	42900	83804	1938	128642	33.3	65.1	1.5
Main Stem Poultney	02010001-070	4756	2381	2302	25	13096	32228	255	45579	28.7	70.7	0.6
Mettawee River	02010001-090	29650	20088	8647	412	110484	121058	4202	235744	46.9	51.4	1.8
Direct to L CH	02010001-270	24849	5198	18867	101	28589	264138	1030	293757	9.7	89.9	0.4
TOTALS		**119627**	**66934**	**47519**	**2092**	**368137**	**665266**	**21338**	**1054741**	**34.9**	**63.1**	**2.0**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	385693	287672	25133	698498	55.2	41.2	3.6
Neshobe River	02010002-020	5254	3997	1072	185	21984	15008	1887	38879	56.5	38.6	4.9
Middlebury River	02010002-030	16274	13407	2538	259	73739	35532	2642	111912	65.9	31.7	2.4
Mid-Otter Creek	02010002-040	47937	23315	18112	585	128233	253568	5967	387768	33.1	65.4	1.5
Bridport	02010002-050	2847	265	2126	19	1458	29764	194	31415	4.6	94.7	0.6
Lemon Fair River	02010002-060	20670	3952	16661	18	21736	233254	184	255174	8.5	91.4	0.1
New Haven River	02010002-070	30131	21644	8029	286	119042	112406	2917	234365	50.8	48.0	1.2
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	13277	328328	6548	348153	3.8	94.3	1.9
Little Otter Creek	02010002-090	18738	4737	13171	203	26054	184394	2071	212518	12.3	86.8	1.0
Lewis Creek	02010002-100	20999	10704	9356	203	58872	130984	2071	191927	30.7	68.2	1.1
TOTALS		**284462**	**154561**	**115065**	**4864**	**850086**	**1610910**	**49613**	**2510608**	**33.9**	**64.2**	**2.0**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	82396	170758	24358	277511	29.7	61.5	8.8
N Branch	02010003-020	72520	53735	16514	987	295543	231196	10067	536806	55.1	43.1	1.9
Dog/Mad River	02010003-030	79983	62258	14574	3130	342419	204036	31926	578381	59.2	35.3	5.5
Shelburne Pond	02010003-040	5505	1257	3520	284	6914	49280	2897	59090	11.7	83.4	4.9
Lower Winooski R.	02010003-050	87539	64007	15865	5865	352039	222110	59823	633972	55.5	35.0	9.4
LaPlatte River	02010003-060	13722	3409	9459	541	18750	132426	5518	156694	12.0	84.5	3.5
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	1931	79646	112	81689	2.4	97.5	0.1
Dir L Ch Burl	02010003-080	5615	337	2438	2782	1854	34132	28376	64362	2.9	53.0	44.1
TOTALS		**300825**	**200335**	**80256**	**15988**	**1101843**	**1123584**	**163078**	**2388504**	**46.1**	**47.0**	**6.8**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	384148	333732	12791	730670	52.6	45.7	1.8
Lee/Browns River	02010005-020	23908	15951	7207	605	87731	100898	6171	194800	45.0	51.8	3.2
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	247093	255738	12842	515673	47.9	49.6	2.5
Malletts Bay	02010005-040	13643	5829	5648	1606	32060	79072	16381	127513	25.1	62.0	12.8
Direct to L Ch	02010005-050	6091	1903	3979	152	10467	55706	1550	67723	15.5	82.3	2.3
St. Albans Bay	02010005-060	12966	2113	8968	1369	11622	125552	13964	151137	7.7	83.1	9.2
Swanton	02010005-070	5488	504	2789	325	2772	39046	3315	45133	6.1	86.5	7.3
Islands	02010005-080	25328	5796	15884	1016	31878	222376	10363	264617	12.0	84.0	3.9
Foucault, Que	02010005-090	23	17	5	1	94	70	10	174	53.8	40.3	5.9
TOTALS		**251036**	**146884**	**86585**	**7587**	**807862**	**1212190**	**77387**	**2097439**	**38.5**	**57.8**	**3.7**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	204831	217658	9843	432332	47.4	50.3	2.3
Trout River	02010007-020	21647	17688	3773	186	97284	52822	1897	152003	64.0	34.8	1.2
Mid Mississquoi R.	02010007-030	42526	29698	11084	794	163339	155176	8099	326614	50.0	47.5	2.5
Tyler Branch	02010007-040	22444	12452	9712	204	68486	135968	2081	206535	33.2	65.8	1.0
Black Creek	02010007-050	31105	15910	14025	152	87505	196350	1550	285405	30.7	68.8	0.5
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	47526	164136	11169	222831	21.3	73.7	5.0
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	182716	263830	10832	457378	39.9	57.7	2.4
Bolton, Que	02010007-080	17713	12753	4074	354	70142	57036	3611	130788	53.6	43.6	2.8
Mansonville, Que	02010007-090	10222	7360	2351	204	40480	32914	2081	75475	53.6	43.6	2.8
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	28061	22820	1448	52329	53.6	43.6	2.8
Morpion, Que	02010007-160	11529	8301	2652	231	45656	37128	2356	85140	53.6	43.6	2.8
Pike R., Que	02010007-170	8557	6161	1968	171	33886	27552	1744	63182	53.6	43.6	2.8
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	19085	15512	979	35576	53.6	43.6	2.8
TOTALS		**310528**	**197999**	**98493**	**5656**	**1088995**	**1378902**	**57691**	**2525588**	**43.1**	**54.6**	**2.3**

TOTAL VT/QU		**1266478**	**766713**	**427918**	**36187**	**4216922**	**5990852**	**369107**	**10576881**	**39.9**	**56.6**	**3.5**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
5.5	14	10.2

HIGH LIT. COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	6721	22274	0	28995	23.2	76.8	0.0
Hampton	02010001-110	2097	640	1363	93	3520	19082	949	23551	14.9	81.0	4.0
Mettawee River	02010001-120	22752	11026	11207	423	60643	156898	4315	221856	27.3	70.7	1.9
Whitehall	02010001-130	2741	911	1753	78	5011	24542	796	30348	16.5	80.9	2.6
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	146416	323498	21532	491446	29.8	65.8	4.4
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	62876	266	0	63142	99.6	0.4	0.0
Clemons	02010001-160	5081	4448	493	0	24464	6902	0	31366	78.0	22.0	0.0
Putnam	02010001-170	4795	3060	1677	0	16830	23478	0	40308	41.8	58.2	0.0
	02010001-180	2283	1605	678	0	8828	9492	0	18320	48.2	51.8	0.0
Lake George	02010001-190	59888	45736	926	1059	251548	12964	10802	275314	91.4	4.7	3.9
Ticonderoga	02010001-200	7385	5890	1121	354	32395	15694	3611	51700	62.7	30.4	7.0
Fort Ticonderoga	02010001-210	4879	2007	2712	137	11039	37968	1397	50404	21.9	75.3	2.8
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	76956	21644	143	98743	77.9	21.9	0.1
Bulwaga Bay	02010001-230	4793	2915	1874	0	16033	26236	0	42269	37.9	62.1	0.0
Moriah	02010001-240	3015	1975	800	241	10863	11200	2458	24521	44.3	45.7	10.0
Port Henry	02010001-250	7203	6105	639	366	33578	8946	3733	46257	72.6	19.3	8.1
Westport	02010001-260	10885	7697	2913	242	42334	40782	2468	85584	49.5	47.7	2.9
	TOTALS	**221315**	**147282**	**54419**	**5118**	**810051**	**761866**	**52204**	**1624121**	**49.9**	**46.9**	**3.2**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	5203	31066	877	37146	14.0	83.6	2.4
No Branch Boquet	02010004-020	25496	23286	1697	446	128073	23758	4549	156380	81.9	15.2	2.9
Boquet River	02010004-030	45185	37277	6336	948	205024	88704	9670	303397	67.6	29.2	3.2
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	39424	20874	1958	62256	63.3	33.5	3.1
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	261553	30590	6059	298201	87.7	10.3	2.0
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	314705	25452	20308	360465	87.3	7.1	5.6
Lower Ausable R.	02010004-070	20733	15189	3493	1253	83540	48902	12781	145222	57.5	33.7	8.8
Little Ausable R.	02010004-080	20856	14015	6343	460	77083	88802	4692	170577	45.2	52.1	2.8
Salmon River	02010004-090	18592	13157	3547	1581	72364	49658	16126	138148	52.4	35.9	11.7
	TOTALS	**257595**	**215812**	**29129**	**7551**	**1186966**	**407806**	**77020**	**1671792**	**71.0**	**24.4**	**4.6**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	424974	21896	14963	461833	92.0	4.7	3.2
N Branch	02010006-020	33202	30549	922	161	168020	12908	1642	182570	92.0	7.1	0.9
Mid Saranac R.	02010006-030	26587	19890	6017	478	109395	84238	4876	198509	55.1	42.4	2.5
Lower Saranac R.	02010006-040	8593	4991	1611	1747	27451	22554	17819	67824	40.5	33.3	26.3
Beekmantown	02010006-050	11346	3424	6292	1164	18832	88088	11873	118793	15.9	74.2	10.0
Ingraham	02010006-060	2596	575	1818	123	3163	25452	1255	29869	10.6	85.2	4.2
Chazy River	02010006-070	16565	8028	7728	333	44154	108192	3397	155743	28.4	69.5	2.2
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	192984	178654	3743	375381	51.4	47.6	1.0
Corbeau Creek	02010006-090	27162	10033	12833	787	55182	179662	8027	242871	22.7	74.0	3.3
Rouses Pt Direct	02010006-100	1185	0	771	142	0	10794	1448	12242	0.0	88.2	11.8
Lacolle, Que.	02010006-110	4415	2822	1384	92	15521	19376	938	35835	43.3	54.1	2.6
North Plattsburg	02010006-120	2904	31	2095	123	171	29330	1255	30755	0.6	95.4	4.1
	TOTALS	**275331**	**192699**	**55796**	**6984**	**1059845**	**781144**	**71237**	**1912225**	**55.4**	**40.8**	**3.7**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**3056862**	**1950816**	**200461**	**5208138**	**58.7**	**37.5**	**3.8**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**7273783**	**7941668**	**569568**	**15785019**	**46.1**	**50.3**	**3.6**

