



Appendix A – Permits To Take Water

Table A1 - Surface Water Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
4153-62NJ28	Agricultural	Other - Agricultural	555321	4764425	17	Surface	1,362,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	238.8	238.8	238.8	238.8	0.0	0.0	0.0	MCKENZIE CREEK
4052-6E3LAX	Agricultural	Field and Pasture Crops	551374	4764501	17	Surface	2,226,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	195.1	195.1	195.1	195.1	0.0	0.0	0.0	MCKENZIE CREEK
6501-7BERXZ	Agricultural	Field and Pasture Crops	553954	4763645	17	Surface	1,080,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	189.3	189.3	189.3	189.3	0.0	0.0	0.0	MCKENZIE CREEK
6404-6LBRVX	Agricultural	Field and Pasture Crops	556554	4759865	17	Surface	1,023,