EXPTNHI.WK

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6713	218	46071	46991	1853	94915	48.5	49.5	2.0
Castleton	02010001-020	8301	6719	1108	474	23517	7756	4029	35302	66.6	22.0	11.4
Lake Bomoseen	02010001-030	17407	11585	3896	672	40548	27272	5712	73532	55.1	37.1	7.8
Hubbardton River	02010001-050	14560	7800	5986	190	27300	41902	1615	70817	38.6	59.2	2.3
Main Stem Poultney	02010001-070	4756	2381	2302	25	8334	16114	213	24660	33.8	65.3	0.9
Mettawee River	02010001-090	29650	20088	8647	412	70308	60529	3502	134339	52.3	45.1	2.6
Direct to L CH	02010001-270	24849	5198	18867	101	18193	132069	859	151121	12.0	87.4	0.6
TOTALS		**119627**	**66934**	**47519**	**2092**	**234269**	**332633**	**17782**	**584684**	**40.1**	**56.9**	**3.0**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	20548	2464	245441	143836	20944	410221	59.8	35.1	5.1
Neshobe River	02010002-020	5254	3997	1072	185	13990	7504	1573	23066	60.6	32.5	6.8
Middlebury River	02010002-030	16274	13407	2538	259	46925	17766	2202	66892	70.1	26.6	3.3
Mid-Otter Creek	02010002-040	47937	23315	18112	585	81603	126784	4973	213359	38.2	59.4	2.3
Bridport	02010002-050	2847	265	2126	19	928	14882	162	15971	5.8	93.2	1.0
Lemon Fair River	02010002-060	20670	3952	16661	18	13832	116627	153	130612	10.6	89.3	0.1
New Haven River	02010002-070	30131	21644	8029	286	75754	56203	2431	134388	56.4	41.8	1.8
Lwr Otter/Dead Cr.	02010002-080	27852	2414	23452	642	8449	164164	5457	178070	4.7	92.2	3.1
Little Otter Creek	02010002-090	18738	4737	13171	203	16580	92197	1726	110502	15.0	83.4	1.6
Lewis Creek	02010002-100	20999	10704	9356	203	37464	65492	1726	104682	35.8	62.6	1.6
TOTALS		**284462**	**154561**	**115065**	**4864**	**540964**	**805455**	**41344**	**1387763**	**39.0**	**58.0**	**3.0**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	12197	2388	52434	85379	20298	158111	33.2	54.0	12.8
N Branch	02010003-020	72520	53735	16514	987	188073	115598	8390	312060	60.3	37.0	2.7
Dog/Mad River	02010003-030	79983	62258	14574	3130	217903	102018	26605	346526	62.9	29.4	7.7
Shelburne Pond	02010003-040	5505	1257	3520	284	4400	24640	2414	31454	14.0	78.3	7.7
Lower Winooski R.	02010003-050	87539	64007	15865	5865	224025	111055	49853	384932	58.2	28.9	13.0
LaPlatte River	02010003-060	13722	3409	9459	541	11932	66213	4599	82743	14.4	80.0	5.6
Dir L Ch Shel/Char	02010003-070	6099	351	5689	11	1229	39823	94	41145	3.0	96.8	0.2
Dir L Ch Burl	02010003-080	5615	337	2438	2782	1180	17066	23647	41893	2.8	40.7	56.4
TOTALS		**300825**	**200335**	**80256**	**15988**	**701173**	**561792**	**135898**	**1398863**	**50.1**	**40.2**	**9.7**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	23838	1254	244458	166866	10659	421983	57.9	39.5	2.5
Lee/Browns River	02010005-020	23908	15951	7207	605	55829	50449	5143	111420	50.1	45.3	4.6
Lower Lamoille R.	02010005-030	66183	44926	18267	1259	157241	127869	10702	295812	53.2	43.2	3.6
Malletts Bay	02010005-040	13643	5829	5648	1606	20402	39536	13651	73589	27.7	53.7	18.6
Direct to L Ch	02010005-050	6091	1903	3979	152	6661	27853	1292	35806	18.6	77.8	3.6
St. Albans Bay	02010005-060	12966	2113	8968	1369	7396	62776	11637	81808	9.0	76.7	14.2
Swanton	02010005-070	5488	504	2789	325	1764	19523	2763	24050	7.3	81.2	11.5
Islands	02010005-080	25328	5796	15884	1016	20286	111188	8636	140110	14.5	79.4	6.2
Foucault, Que	02010005-090	23	17	5	1	60	35	9	103	57.8	34.0	8.3
TOTALS		**251036**	**146884**	**86585**	**7587**	**514094**	**606095**	**64490**	**1184679**	**43.4**	**51.2**	**5.4**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	15547	965	130347	108829	8203	247379	52.7	44.0	3.3
Trout River	02010007-020	21647	17688	3773	186	61908	26411	1581	89900	68.9	29.4	1.8
Mid Missisquoi R.	02010007-030	42526	29698	11084	794	103943	77588	6749	188280	55.2	41.2	3.6
Tyler Branch	02010007-040	22444	12452	9712	204	43582	67984	1734	113300	38.5	60.0	1.5
Black Creek	02010007-050	31105	15910	14025	152	55685	98175	1292	155152	35.9	63.3	0.8
Lowr Missisquoi R	02010007-060	23410	8641	11724	1095	30244	82068	9308	121619	24.9	67.5	7.7
Rock R./Pike R.	02010007-070	55276	33221	18845	1062	116274	131915	9027	257216	45.2	51.3	3.5
Bolton, Que	02010007-080	17713	12753	4074	354	44636	28518	3009	76163	58.6	37.4	4.0
Mansonville, Que	02010007-090	10222	7360	2351	204	25760	16457	1734	43951	58.6	37.4	3.9
Wallbridge Ck, Que	02010007-150	7086	5102	1630	142	17857	11410	1207	30474	58.6	37.4	4.0
Morpion, Que	02010007-160	11529	8301	2652	231	29054	18564	1964	49581	58.6	37.4	4.0
Pike R., Que	02010007-170	8557	6161	1968	171	21564	13776	1454	36793	58.6	37.4	4.0
Miss. Bay Dir, Que	02010007-190	4819	3470	1108	96	12145	7756	816	20717	58.6	37.4	3.9
TOTALS		**310528**	**197999**	**98493**	**5656**	**692997**	**689451**	**48076**	**1430524**	**48.4**	**48.2**	**3.4**

TOTAL VT/QU	**1266478**	**766713**	**427918**	**36187**	**2683496**	**2995426**	**307590**	**5986511**	**44.8**	**50.0**	**5.1**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1591	0	4277	11137	0	15414	27.7	72.3	0.0
Hampton	02010001-110	2097	640	1363	93	2240	9541	791	12572	17.8	75.9	6.3
Mettawee River	02010001-120	22752	11026	11207	423	38591	78449	3596	120636	32.0	65.0	3.0
Whitehall	02010001-130	2741	911	1753	78	3189	12271	663	16123	19.8	76.1	4.1
Halfway Ck/Ch Can	02010001-140	52585	26621	23107	2111	93174	161749	17944	272866	34.1	59.3	6.6
Mt Hope Br/So Bay	02010001-150	12114	11432	19	0	40012	133	0	40145	99.7	0.3	0.0
Clemons	02010001-160	5081	4448	493	0	15568	3451	0	19019	81.9	18.1	0.0
Putnam	02010001-170	4795	3060	1677	0	10710	11739	0	22449	47.7	52.3	0.0
	02010001-180	2283	1605	678	0	5618	4746	0	10364	54.2	45.8	0.0
Lake George	02010001-190	59888	45736	926	1059	160076	6482	9002	175560	91.2	3.7	5.1
Ticonderoga	02010001-200	7385	5890	1121	354	20615	7847	3009	31471	65.5	24.9	9.6
Fort Ticonderoga	02010001-210	4879	2007	2712	137	7025	18984	1165	27173	25.9	69.9	4.3
Putnam Br/Crown P	02010001-220	16005	13992	1546	14	48972	10822	119	59913	81.7	18.1	0.2
Bulwaga Bay	02010001-230	4793	2915	1874	0	10203	13118	0	23321	43.7	56.3	0.0
Moriah	02010001-240	3015	1975	800	241	6913	5600	2049	14561	47.5	38.5	14.1
Port Henry	02010001-250	7203	6105	639	366	21368	4473	3111	28952	73.8	15.4	10.7
Westport	02010001-260	10885	7697	2913	242	26940	20391	2057	49388	54.5	41.3	4.2
TOTALS		**221315**	**147282**	**54419**	**5118**	**515487**	**380933**	**43503**	**939923**	**54.8**	**40.5**	**4.6**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	2219	86	3311	15533	731	19575	16.9	79.4	3.7
No Branch Boquet	02010004-020	25496	23286	1697	446	81501	11879	3791	97171	83.9	12.2	3.9
Boquet River	02010004-030	45185	37277	6336	948	130470	44352	8058	182880	71.3	24.3	4.4
Dir to L Ch/Wboro	02010004-040	9066	7168	1491	192	25088	10437	1632	37157	67.5	28.1	4.4
E. Br. Ausable R.	02010004-050	50716	47555	2185	594	166443	15295	5049	186787	89.1	8.2	2.7
W Br Ausable/L Pla	02010004-060	63686	57219	1818	1991	200267	12726	16924	229916	87.1	5.5	7.4
Lower Ausable R.	02010004-070	20733	15189	3493	1253	53162	24451	10651	88263	60.2	27.7	12.1
Little Ausable R.	02010004-080	20856	14015	6343	460	49053	44401	3910	97364	50.4	45.6	4.0
Salmon River	02010004-090	18592	13157	3547	1581	46050	24829	13439	84317	54.6	29.4	15.9
TOTALS		**257595**	**215812**	**29129**	**7551**	**755342**	**203903**	**64184**	**1023429**	**73.8**	**19.9**	**6.3**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1564	1467	270438	10948	12470	293856	92.0	3.7	4.2
N Branch	02010006-020	33202	30549	922	161	106922	6454	1369	114744	93.2	5.6	1.2
Mid Saranac R.	02010006-030	26587	19890	6017	478	69615	42119	4063	115797	60.1	36.4	3.5
Lower Saranac R.	02010006-040	8593	4991	1611	1747	17469	11277	14850	43595	40.1	25.9	34.1
Beekmantown	02010006-050	11346	3424	6292	1164	11984	44044	9894	65922	18.2	66.8	15.0
Ingraham	02010006-060	2596	575	1818	123	2013	12726	1046	15784	12.8	80.6	6.6
Chazy River	02010006-070	16565	8028	7728	333	28098	54096	2831	85025	33.0	63.6	3.3
Gt Chazy/Graves R	02010006-080	49434	35088	12761	367	122808	89327	3120	215255	57.1	41.5	1.4
Corbeau Creek	02010006-090	27162	10033	12833	787	35116	89831	6690	131636	26.7	68.2	5.1
Rouses Pt Direct	02010006-100	1185	0	771	142	0	5397	1207	6604	0.0	81.7	18.3
Lacolle, Que.	02010006-110	4415	2822	1384	92	9877	9688	782	20347	48.5	47.6	3.8
North Plattsburg	02010006-120	2904	31	2095	123	109	14665	1046	15819	0.7	92.7	6.6
TOTALS		**275331**	**192699**	**55796**	**6984**	**674447**	**390572**	**59364**	**1124383**	**60.0**	**34.7**	**5.3**

TOTAL NY/QU	**754241**	**555793**	**139344**	**19653**	**1945276**	**975408**	**167051**	**3087734**	**63.0**	**31.6**	**5.4**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**567262**	**55840**	**4628771**	**3970834**	**474640**	**9074245**	**51.0**	**43.8**	**5.2**

EXPTN.WK3

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS
AG -20% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	5370.4	1560.6	46071	37593	13265	96928	47.5	38.8	13.7
Castleton	02010001-020	8301	6719	886.4	695.6	23517	6205	5913	35634	66.0	17.4	16.6
Lake Bomoseen	02010001-030	17407	11585	3116.8	1451.2	40548	21818	12335	74700	54.3	29.2	16.5
Hubbardton River	02010001-050	14560	7800	4788.8	1387.2	27300	33522	11791	72613	37.6	46.2	16.2
Main Stem Poultney	02010001-070	4756	2381	1841.6	485.4	8334	12891	4126	25351	32.9	50.9	16.3
Mettawee River	02010001-090	29650	20088	6917.6	2141.4	70308	48423	18202	136933	51.3	35.4	13.3
Direct to L CH	02010001-270	24849	5198	15093.6	3874.4	18193	105655	32932	156781	11.6	67.4	21.0
TOTALS		**119627**	**66934**	**38015**	**11596**	**234269**	**266106**	**98564**	**598940**	**39.1**	**44.4**	**16.5**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	16438.4	6573.6	245441	115069	55876	416385	58.9	27.6	13.4
Neshobe River	02010002-020	5254	3997	857.6	399.4	13990	6003	3395	23388	59.8	25.7	14.5
Middlebury River	02010002-030	16274	13407	2030.4	766.6	46925	14213	6516	67653	69.4	21.0	9.6
Mid-Otter Creek	02010002-040	47937	23315	14489.6	4207.4	81603	101427	35763	218793	37.3	46.4	16.3
Bridport	02010002-050	2847	265	1700.8	444.2	928	11906	3776	16609	5.6	71.7	22.7
Lemon Fair River	02010002-060	20670	3952	13328.8	3350.2	13832	93302	28477	135610	10.2	68.8	21.0
New Haven River	02010002-070	30131	21644	6423.2	1891.8	75754	44962	16080	136797	55.4	32.9	11.8
Lwr Otter/Dead Cr.	02010002-080	27852	2414	18761.6	5332.4	8449	131331	45325	185106	4.6	70.9	24.5
Little Otter Creek	02010002-090	18738	4737	10536.8	2837.2	16580	73758	24116	114453	14.5	64.4	21.1
Lewis Creek	02010002-100	20999	10704	7484.8	2074.2	37464	52394	17631	107488	34.9	48.7	16.4
TOTALS		**284462**	**154561**	**92052**	**27877**	**540964**	**644364**	**236955**	**1422282**	**38.0**	**45.3**	**16.7**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	9757.6	4827.4	52434	68303	41033	161770	32.4	42.2	25.4
N Branch	02010003-020	72520	53735	13211.2	4289.8	188073	92478	36463	317014	59.3	29.2	11.5
Dog/Mad River	02010003-030	79983	62258	11659.2	6044.8	217903	81614	51381	350898	62.1	23.3	14.6
Shelburne Pond	02010003-040	5505	1257	2816	988	4400	19712	8398	32510	13.5	60.6	25.8
Lower Winooski R.	02010003-050	87539	64007	12692	9038	224025	88844	76823	389692	57.5	22.8	19.7
LaPlatte River	02010003-060	13722	3409	7567.2	2432.8	11932	52970	20679	85581	13.9	61.9	24.2
Dir L Ch Shel/Char	02010003-070	6099	351	4551.2	1148.8	1229	31858	9765	42852	2.9	74.3	22.8
Dir L Ch Burl	02010003-080	5615	337	1950.4	3269.6	1180	13653	27792	42624	2.8	32.0	65.2
TOTALS		**300825**	**200335**	**64205**	**32039**	**701173**	**449434**	**272333**	**1422939**	**49.3**	**31.6**	**19.1**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	19070.4	6021.6	244458	133493	51184	429134	57.0	31.1	11.9
Lee/Browns River	02010005-020	23908	15951	5765.6	2046.4	55829	40359	17394	113582	49.2	35.5	15.3
Lower Lamoille R.	02010005-030	66183	44926	14613.6	4912.4	157241	102295	41755	301292	52.2	34.0	13.9
Malletts Bay	02010005-040	13643	5829	4518.4	2735.6	20402	31629	23253	75283	27.1	42.0	30.9
Direct to L Ch	02010005-050	6091	1903	3183.2	947.8	6661	22282	8056	36999	18.0	60.2	21.8
St. Albans Bay	02010005-060	12966	2113	7174.4	3162.6	7396	50221	26882	84498	8.8	59.4	31.8
Swanton	02010005-070	5488	504	2231.2	882.8	1764	15618	7504	24886	7.1	62.8	30.2
Islands	02010005-080	25328	5796	12707.2	4192.8	20286	88950	35639	144875	14.0	61.4	24.6
Foucault, Que	02010005-090	23	17	4	2	60	28	17	105	56.9	26.8	16.3
TOTALS		**251036**	**146884**	**69268**	**24904**	**514094**	**484876**	**211684**	**1210654**	**42.5**	**40.1**	**17.5**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	12437.6	4074.4	130347	87063	34632	252043	51.7	34.5	13.7
Trout River	02010007-020	21647	17688	3018.4	940.6	61908	21129	7995	91032	68.0	23.2	8.8
Mid Missisquoi R.	02010007-030	42526	29698	8867.2	3010.8	103943	62070	25592	191605	54.2	32.4	13.4
Tyler Branch	02010007-040	22444	12452	7769.6	2146.4	43582	54387	18244	116214	37.5	46.8	15.7
Black Creek	02010007-050	31105	15910	11220	2957	55685	78540	25135	159360	34.9	49.3	15.8
Lowr Missisquoi R	02010007-060	23410	8641	9379.2	3439.8	30244	65654	29238	125136	24.2	52.5	23.4
Rock R./Pike R.	02010007-070	55276	33221	15076	4831	116274	105532	41064	262869	44.2	40.1	15.6
Bolton, Que	02010007-080	17713	12753	3259.2	1168.8	44636	22814	9935	77385	57.7	29.5	12.8
Mansonville, Que	02010007-090	10222	7360	1880.8	674.2	25760	13166	5731	44656	57.7	29.5	12.8
Wallbridge Ck, Que	02010007-150	7086	5102	1304	468	17857	9128	3978	30963	57.7	29.5	12.8
Morpion, Que	02010007-160	11529	8301	2121.6	761.4	29054	14851	6472	50377	57.7	29.5	12.8
Pike R., Que	02010007-170	8557	6161	1574.4	564.6	21564	11021	4799	37383	57.7	29.5	12.8
Miss. Bay Dir, Que	02010007-190	4819	3470	886.4	317.6	12145	6205	2700	21049	57.7	29.5	12.8
TOTALS		**310528**	**197999**	**78794**	**25355**	**692997**	**551561**	**215514**	**1460071**	**47.5**	**37.8**	**14.8**

TOTAL VT/QU	1266478	766713	342334	121771	2683496	2396341	1035050	6114886	43.9	39.2	16.9

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS
AG -20% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1272.8	318.2	4277	8910	2705	15891	26.9	56.1	17.0
Hampton	02010001-110	2097	640	1090.4	365.6	2240	7633	3108	12980	17.3	58.8	23.9
Mettawee River	02010001-120	22752	11026	8965.6	2664.4	38591	62759	22647	123998	31.1	50.6	18.3
Whitehall	02010001-130	2741	911	1402.4	428.6	3189	9817	3643	16648	19.2	59.0	21.9
Halfway Ck/Ch Can	02010001-140	52585	26621	18485.6	6732.4	93174	129399	57225	279798	33.3	46.2	20.5
Mt Hope Br/So Bay	02010001-150	12114	11432	15.2	3.8	40012	106	32	40151	99.7	0.3	0.1
Clemons	02010001-160	5081	4448	394.4	98.6	15568	2761	838	19167	81.2	14.4	4.4
Putnam	02010001-170	4795	3060	1341.6	335.4	10710	9391	2851	22952	46.7	40.9	12.4
	02010001-180	2283	1605	542.4	135.6	5618	3797	1153	10567	53.2	35.9	10.9
Lake George	02010001-190	59888	45736	740.8	1244.2	160076	5186	10576	175837	91.0	2.9	6.0
Ticonderoga	02010001-200	7385	5890	896.8	578.2	20615	6278	4915	31807	64.8	19.7	15.5
Fort Ticonderoga	02010001-210	4879	2007	2169.6	679.4	7025	15187	5775	27987	25.1	54.3	20.6
Putnam Br/Crown P	02010001-220	16005	13992	1236.8	323.2	48972	8658	2747	60377	81.1	14.3	4.6
Bulwaga Bay	02010001-230	4793	2915	1499.2	374.8	10203	10494	3186	23883	42.7	43.9	13.3
Moriah	02010001-240	3015	1975	640	401	6913	4480	3409	14801	46.7	30.3	23.0
Port Henry	02010001-250	7203	6105	511.2	493.8	21368	3578	4197	29143	73.3	12.3	14.4
Westport	02010001-260	10885	7697	2330.4	824.6	26940	16313	7009	50261	53.6	32.5	13.9
	TOTALS	**221315**	**147282**	**43535**	**16002**	**515487**	**304746**	**136015**	**956249**	**53.9**	**31.9**	**14.2**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1775.2	529.8	3311	12426	4503	20241	16.4	61.4	22.2
No Branch Boquet	02010004-020	25496	23286	1357.6	785.4	81501	9503	6676	97680	83.4	9.7	6.8
Boquet River	02010004-030	45185	37277	5068.8	2215.2	130470	35482	18829	184780	70.6	19.2	10.2
Dir to L Ch/Wboro	02010004-040	9066	7168	1192.8	490.2	25088	8350	4167	37604	66.7	22.2	11.1
E. Br. Ausable R.	02010004-050	50716	47555	1748	1031	166443	12236	8764	187442	88.8	6.5	4.7
W Br Ausable/L Pla	02010004-060	63686	57219	1454.4	2354.6	200267	10181	20014	230461	86.9	4.4	8.7
Lower Ausable R.	02010004-070	20733	15189	2794.4	1951.6	53162	19561	16589	89311	59.5	21.9	18.6
Little Ausable R.	02010004-080	20856	14015	5074.4	1728.6	49053	35521	14693	99266	49.4	35.8	14.8
Salmon River	02010004-090	18592	13157	2837.6	2290.4	46050	19863	19468	85381	53.9	23.3	22.8
	TOTALS	**257595**	**215812**	**23303**	**13377**	**755342**	**163122**	**113703**	**1032167**	**73.2**	**15.8**	**11.0**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1251.2	1779.8	270438	8758	15128	294325	91.9	3.0	5.1
N Branch	02010006-020	33202	30549	737.6	345.4	106922	5163	2936	115021	93.0	4.5	2.6
Mid Saranac R.	02010006-030	26587	19890	4813.6	1681.4	69615	33695	14292	117602	59.2	28.7	12.2
Lower Saranac R.	02010006-040	8593	4991	1288.8	2069.2	17469	9022	17588	44078	39.6	20.5	39.9
Beekmantown	02010006-050	11346	3424	5033.6	2422.4	11984	35235	20590	67810	17.7	52.0	30.4
Ingraham	02010006-060	2596	575	1454.4	486.6	2013	10181	4136	16329	12.3	62.3	25.3
Chazy River	02010006-070	16565	8028	6182.4	1878.6	28098	43277	15968	87343	32.2	49.5	18.3
Gt Chazy/Graves R	02010006-080	49434	35088	10208.8	2919.2	122808	71462	24813	219083	56.1	32.6	11.3
Corbeau Creek	02010006-090	27162	10033	10266.4	3353.6	35116	71865	28506	135486	25.9	53.0	21.0
Rouses Pt Direct	02010006-100	1185	0	616.8	296.2	0	4318	2518	6835	0.0	63.2	36.8
Lacolle, Que.	02010006-110	4415	2822	1107.2	368.8	9877	7750	3135	20762	47.6	37.3	15.1
North Plattsburg	02010006-120	2904	31	1676	542	109	11732	4607	16448	0.7	71.3	28.0
	TOTALS	**275331**	**192699**	**44637**	**18143**	**674447**	**312458**	**154217**	**1141121**	**59.1**	**27.4**	**13.5**

TOTAL NY/QU	**754241**	**555793**	**111475**	**47522**	**1945276**	**780326**	**403935**	**3129537**	**62.2**	**24.9**	**12.9**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**453810**	**169292**	**4628771**	**3176667**	**1438985**	**9244424**	**50.1**	**34.4**	**15.6**

EXPTNAG2.W

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS
AG -10% ==>URB

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	13163	6042	889	46071	42292	7559	95921	48.0	44.1	7.9
Castleton	02010001-020	8301	6719	997	585	23517	6980	4971	35468	66.3	19.7	14.0
Lake Bomoseen	02010001-030	17407	11585	3506	1062	40548	24545	9024	74116	54.7	33.1	12.2
Hubbardton River	02010001-050	14560	7800	5387	789	27300	37712	6703	71715	38.1	52.6	9.3
Main Stem Poultney	02010001-070	4756	2381	2072	255	8334	14503	2169	25005	33.3	58.0	8.7
Mettawee River	02010001-090	29650	20088	7782	1277	70308	54476	10852	135636	51.8	40.2	8.0
Direct to L CH	02010001-270	24849	5198	16980	1988	18193	118862	16895	153951	11.8	77.2	11.0
TOTALS		**119627**	**66934**	**42767**	**6844**	**234269**	**299370**	**58173**	**591812**	**39.6**	**50.6**	**9.8**

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	70126	18493	4519	245441	129452	38410	413303	59.4	31.3	9.3
Neshobe River	02010002-020	5254	3997	965	292	13990	6754	2484	23227	60.2	29.1	10.7
Middlebury River	02010002-030	16274	13407	2284	513	46925	15989	4359	67273	69.8	23.8	6.5
Mid-Otter Creek	02010002-040	47937	23315	16301	2396	81603	114106	20368	216076	37.8	52.8	9.4
Bridport	02010002-050	2847	265	1913	232	928	13394	1969	16290	5.7	82.2	12.1
Lemon Fair River	02010002-060	20670	3952	14995	1684	13832	104964	14315	133111	10.4	78.9	10.8
New Haven River	02010002-070	30131	21644	7226	1089	75754	50583	9256	135592	55.9	37.3	6.8
Lwr Otter/Dead Cr.	02010002-080	27852	2414	21107	2987	8449	147748	25391	181588	4.7	81.4	14.0
Little Otter Creek	02010002-090	18738	4737	11854	1520	16580	82977	12921	112478	14.7	73.8	11.5
Lewis Creek	02010002-100	20999	10704	8420	1139	37464	58943	9678	106085	35.3	55.6	9.1
TOTALS		**284462**	**154561**	**103559**	**16371**	**540964**	**724910**	**139149**	**1405022**	**38.5**	**51.6**	**9.9**

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	14981	10977	3608	52434	76841	30665	159940	32.8	48.0	19.2
N Branch	02010003-020	72520	53735	14863	2638	188073	104038	22426	314537	59.8	33.1	7.1
Dog/Mad River	02010003-030	79983	62258	13117	4587	217903	91816	38993	348712	62.5	26.3	11.2
Shelburne Pond	02010003-040	5505	1257	3168	636	4400	22176	5406	31982	13.8	69.3	16.9
Lower Winooski R.	02010003-050	87539	64007	14279	7452	224025	99950	63338	387312	57.8	25.8	16.4
LaPlatte River	02010003-060	13722	3409	8513	1487	11932	59592	12639	84162	14.2	70.8	15.0
Dir L Ch Shel/Char	02010003-070	6099	351	5120	580	1229	35841	4929	41998	2.9	85.3	11.7
Dir L Ch Burl	02010003-080	5615	337	2194	3026	1180	15359	25719	42258	2.8	36.3	60.9
TOTALS		**300825**	**200335**	**72230**	**24014**	**701173**	**505613**	**204116**	**1410901**	**49.7**	**35.8**	**14.5**

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	69845	21454	3638	244458	150179	30921	425558	57.4	35.3	7.3
Lee/Browns River	02010005-020	23908	15951	6486	1326	55829	45404	11268	112501	49.6	40.4	10.0
Lower Lamoille R.	02010005-030	66183	44926	16440	3086	157241	115082	26228	298552	52.7	38.5	8.8
Malletts Bay	02010005-040	13643	5829	5083	2171	20402	35582	18452	74436	27.4	47.8	24.8
Direct to L Ch	02010005-050	6091	1903	3581	550	6661	25068	4674	36402	18.3	68.9	12.8
St. Albans Bay	02010005-060	12966	2113	8071	2266	7396	56498	19259	83153	8.9	67.9	23.2
Swanton	02010005-070	5488	504	2510	604	1764	17571	5133	24468	7.2	71.8	21.0
Islands	02010005-080	25328	5796	14296	2604	20286	100069	22137	142493	14.2	70.2	15.5
Foucault, Que	02010005-090	23	17	5	2	60	32	13	104	57.3	30.4	12.3
TOTALS		**251036**	**146884**	**77927**	**16246**	**514094**	**545486**	**138087**	**1197666**	**42.9**	**45.5**	**11.5**

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	37242	13992	2520	130347	97946	21417	249711	52.2	39.2	8.6
Trout River	02010007-020	21647	17688	3396	563	61908	23770	4788	90466	68.4	26.3	5.3
Mid Missisquoi R.	02010007-030	42526	29698	9976	1902	103943	69829	16170	189943	54.7	36.8	8.5
Tyler Branch	02010007-040	22444	12452	8741	1175	43582	61186	9989	114757	38.0	53.3	8.7
Black Creek	02010007-050	31105	15910	12623	1555	55685	88358	13213	157256	35.4	56.2	8.4
Lowr Missisquoi R	02010007-060	23410	8641	10552	2267	30244	73861	19273	123378	24.5	59.9	15.6
Rock R./Pike R.	02010007-070	55276	33221	16961	2947	116274	118724	25045	260042	44.7	45.7	9.6
Bolton, Que	02010007-080	17713	12753	3667	761	44636	25666	6472	76774	58.1	33.4	8.4
Mansonville, Que	02010007-090	10222	7360	2116	439	25760	14811	3732	44304	58.1	33.4	8.4
Wallbridge Ck, Que	02010007-150	7086	5102	1467	305	17857	10269	2593	30719	58.1	33.4	8.4
Morpion, Que	02010007-160	11529	8301	2387	496	29054	16708	4218	49979	58.1	33.4	8.4
Pike R., Que	02010007-170	8557	6161	1771	368	21564	12398	3126	37088	58.1	33.4	8.4
Miss. Bay Dir, Que	02010007-190	4819	3470	997	207	12145	6980	1758	20883	58.2	33.4	8.4
TOTALS		**310528**	**197999**	**88644**	**15505**	**692997**	**620506**	**131795**	**1445297**	**47.9**	**42.9**	**9.1**

TOTAL VT/QU	**1266478**	**766713**	**385126**	**78979**	**2683496**	**2695883**	**671320**	**6050699**	**44.4**	**44.6**	**11.1**

NPS LOAD ESTIMATE - EXPORT COEFFICIENTS

TOTAL NITROGEN

AREAL EXPORT (kg/ha/yr)		
FOREST	AG	URBAN
3.5	7	8.5

BASELINE COEFFCIENTS
AG -10% ==>URB

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
	02010001-080	2814	1222	1432	159	4277	10023	1352	15653	27.3	64.0	8.6
Hampton	02010001-110	2097	640	1227	229	2240	8587	1949	12776	17.5	67.2	15.3
Mettawee River	02010001-120	22752	11026	10086	1544	38591	70604	13121	122317	31.6	57.7	10.7
Whitehall	02010001-130	2741	911	1578	253	3189	11044	2153	16385	19.5	67.4	13.1
Halfway Ck/Ch Can	02010001-140	52585	26621	20796	4422	93174	145574	37584	276332	33.7	52.7	13.6
Mt Hope Br/So Bay	02010001-150	12114	11432	17	2	40012	120	16	40148	99.7	0.3	0.0
Clemons	02010001-160	5081	4448	444	49	15568	3106	419	19093	81.5	16.3	2.2
Putnam	02010001-170	4795	3060	1509	168	10710	10565	1425	22701	47.2	46.5	6.3
	02010001-180	2283	1605	610	68	5618	4271	576	10465	53.7	40.8	5.5
Lake George	02010001-190	59888	45736	833	1152	160076	5834	9789	175698	91.1	3.3	5.6
Ticonderoga	02010001-200	7385	5890	1009	466	20615	7062	3962	31639	65.2	22.3	12.5
Fort Ticonderoga	02010001-210	4879	2007	2441	408	7025	17086	3470	27580	25.5	61.9	12.6
Putnam Br/Crown P	02010001-220	16005	13992	1391	169	48972	9740	1433	60145	81.4	16.2	2.4
Bulwaga Bay	02010001-230	4793	2915	1687	187	10203	11806	1593	23602	43.2	50.0	6.7
Moriah	02010001-240	3015	1975	720	321	6913	5040	2729	14681	47.1	34.3	18.6
Port Henry	02010001-250	7203	6105	575	430	21368	4026	3654	29047	73.6	13.9	12.6
Westport	02010001-260	10885	7697	2622	533	26940	18352	4533	49824	54.1	36.8	9.1
	TOTALS	**221315**	**147282**	**48977**	**10560**	**515487**	**342840**	**89759**	**948086**	**54.4**	**36.2**	**9.5**

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	946	1997	308	3311	13980	2617	19908	16.6	70.2	13.1
No Branch Boquet	02010004-020	25496	23286	1527	616	81501	10691	5233	97426	83.7	11.0	5.4
Boquet River	02010004-030	45185	37277	5702	1582	130470	39917	13444	183830	71.0	21.7	7.3
Dir to L Ch/Wboro	02010004-040	9066	7168	1342	341	25088	9393	2899	37381	67.1	25.1	7.8
E. Br. Ausable R.	02010004-050	50716	47555	1967	813	166443	13766	6906	187114	89.0	7.4	3.7
W Br Ausable/L Pla	02010004-060	63686	57219	1636	2173	200267	11453	18469	230189	87.0	5.0	8.0
Lower Ausable R.	02010004-070	20733	15189	3144	1602	53162	22006	13620	88787	59.9	24.8	15.3
Little Ausable R.	02010004-080	20856	14015	5709	1094	49053	39961	9302	98315	49.9	40.6	9.5
Salmon River	02010004-090	18592	13157	3192	1936	46050	22346	16453	84849	54.3	26.3	19.4
	TOTALS	**257595**	**215812**	**26216**	**10464**	**755342**	**183513**	**88943**	**1027798**	**73.5**	**17.9**	**8.7**

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
			FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	77268	1408	1623	270438	9853	13799	294090	92.0	3.4	4.7
N Branch	02010006-020	33202	30549	830	253	106922	5809	2152	114882	93.1	5.1	1.9
Mid Saranac R.	02010006-030	26587	19890	5415	1080	69615	37907	9177	116700	59.7	32.5	7.9
Lower Saranac R.	02010006-040	8593	4991	1450	1908	17469	10149	16219	43837	39.8	23.2	37.0
Beekmantown	02010006-050	11346	3424	5663	1793	11984	39640	15242	66866	17.9	59.3	22.8
Ingraham	02010006-060	2596	575	1636	305	2013	11453	2591	16057	12.5	71.3	16.1
Chazy River	02010006-070	16565	8028	6955	1106	28098	48686	9399	86184	32.6	56.5	10.9
Gt Chazy/Graves R	02010006-080	49434	35088	11485	1643	122808	80394	13966	217169	56.5	37.0	6.4
Corbeau Creek	02010006-090	27162	10033	11550	2070	35116	80848	17598	133561	26.3	60.5	13.2
Rouses Pt Direct	02010006-100	1185	0	694	219	0	4857	1862	6720	0.0	72.3	27.7
Lacolle, Que.	02010006-110	4415	2822	1246	230	9877	8719	1958	20555	48.1	42.4	9.5
North Plattsburg	02010006-120	2904	31	1886	333	109	13199	2826	16133	0.7	81.8	17.5
	TOTALS	**275331**	**192699**	**50216**	**12564**	**674447**	**351515**	**106791**	**1132752**	**59.5**	**31.0**	**9.4**

TOTAL NY/QU	**754241**	**555793**	**125410**	**33587**	**1945276**	**877867**	**285493**	**3108636**	**62.6**	**28.2**	**9.2**

	AREA(ha)	LAND USE (ha)			POLLUTANT LOAD (kg/year)			TOTAL LOAD	SOURCE OF NPS LOAD		
		FOR	AG	URBAN	FOREST	AGRICULTURE	URBAN	kg/year	% FOREST	% AG	% URBAN
TOTAL BASIN	**2020719**	**1322506**	**510536**	**112566**	**4628771**	**3573751**	**956813**	**9159334**	**50.5**	**39.0**	**10.4**

EXPTNAG1.W

APPENDIX F

Loading Function NPS Load Estimates for TP, SRP, and TN

NPS LOAD ESTIMATE - LOADING FUNCTIONS

TOTAL PHOSPHORUS

RUNOFF CONCENTRATIONS (mg/l)		
FOREST	AG	URBAN
0.01	0.1	0.28

LOW LIT. COEFFICIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	7.9568E+07	1.1507E+08	1.5057E+08	13163	6713	218	521	753	986	2657	3842	5028	86	349	457	3264	4945	6471	15.2	77.7	7.1
Castleton	02010001-020	8301	2.9414E+07	4.3580E+07	5.7746E+07	6719	1108	474	238	353	467	393	582	771	168	697	923	799	1631	2161	21.6	35.7	42.7
Lake Bomoseen	02010001-030	17407	5.8373E+07	8.3238E+07	1.0810E+08	11585	3896	672	388	554	719	1306	1863	2419	225	900	1169	1920	3317	4307	16.7	56.2	27.1
Hubbardton River	02010001-050	14560	4.7129E+07	6.8645E+07	9.0142E+07	7800	5986	190	252	368	483	1938	2822	3706	62	251	329	2252	3441	4518	10.7	82.0	7.3
Main Stem Poultne	02010001-070	4756	1.5952E+07	2.2659E+07	2.9373E+07	2381	2302	25	80	113	147	772	1097	1422	8	33	43	860	1244	1612	9.1	88.2	2.7
Mettawee River	02010001-090	29650	1.2352E+08	1.7035E+08	2.1718E+08	20088	8647	412	837	1154	1471	3602	4968	6334	172	663	845	4611	6785	8650	17.0	73.2	9.8
Direct to L.CH	02010001-270	24849	7.9770E+07	1.1350E+08	1.4720E+08	5198	18867	101	167	237	308	6057	8618	11176	32	129	168	6256	8984	11652	2.6	95.9	1.4
	TOTALS	119627	4.3373E+08	6.1704E+08	8.0031E+08	66934	47519	2092	2484	3533	4582	16725	23792	30856	754	3022	3934	19962	30347	39372	11.6	78.4	10.0

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	3.8625E+08	5.8759E+08	7.8880E+08	70126	20548	2464	2889	4395	5900	8465	12877	17287	2842	4324	5804	14196	21596	28991	20.4	59.6	20.0
Neshobe River	02010002-020	5254	1.7342E+07	2.8598E+07	3.9863E+07	3997	1072	185	132	218	303	354	583	813	171	282	393	657	1083	1510	20.1	53.9	26.0
Middlebury River	02010002-030	16274	5.6241E+07	8.9618E+07	1.2302E+08	13407	2538	259	463	738	1013	877	1398	1919	251	399	548	1591	2535	3480	29.1	55.1	15.8
Mid-Otter Creek	02010002-040	47937	1.6299E+08	2.6048E+08	3.5803E+08	23315	18112	585	793	1267	1741	6158	9842	13527	557	890	1223	7508	11999	16492	10.6	82.0	7.4
Bridport	02010002-050	2847	1.0841E+07	1.5510E+07	2.0183E+07	265	2126	19	10	14	19	810	1158	1507	20	29	38	840	1202	1564	1.2	96.4	2.4
Lemon Fair River	02010002-060	20670	7.8037E+07	1.1267E+08	1.4774E+08	3952	16661	18	149	216	282	6290	9098	11909	19	28	36	6458	9341	12227	2.3	97.4	0.3
New Haven River	02010002-070	30131	1.1280E+08	1.6618E+08	2.1956E+08	21644	8029	286	810	1194	1577	3006	4428	5851	300	442	584	4116	6064	8011	19.7	73.0	7.3
Lwr Otter/Dead Cr.	02010002-080	27852	9.8869E+07	1.5316E+08	2.0745E+08	2414	23452	642	86	133	180	8325	12896	17468	638	989	1339	9049	14018	18986	0.9	92.0	7.1
Little Otter Creek	02010002-090	18738	6.0365E+07	8.5056E+07	1.0972E+08	4737	13171	203	153	215	277	4243	5979	7712	183	258	333	4579	6452	8322	3.3	92.7	4.0
Lewis Creek	02010002-100	20999	7.2309E+07	1.0225E+08	1.3222E+08	10704	9356	203	369	521	674	3222	4556	5891	196	277	358	3786	5354	6923	9.7	85.1	5.2
	TOTALS	284462	1.0560E+09	1.6013E+09	2.1466E+09	154561	115065	4864	5853	8910	11967	41749	62815	83884	5177	7917	10656	52779	79642	106507	11.2	78.9	9.9

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	9.8362E+07	1.4487E+08	1.9134E+08	14981	12197	2388	494	727	961	4020	5921	7820	2204	3246	4287	6718	9894	13068	7.4	59.8	32.8
N Branch	02010003-020	72520	2.6746E+08	3.7600E+08	4.8454E+08	53735	16514	987	1982	2786	3590	6091	8562	11034	1019	1433	1846	9092	12781	16471	21.8	67.0	11.2
Dog/Mad River	02010003-030	79983	3.2675E+08	4.8482E+08	6.4300E+08	62258	14574	3130	2543	3774	5005	5954	8834	11716	3580	5312	7046	12078	17920	23767	21.1	49.3	29.6
Shelburne Pond	02010003-040	5505	1.8004E+07	2.5832E+07	3.3661E+07	1257	3520	284	41	59	77	1151	1652	2152	260	373	486	1452	2084	2715	2.8	79.3	17.9
Lower Winooski R.	02010003-050	87539	3.5134E+08	5.0156E+08	6.5166E+08	64007	15865	5865	2569	3667	4765	6367	9090	11810	6591	9409	12225	15527	22166	28800	16.5	41.0	42.4
LaPlatte River	02010003-060	13722	4.5299E+07	6.4332E+07	8.3365E+07	3409	9459	541	113	160	207	3123	4435	5747	500	710	920	3735	5305	6874	3.0	83.6	13.4
Dir L Ch Shel/Char	02010003-070	6099	2.1017E+07	2.9456E+07	3.7895E+07	351	5689	11	12	17	22	1960	2748	3535	11	15	19	1983	2779	3576	0.6	98.9	0.5
Dir L Ch Burl	02010003-080	5615	1.8010E+07	2.6025E+07	3.4048E+07	337	2438	2782	11	16	20	782	1130	1478	2498	3610	4723	3291	4756	6222	0.3	23.8	75.9
	TOTALS	300625	1.1462E+09	1.6529E+09	2.1595E+09	200335	80256	15988	7764	11206	14647	29448	42371	55293	16664	24109	31553	53876	77686	101493	14.4	54.5	31.0

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	4.0558E+08	5.7788E+08	7.5018E+08	69845	23838	1254	2908	4144	5379	9926	14142	18359	1462	2083	2704	14296	20369	26442	20.3	69.4	10.2
Lee/Browns River	02010005-020	23908	1.2008E+08	1.5019E+08	1.8033E+08	15951	7207	605	801	1002	1203	3620	4527	5436	851	1064	1278	5272	6594	7917	15.2	68.7	16.1
Lower Lamoille R.	02010005-030	66183	2.8972E+08	4.1555E+08	5.4147E+08	44926	18267	1259	1967	2821	3676	7996	11469	14945	1543	2213	2884	11506	16504	21505	17.1	69.5	13.4
Malletts Bay	02010005-040	13643	4.3219E+07	6.2496E+07	8.1772E+07	5829	5648	1606	185	267	349	1789	2587	3385	1425	2060	2695	3398	4914	6430	5.4	52.6	41.9
Direct to L.Ch	02010005-050	6091	1.5288E+07	2.0584E+07	2.5886E+07	1903	3979	152	48	64	81	999	1345	1691	107	144	181	1153	1553	1953	4.1	86.6	9.3
St. Albans Bay	02010005-060	12966	2.9190E+07	4.2728E+07	5.6266E+07	2113	8968	1369	48	70	92	2019	2955	3892	863	1263	1663	2929	4288	5647	1.6	68.9	29.5
Swanton	02010005-070	5488	1.3024E+07	1.7071E+07	2.1118E+07	504	2789	325	12	16	19	662	868	1073	216	283	350	890	1166	1443	1.3	74.4	24.3
Islands	02010005-080	25328	6.0027E+07	7.9189E+07	9.8375E+07	5796	15884	1016	137	181	225	3764	4966	6169	674	889	1105	4576	6037	7499	3.0	82.3	14.7
Foucault, Que	02010005-090	23	5.7649E+04	7.7231E+04	9.6814E+04	17	5	1	0	1	1	1	2	2	1	1	1	2	3	4	17.9	52.6	29.5
	TOTALS	251036	9.7619E+08	1.3658E+09	1.7555E+09	146884	86585	7587	6106	8565	11025	30776	42862	54953	7141	10001	12862	44023	61428	78840	13.9	69.8	16.3

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	2.6881E+08	3.7142E+08	4.7403E+08	37242	15547	965	1847	2552	3258	7712	10655	13599	1340	1852	2363	10899	15059	19220	16.9	70.8	12.3
Trout River	02010007-020	21647	1.0605E+08	1.4549E+08	1.8493E+08	17688	3773	186	867	1189	1511	1848	2536	3223	255	350	445	2970	4075	5179	29.2	62.2	8.6
Mid Mississquoi R.	02010007-030	42526	2.3209E+08	2.8347E+08	3.3491E+08	29698	11084	794	1621	1980	2339	6049	7388	8729	1213	1482	1751	8883	10850	12819	18.2	68.1	13.7
Tyler Branch	02010007-040	22444	9.5534E+07	1.3702E+08	1.7851E+08	12452	9712	204	530	760	990	4134	5929	7725	243	349	454	4907	7036	9169	10.8	84.2	5.0
Black Creek	02010007-050	31105	1.4360E+08	1.9246E+08	2.4133E+08	15910	14025	152	735	984	1234	6475	8678	10881	196	263	330	7406	9926	12446	9.9	87.4	2.7
Lowr Missisquoi R	02010007-060	23410	1.1063E+08	1.4440E+08	1.7821E+08	8641	11724	1095	408	533	658	5540	7232	8925	1449	1891	2334	7398	9656	11917	5.5	74.9	19.6
Rock R./Pike R.	02010007-070	55276	2.6155E+08	3.3746E+08	4.1341E+08	33221	18845	1062	1572	2028	2485	8917	11506	14094	1407	1815	2224	11896	15349	18803	13.2	75.0	11.8
Bolton, Que	02010007-080	17713	1.0159E+08	1.2563E+08	1.4965E+08	12753	4074	354	731	905	1077	2337	2889	3442	568	703	837	3636	4497	5357	20.1	64.3	15.6
Mansonville, Que	02010007-090	10222	5.7663E+07	7.2402E+07	8.7142E+07	7360	2351	204	415	521	627	1326	1665	2004	322	405	487	2064	2591	3119	20.1	64.3	15.6
Wallbridge Ck, Que	02010007-150	7086	3.5194E+07	4.7632E+07	5.8733E+07	5102	1630	142	253	343	423	810	1096	1351	197	267	330	1260	1706	2103	20.1	64.2	15.7
Morpion, Que	02010007-160	11529	5.6343E+07	7.5623E+07	9.8670E+07	8301	2652	231	406	544	710	1296	1740	2270	316	424	554	2018	2708	3534	20.1	64.2	15.7
Pike R., Que	02010007-170	8557	4.2825E+07	5.6596E+07	7.1201E+07	6161	1968	171	308	407	513	985	1302	1638	240	317	398	1533	2026	2549	20.1	64.3	15.6
Miss. Bay Dir. Que	02010007-190	4819	2.4157E+07	3.2363E+07	4.0569E+07	3470	1108	96	174	233	292	555	744	933	135	181	226	864	1158	1451	20.1	64.3	15.6
	TOTALS	310528	1.5360E+09	2.0220E+09	2.5113E+09	197999	98493	5656	9867	12980	16116	47984	63359	78813	7883	10299	12734	65734	86639	107665	15.0	73.1	11.9

TOTAL VT/QU	1266478	5.1482E+09	7.2590E+09	9.3732E+09	766713	427918	36187	32075	45195	58339	166683	235199	303798	37618	55347	71739	236375	335741	433876	13.5	70.1	16.5

NPS LOAD ESTIMATE - LOADING FUNCTIONS

TOTAL PHOSPHORUS

RUNOFF CONCENTRATIONS (mg/l)		
FOREST	AG	URBAN
0.01	0.1	0.28

LOW LIT. COEFFICIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
	02010001-080	2814	8.7895E+06	1.3463E+07	1.8133E+07	1222	1591	0	38	58	79	497	761	1025	0	0	0	535	820	1104	7.1	92.9	0.0
Hampton	02010001-110	2097	6.5499E+06	1.0033E+07	1.3513E+07	640	1363	93	20	31	41	426	652	878	81	125	168	527	807	1087	3.8	80.8	15.4
Mettawee River	02010001-120	22752	8.1651E+07	1.1548E+08	1.4930E+08	11026	11207	423	396	560	724	4022	5688	7354	425	601	777	4843	6849	8855	8.2	83.1	8.8
Whitehall	02010001-130	2741	9.0751E+06	1.3900E+07	1.8722E+07	911	1753	78	30	46	62	580	889	1197	72	111	149	683	1046	1409	4.4	85.0	10.6
Halfway Ck/Ch Can	02010001-140	52585	1.8052E+08	2.7459E+08	3.6119E+08	26621	23107	2111	914	1390	1829	7932	12066	15871	2029	3087	4060	10875	16543	21760	8.4	72.9	18.7
Mt Hope Br/So Bay	02010001-150	12114	3.6339E+07	5.5579E+07	7.4804E+07	11432	19	0	343	524	706	6	9	12	0	0	0	349	533	718	98.4	1.6	0.0
Clemons	02010001-160	5081	1.5379E+07	2.1825E+07	2.8272E+07	4448	493	0	135	191	247	149	212	274	0	0	0	284	403	522	47.4	52.6	0.0
Putnam	02010001-170	4795	1.3774E+07	2.0300E+07	2.6833E+07	3060	1677	0	88	130	171	482	710	938	0	0	0	570	840	1110	15.4	84.6	0.0
	02010001-180	2283	6.4846E+06	9.7314E+06	1.2975E+07	1605	678	0	46	68	91	193	289	385	0	0	0	238	357	477	19.1	80.9	0.0
Lake George	02010001-190	59888	2.4801E+08	3.4401E+08	4.3993E+08	45736	926	1059	1894	2627	3360	383	532	680	1228	1703	2178	3505	4862	6218	54.0	10.9	35.0
Ticonderoga	02010001-200	7385	2.2590E+07	3.3900E+07	4.5201E+07	5890	1121	354	180	270	361	343	515	686	303	455	607	826	1240	1653	21.8	41.5	36.7
Fort Ticonderoga	02010001-210	4879	1.6257E+07	2.4396E+07	3.2529E+07	2007	2712	137	67	100	134	904	1356	1808	128	192	256	1098	1648	2198	6.1	82.3	11.6
Putnam Br/Crown P	02010001-220	16005	5.3328E+07	8.0030E+07	1.0671E+08	13992	1546	14	466	700	933	515	773	1031	13	20	26	994	1492	1990	46.9	51.8	1.3
Bulwaga Bay	02010001-230	4793	1.6059E+07	2.3727E+07	3.1388E+07	2915	1874	0	98	144	191	628	928	1227	0	0	0	726	1072	1418	13.5	86.5	0.0
Moriah	02010001-240	3015	9.9471E+06	1.4475E+07	1.8998E+07	1975	800	241	65	95	124	264	384	504	223	324	425	552	803	1054	11.8	47.8	40.4
Port Henry	02010001-250	7203	2.2998E+07	3.4476E+07	4.5945E+07	6105	639	366	195	292	389	204	306	408	327	491	654	726	1089	1451	26.8	28.1	45.1
Westport	02010001-260	10885	2.5511E+07	4.0096E+07	5.4682E+07	7697	2913	242	180	284	387	683	1073	1463	159	250	340	1022	1606	2190	17.7	66.8	15.5
	TOTALS	221315	7.7326E+08	1.1300E+09	1.4791E+09	147262	54419	5118	5154	7511	9828	18210	27142	35744	4988	7357	9640	28353	42010	55212	17.9	64.6	17.5

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	7.7880E+06	1.1986E+07	1.6184E+07	946	2219	86	23	35	47	529	815	1100	57	88	119	609	938	1266	3.7	86.9	9.4
No Branch Boquet	02010004-020	25496	5.8692E+07	9.2590E+07	1.2652E+08	23286	1697	446	536	846	1156	391	616	842	287	454	620	1214	1915	2617	44.1	32.2	23.7
Boquet River	02010004-030	45185	1.0613E+08	1.6640E+08	2.2671E+08	37277	6336	948	876	1373	1870	1488	2333	3179	623	978	1332	2987	4684	6381	29.3	49.8	20.9
Dir to L Ch/Wboro	02010004-040	9066	2.1891E+07	3.2178E+07	4.2476E+07	7168	1491	192	173	254	336	360	529	699	130	191	252	663	974	1286	26.1	54.3	19.6
E. Br. Ausable R.	02010004-050	50716	1.8958E+08	2.7826E+08	3.6693E+08	47555	2185	594	1778	2609	3441	817	1199	1581	622	913	1203	3216	4721	6225	55.3	25.4	19.3
W Br Ausable/L Pla	02010004-060	63686	2.3644E+08	3.3587E+08	4.3520E+08	57219	1818	1991	2124	3018	3910	675	959	1242	2070	2940	3810	4869	6916	8962	43.6	13.9	42.5
Lower Ausable R.	02010004-070	20733	6.3486E+07	9.6755E+07	1.2999E+08	15189	3493	1253	465	709	952	1070	1630	2190	1074	1637	2200	2609	3976	5342	17.8	41.0	41.2
Little Ausable R.	02010004-080	20856	7.0456E+07	1.0795E+08	1.4548E+08	14015	6343	460	473	725	978	2143	3283	4425	435	667	898	3051	4675	6301	15.5	70.2	14.3
Salmon River	02010004-090	18592	6.1530E+07	9.5533E+07	1.2954E+08	13157	3547	1581	435	676	917	1174	1823	2471	1465	2275	3084	3074	4773	6472	14.2	38.2	47.7
	TOTALS	257595	8.1598E+08	1.2175E+09	1.6190E+09	215812	29129	7551	6883	10245	13606	8646	13187	17729	6764	10141	13518	22293	33573	44853	30.5	39.3	30.2

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	3.7902E+08	5.0415E+08	6.2928E+08	77268	1564	1467	3206	4265	5323	649	863	1077	1704	2267	2830	5560	7395	9231	57.7	11.7	30.7
N Branch	02010006-020	33202	1.3638E+08	1.7867E+08	2.2096E+08	30549	922	161	1255	1644	2033	379	496	614	185	243	300	1819	2383	2947	69.0	20.8	10.2
Mid Saranac R.	02010006-030	26587	8.5256E+07	1.2737E+08	1.6948E+08	19890	6017	478	638	953	1268	1930	2883	3836	429	641	853	2997	4477	5957	21.3	64.4	14.3
Lower Saranac R.	02010006-040	8593	2.5809E+07	4.1232E+07	5.6668E+07	4991	1611	1747	150	239	329	484	773	1062	1469	2347	3226	2103	3360	4617	7.1	23.0	69.9
Beekmantown	02010006-050	11346	3.2740E+07	5.4227E+07	7.5697E+07	3424	6292	1164	99	164	228	1816	3007	4198	940	1558	2174	2855	4729	6601	3.5	63.6	32.9
Ingraham	02010006-060	2596	8.6374E+06	1.2438E+07	1.6242E+07	575	1818	123	19	28	36	605	871	1137	115	165	215	739	1064	1389	2.6	81.9	15.5
Chazy River	02010006-070	16565	4.8871E+07	6.9809E+07	9.0748E+07	8028	7728	333	237	338	440	2280	3257	4234	275	393	511	2792	3988	5184	8.5	81.7	9.9
Gt Chazy/Graves R	02010006-080	49434	1.5880E+08	2.3044E+08	3.0209E+08	35088	12761	367	1127	1636	2144	4099	5949	7798	330	479	628	5557	8063	10570	20.3	73.8	5.9
Corbeau Creek	02010006-090	27162	8.8382E+07	1.2711E+08	1.6580E+08	10033	12833	787	326	470	612	4176	6005	7833	717	1031	1345	5219	7506	9791	6.3	80.0	13.7
Rouses Pt Direct	02010006-100	1185	3.6708E+06	5.2860E+06	6.9029E+06	0	771	142	0	0	0	239	344	449	123	177	232	362	521	681	0.0	66.0	34.0
Lacolle, Que.	02010006-110	4415	1.5178E+07	1.9658E+07	2.4132E+07	2822	1384	92	97	126	154	476	616	756	89	115	141	661	857	1052	14.7	71.9	13.4
North Plattsburg	02010006-120	2904	8.6235E+06	1.3879E+07	1.9135E+07	31	2095	123	1	1	2	622	1001	1380	102	165	227	725	1167	1609	0.1	85.8	14.1
	TOTALS	275331	9.9137E+08	1.3843E+09	1.7771E+09	192699	55796	6984	7155	9863	12570	17753	26085	34376	6479	9561	12682	31388	45509	59628	21.7	57.3	21.1

TOTAL NY/QU	754241	2.5806E+09	3.7318E+09	4.8753E+09	555793	139344	19653	19193	27618	36005	44610	66395	87848	18232	27079	35840	82034	121092	159693	22.8	54.8	22.4

	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
		Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
TOTAL BASIN	2020719	7.7289E+09	1.0991E+10	1.4248E+10	1322506	567262	55840	51267	72813	94344	211292	301594	391647	55850	82426	107579	318409	456833	593569	15.9	66.0	18.0

LFTPLO.WK3

NPS LOAD ESTIMATE - LOADING FUNCTIONS

TOTAL PHOSPHORUS

RUNOFF CONCENTRATIONS (mg/l)		
FOREST	AG	URBAN
0.025	0.3	0.82

HIGH LIT. COEFFICIENTS

POULTNEY-METAWEE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Poultney R.	02010001-010	20104	7.9568E+07	1.1507E+08	1.5057E+08	13163	6713	218	1302	1884	2465	7971	11527	15083	259	1023	1339	9532	14434	18887	13.0	79.9	7.1
Castleton	02010001-020	8301	2.9414E+07	4.3580E+07	5.7746E+07	6719	1108	474	595	882	1169	1178	1745	2312	504	2041	2704	2277	4668	6185	18.9	37.4	43.7
Lake Bomoseen	02010001-030	17407	5.8373E+07	8.3238E+07	1.0810E+08	11585	3896	672	971	1385	1799	3919	5589	7258	676	2635	3422	5567	9609	12479	14.4	58.2	27.4
Hubbardton River	02010001-050	14560	4.7129E+07	6.8645E+07	9.0142E+07	7800	5986	190	631	919	1207	5813	8467	11118	185	735	965	6628	10120	13290	9.1	83.7	7.3
Main Stem Poultney	02010001-070	4756	1.5952E+07	2.2659E+07	2.9373E+07	2381	2302	25	200	284	368	2316	3290	4265	25	98	127	2541	3671	4759	7.7	89.6	2.7
Mettawee River	02010001-090	29650	1.2352E+08	1.7035E+08	2.1718E+08	20088	8647	412	2092	2885	3679	10807	14904	19001	515	1941	2475	13414	19730	25154	14.6	75.5	9.8
Direct to L CH	02010001-270	24849	7.9770E+07	1.1350E+08	1.4720E+08	5198	18867	101	417	594	770	18170	25853	33529	97	378	491	18684	26825	34790	2.2	96.4	1.4
	TOTALS	119627	4.3373E+08	6.1704E+08	8.0031E+08	66934	47519	2092	6209	8832	11455	50174	71375	92567	2261	8850	11521	58644	89057	115544	9.9	80.1	9.9

OTTER-LEWIS

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Otter/Rutland	02010002-010	93760	3.8625E+08	5.8759E+08	7.8880E+08	70126	20548	2464	7222	10967	14749	25395	38632	51861	8323	12662	16998	40940	62281	83608	17.6	62.0	20.3
Neshobe River	02010002-020	5254	1.7342E+07	2.8596E+07	3.9863E+07	3997	1072	185	330	544	758	1062	1750	2440	501	826	1151	1892	3120	4349	17.4	56.1	26.5
Middlebury River	02010002-030	16274	5.6241E+07	8.9618E+07	1.2302E+08	13407	2538	259	1158	1846	2534	2631	4193	5756	734	1170	1605	4524	7208	9895	25.6	58.2	16.2
Mid-Otter Creek	02010002-040	47937	1.6299E+08	2.6048E+08	3.5803E+08	23315	18112	585	1982	3167	4353	18475	29525	40582	1631	2607	3583	22088	35299	48518	9.0	83.6	7.4
Bridport	02010002-050	2847	1.0841E+07	1.5510E+07	2.0183E+07	265	2126	19	25	36	47	2429	3475	4522	59	85	110	2513	3596	4679	1.0	96.6	2.4
Lemon Fair River	02010002-060	20670	7.8037E+07	1.1287E+08	1.4774E+08	3952	16661	18	373	540	706	18870	27294	35726	56	81	105	19299	27914	36537	1.9	97.8	0.3
New Haven River	02010002-070	30131	1.1280E+08	1.6618E+08	2.1956E+08	21644	8029	286	2026	2984	3943	9017	13285	17552	878	1293	1709	11921	17562	23204	17.0	75.6	7.4
Lwr Otter/Dead Cr.	02010002-080	27852	9.8869E+07	1.5316E+08	2.0745E+08	2414	23452	642	214	332	450	24975	38689	52403	1869	2895	3921	27058	41916	56774	0.8	92.3	6.9
Little Otter Creek	02010002-090	18738	6.0365E+07	8.5056E+07	1.0972E+08	4737	13171	203	382	538	693	12729	17936	23137	536	756	975	13647	19229	24805	2.8	93.3	3.9
Lewis Creek	02010002-100	20999	7.2309E+07	1.0225E+08	1.3222E+08	10704	9356	203	921	1303	1685	9665	13667	17673	573	811	1048	11160	15781	20406	8.3	86.6	5.1
	TOTALS	284462	1.0560E+09	1.6013E+09	2.1466E+09	154561	115065	4864	14633	22276	29918	125248	189445	251651	15160	23184	31206	155042	233906	312775	9.5	80.6	9.9

WINOOSKI

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Stevens/Jail Brnch	02010003-010	29842	9.8362E+07	1.4487E+08	1.9134E+08	14981	12197	2388	1234	1818	2401	12061	17763	23461	6454	9506	12555	19749	29088	38418	6.3	61.1	32.7
N Branch	02010003-020	72520	2.6746E+08	3.7600E+08	4.8454E+08	53735	16514	987	4954	6965	8976	18272	25686	33101	2985	4196	5408	26211	36848	47485	18.9	69.7	11.4
Dog/Mad River	02010003-030	79983	3.2675E+08	4.8482E+08	6.4300E+08	62258	14574	3130	6358	9434	12513	17861	26502	35149	10485	15558	20633	34705	51494	68295	18.3	51.5	30.2
Shelburne Pond	02010003-040	5505	1.8004E+07	2.5832E+07	3.3661E+07	1257	3520	284	103	147	192	3454	4955	6457	762	1093	1424	4318	6195	8073	2.4	80.0	17.6
Lower Winooski R.	02010003-050	87539	3.5134E+08	5.0156E+08	6.5166E+08	64007	15865	5865	6422	9168	11912	19102	27270	35431	19302	27555	35802	44827	63993	83144	14.3	42.6	43.1
LaPlatte River	02010003-060	13722	4.5299E+07	6.4332E+07	8.3365E+07	3409	9459	541	281	400	518	9368	13304	17240	1464	2080	2695	11114	15783	20453	2.5	84.3	13.2
Dir L Ch Shel/Char	02010003-070	6099	2.1017E+07	2.9456E+07	3.7895E+07	351	5689	11	30	42	55	5881	8243	10604	31	44	56	5943	8329	10715	0.5	99.0	0.5
Dir L Ch Burl	02010003-080	5615	1.8010E+07	2.6025E+07	3.4048E+07	337	2438	2782	27	39	51	2346	3390	4435	7317	10573	13833	9690	14002	18319	0.3	24.2	75.5
	TOTALS	300825	1.1462E+09	1.6529E+09	2.1595E+09	200035	80256	15988	19411	28014	36617	88345	127114	165879	48801	70604	92406	156557	225733	294902	12.4	56.3	31.3

LAMOILLE-GRAND ISLE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Lamoille R.	02010005-010	97406	4.0558E+08	5.7788E+08	7.5018E+08	69845	23838	1254	7271	10359	13448	29777	42427	55077	4282	6100	7919	41329	58887	76444	17.6	72.0	10.4
Lee/Browns River	02010005-020	23908	1.2006E+08	1.5019E+08	1.8033E+08	15951	7207	605	2003	2505	3008	10859	13582	16308	2492	3116	3742	15354	19204	23058	13.0	70.7	16.2
Lower Lamoille R.	02010005-030	66183	2.8972E+08	4.1555E+08	5.4147E+08	44926	18267	1259	4917	7052	9189	23989	34408	44835	4519	6482	8446	33425	47943	62470	14.7	71.8	13.5
Malletts Bay	02010005-040	13643	4.3219E+07	6.2496E+07	8.1772E+07	5829	5648	1606	462	668	873	5368	7762	10156	4172	6033	7893	10001	14462	18922	4.6	53.7	41.7
Direct to L Ch	02010005-050	6091	1.5288E+07	2.0584E+07	2.5886E+07	1903	3979	152	119	161	202	2996	4034	5073	313	421	530	3428	4616	5805	3.5	87.4	9.1
St. Albans Bay	02010005-060	12966	2.9190E+07	4.2728E+07	5.6266E+07	2113	8968	1369	119	174	229	6057	8866	11675	2527	3699	4871	8703	12739	16776	1.4	69.6	29.0
Swanton	02010005-070	5488	1.3024E+07	1.7071E+07	2.1118E+07	504	2789	325	30	39	48	1986	2603	3220	632	829	1026	2648	3471	4294	1.1	75.0	23.9
Islands	02010005-080	25328	6.0027E+07	7.9189E+07	9.8375E+07	5796	15864	1016	343	453	563	11293	14899	18508	1974	2605	3236	13611	17956	22307	2.5	83.0	14.5
Foucault, Que	02010005-090	23	5.7649E+04	7.7231E+04	9.6814E+04	17	5	1	1	1	2	4	5	6	2	3	3	7	9	12	15.5	54.6	29.9
	TOTALS	251036	9.7619E+08	1.3658E+09	1.7555E+09	146884	86585	7587	15264	21412	27563	92329	128596	164858	20913	29289	37667	128507	179287	230087	11.9	71.7	16.3

MISSISQUOI

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Uppr Missisquoi R.	02010007-010	54194	2.6881E+08	3.7142E+08	4.7403E+08	37242	15547	965	4618	6381	8144	23135	31966	40796	3925	5423	6921	31678	43770	55862	14.6	73.0	12.4
Trout River	02010007-020	21647	1.0605E+08	1.4549E+08	1.8493E+08	17688	3773	186	2166	2972	3778	5545	7608	9670	747	1025	1303	8459	11605	14750	25.6	65.6	8.8
Mid Mississquoi R.	02010007-030	42526	2.3209E+08	2.8347E+08	3.3491E+08	29698	11084	794	4052	4949	5847	18148	22165	26187	3553	4340	5128	25753	31454	37162	15.7	70.5	13.8
Taylor Branch	02010007-040	22444	9.5534E+07	1.3702E+08	1.7851E+08	12452	9712	204	1325	1900	2476	12402	17787	23174	712	1021	1330	14439	20709	26980	9.2	85.9	4.9
Black Creek	02010007-050	31105	1.4360E+08	1.9246E+08	2.4133E+08	15910	14025	152	1836	2461	3086	19424	26034	32644	575	771	967	21836	29266	36697	8.4	89.0	2.6
Lowr Missisquoi R	02010007-060	23410	1.1063E+08	1.4440E+08	1.7821E+08	8641	11724	1095	1021	1333	1645	16621	21695	26775	4243	5539	6835	21886	28566	35255	4.7	75.9	19.4
Rock R./Pike R.	02010007-070	55276	2.6155E+08	3.3748E+08	4.1341E+08	33221	18845	1062	3930	5071	6212	26751	34517	42283	4121	5317	6513	34801	44904	55007	11.3	76.9	11.8
Bolton, Que	02010007-080	17713	1.0159E+08	1.2563E+08	1.4965E+08	12753	4074	354	1829	2261	2694	7010	8668	10326	1665	2059	2452	10503	12989	15472	17.4	66.7	15.9
Mansonville, Que	02010007-090	10222	5.7663E+07	7.2402E+07	8.7142E+07	7360	2351	204	1038	1303	1569	3979	4996	6013	944	1185	1426	5960	7484	9007	17.4	66.8	15.8
Wallbridge Ck, Que	02010007-150	7086	3.5194E+07	4.7632E+07	5.8733E+07	5102	1630	142	634	857	1057	2429	3287	4053	578	783	965	3641	4927	6075	17.4	66.7	15.9
Morpion, Que	02010007-160	11529	5.6343E+07	7.5623E+07	9.8670E+07	8301	2652	231	1014	1361	1776	3888	5219	6809	926	1242	1621	5828	7822	10206	17.4	66.7	15.9
Pike R., Que	02010007-170	8557	4.2825E+07	5.6596E+07	7.1201E+07	6161	1968	171	771	1019	1282	2955	3905	4913	702	927	1167	4427	5851	7361	17.4	66.7	15.9
Miss. Bay Dir, Que	02010007-190	4819	2.4157E+07	3.2363E+07	4.0569E+07	3470	1108	96	435	583	730	1666	2232	2798	395	529	663	2496	3344	4191	17.4	66.8	15.8
	TOTALS	310528	1.5360E+09	2.0220E+09	2.5113E+09	197999	98493	5656	24668	32451	40294	143952	190078	236440	23066	30161	37292	191706	252690	314026	12.8	75.2	11.9

TOTAL VT/QU	1266478	5.1482E+09	7.2590E+09	9.3732E+09	766713	427918	36187	80186	112966	145847	500048	705598	911395	110221	162088	210092	690455	980673	1267334	11.5	72.0	16.5

NPS LOAD ESTIMATE - LOADING FUNCTIONS

TOTAL PHOSPHORUS

RUNOFF CONCENTRATIONS (mg/l)		
FOREST	AG	URBAN
0.025	0.3	0.82

HIGH LIT. COEFFICIENTS

SOUTH BASIN, NY

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
	02010001-080	2814	8.7895E+06	1.3463E+07	1.8133E+07	1222	1591	0	95	146	197	1491	2284	3076	0	0	0	1586	2430	3273	6.0	94.0	0.0
Hampton	02010001-110	2097	6.5499E+06	1.0033E+07	1.3513E+07	640	1363	93	50	77	103	1277	1956	2635	238	365	491	1565	2398	3229	3.2	81.6	15.2
Mettawee River	02010001-120	22752	8.1651E+07	1.1548E+08	1.4930E+08	11026	11207	423	989	1399	1809	12066	17065	22062	1245	1761	2276	14300	20224	26147	6.9	84.4	8.7
Whitehall	02010001-130	2741	9.0751E+06	1.3900E+07	1.8722E+07	911	1753	78	75	115	156	1741	2667	3592	212	324	437	2028	3107	4185	3.7	85.8	10.4
Halfway Ck/Ch Car	02010001-140	52585	1.8052E+08	2.7459E+08	3.6119E+08	26621	23107	2111	2285	3475	4571	23797	36198	47614	5942	9039	11890	32024	48713	64076	7.1	74.3	18.6
Mt Hope Br/So Bay	02010001-150	12114	3.6339E+07	5.5579E+07	7.4804E+07	11432	19	0	857	1311	1765	17	26	35	0	0	0	874	1337	1800	98.0	2.0	0.0
Clemons	02010001-160	5081	1.5379E+07	2.1825E+07	2.8272E+07	4448	493	0	337	478	619	448	635	823	0	0	0	784	1113	1442	42.9	57.1	0.0
Putnam	02010001-170	4795	1.3774E+07	2.0300E+07	2.6833E+07	3060	1677	0	220	324	428	1445	2130	2815	0	0	0	1665	2454	3243	13.2	86.8	0.0
	02010001-180	2283	6.4846E+06	9.7314E+06	1.2975E+07	1605	678	0	114	171	228	578	867	1156	0	0	0	692	1038	1384	16.5	83.5	0.0
Lake George	02010001-190	59888	2.4801E+08	3.4401E+08	4.3993E+08	45736	926	1059	4735	6568	8399	1150	1596	2041	3596	4988	6379	9482	13152	16819	49.9	12.1	37.9
Ticonderoga	02010001-200	7385	2.2590E+07	3.3900E+07	4.5201E+07	5890	1121	354	450	676	901	1029	1544	2058	888	1332	1777	2367	3552	4736	19.0	43.5	37.5
Fort Ticonderoga	02010001-210	4879	1.6257E+07	2.4396E+07	3.2529E+07	2007	2712	137	167	251	335	2711	4068	5424	374	562	749	3252	4881	6508	5.1	83.4	11.5
Putnam Br/Crown P	02010001-220	16005	5.3328E+07	8.0030E+07	1.0671E+08	13992	1546	14	1166	1749	2332	1545	2319	3092	38	57	77	2749	4126	5501	42.4	56.2	1.4
Bulwaga Bay	02010001-230	4793	1.6059E+07	2.3727E+07	3.1388E+07	2915	1874	0	244	361	477	1884	2783	3682	0	0	0	2128	3144	4159	11.5	88.5	0.0
Moriah	02010001-240	3015	9.9471E+06	1.4475E+07	1.8998E+07	1975	800	241	163	237	311	792	1152	1512	652	949	1245	1607	2338	3069	10.1	49.3	40.6
Port Henry	02010001-250	7203	2.2998E+07	3.4476E+07	4.5945E+07	6105	639	366	487	731	974	612	918	1223	958	1436	1914	2058	3085	4111	23.7	29.7	46.6
Westport	02010001-260	10885	2.5511E+07	4.0096E+07	5.4682E+07	7697	2913	242	451	709	967	2048	3219	4390	465	731	997	2964	4659	6354	15.2	69.1	15.7
	TOTALS	221315	7.7326E+08	1.1300E+09	1.4791E+09	147282	54419	5118	12886	18777	24571	54631	81427	107232	14609	21545	28232	82126	121749	160035	15.4	66.9	17.7

BOQUET-AUSABLE

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Dir to L Ch/Essex	02010004-010	3265	7.7880E+06	1.1986E+07	1.6184E+07	946	2219	86	56	87	117	1588	2444	3300	168	259	350	1813	2790	3767	3.1	87.6	9.3
No Branch Boquet	02010004-020	25496	5.8692E+07	9.2590E+07	1.2652E+08	23286	1697	446	1340	2114	2889	1172	1849	2526	842	1328	1815	3354	5291	7230	40.0	34.9	25.1
Boquet River	02010004-030	45185	1.0613E+08	1.6640E+08	2.2671E+08	37277	6336	948	2189	3432	4676	4465	7000	9537	1826	2863	3900	8479	13295	18113	25.8	52.7	21.5
Dir to L Ch/Wboro	02010004-040	9066	2.1891E+07	3.2178E+07	4.2476E+07	7168	1491	192	433	636	840	1080	1588	2096	380	559	738	1893	2782	3673	22.9	57.1	20.1
E. Br. Ausable R.	02010004-050	50716	1.8958E+08	2.7826E+08	3.6693E+08	47555	2185	594	4444	6523	8602	2450	3596	4743	1821	2672	3524	8715	12792	16868	51.0	28.1	20.9
W Br Ausable/L Pla	02010004-060	63686	2.3644E+08	3.3587E+08	4.3520E+08	57219	1818	1991	5311	7544	9775	2025	2876	3727	6061	8610	11157	13397	19031	24659	39.6	15.1	45.2
Lower Ausable R.	02010004-070	20733	6.3486E+07	9.6755E+07	1.2999E+08	15189	3493	1253	1163	1772	2381	3209	4890	6570	3146	4795	6442	7518	11457	15393	15.5	42.7	41.9
Little Ausable R.	02010004-080	20856	7.0456E+07	1.0795E+08	1.4548E+08	14015	6343	460	1184	1814	2444	6428	9849	13274	1274	1952	2631	8886	13615	18349	13.3	72.3	14.3
Salmon River	02010004-090	18592	6.1530E+07	9.5533E+07	1.2954E+08	13157	3547	1581	1089	1690	2292	3522	5468	7414	4290	6662	9033	8901	13819	18739	12.2	39.6	48.2
	TOTALS	257595	8.1599E+08	1.2175E+09	1.6190E+09	215812	29129	7551	17208	25612	34015	25938	39560	53186	19809	29700	39589	62955	94872	126790	27.0	41.7	31.3

SARANAC-CHAZY

HU NAME	HU NUMBER	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
			Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
Upper Saranac R.	02010006-010	91342	3.7902E+08	5.0415E+08	6.2928E+08	77268	1564	1467	8016	10662	13308	1947	2590	3232	4992	6639	8287	14954	19891	24828	53.6	13.0	33.4
N Branch	02010006-020	33202	1.3638E+08	1.7867E+08	2.2096E+08	30549	922	161	3137	4110	5083	1136	1488	1841	542	710	879	4816	6309	7802	65.1	23.6	11.3
Mid Saranac R.	02010006-030	26587	8.5258E+07	1.2737E+08	1.6948E+08	19890	6017	478	1595	2382	3170	5789	8648	11507	1257	1878	2499	8640	12908	17175	18.5	67.0	14.5
Lower Saranac R.	02010006-040	8593	2.5809E+07	4.1232E+07	5.6668E+07	4991	1611	1747	375	599	823	1452	2319	3187	4303	6874	9447	6129	9792	13457	6.1	23.7	70.2
Beekmantown	02010006-050	11346	3.2740E+07	5.4227E+07	7.5697E+07	3424	6292	1164	247	409	571	5447	9022	12593	2754	4562	6368	8448	13993	19533	2.9	64.5	32.6
Ingraham	02010006-060	2596	8.6374E+06	1.2438E+07	1.6242E+07	575	1818	123	48	69	90	1815	2613	3412	336	483	631	2198	3165	4133	2.2	82.6	15.3
Chazy River	02010006-070	16565	4.8871E+07	6.9809E+07	9.0748E+07	8028	7728	333	592	846	1099	6840	9770	12701	806	1151	1496	8238	11767	15296	7.2	83.0	9.8
Gt Chazy/Graves R	02010006-080	49434	1.5880E+08	2.3044E+08	3.0209E+08	35088	12761	367	2818	4089	5361	12298	17846	23395	967	1403	1839	16083	23338	30594	17.5	76.5	6.0
Corbeau Creek	02010006-090	27162	8.8382E+07	1.2711E+08	1.6580E+08	10033	12833	787	816	1174	1531	12527	18016	23500	2100	3020	3939	15443	22210	28971	5.3	81.1	13.6
Rouses Pt Direct	02010006-100	1185	3.6708E+06	5.2860E+06	6.9029E+06	0	771	142	0	0	0	717	1032	1347	361	519	678	1077	1551	2026	0.0	66.5	33.5
Lacolle, Que.	02010006-110	4415	1.5178E+07	1.9658E+07	2.4132E+07	2822	1384	92	243	314	386	1427	1849	2269	259	336	412	1929	2499	3067	12.6	74.0	13.4
North Plattsburg	02010006-120	2904	8.6235E+06	1.3879E+07	1.9135E+07	31	2095	123	2	4	5	1866	3004	4141	300	482	665	2168	3490	4811	0.1	86.1	13.8
	TOTALS	275331	9.9137E+08	1.3843E+09	1.7771E+09	192699	55796	6984	17888	24657	31426	53260	78196	103127	18975	28057	37140	90122	130911	171693	18.8	59.7	21.4
TOTAL NY/QU		754241	2.5806E+09	3.7318E+09	4.8753E+09	555793	139344	19653	47982	69046	90012	133829	199184	263544	53393	79302	104961	235204	347532	458517	19.9	57.3	22.8

	AREA(ha)	DISCHARGE (m3/yr)			LAND USE (ha)			FOREST (kg/yr)			AGRICULTURE (kg/yr)			URBAN (kg/yr)			TOTAL NPS LOAD (kg/yr)			SOURCE OF NPS LOAD		
		Q(low)	Q(ave)	Q(high)	FOR	AG	URBAN	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	LOW	AVE	HIGH	% FOREST	% AG	% URBAN
TOTAL BASIN	2020719	7.7289E+09	1.0991E+10	1.4248E+10	1322506	567262	55840	128168	182032	235859	633877	904782	1174940	163614	241391	315053	925659	1328205	1725852	13.7	68.1	18.2

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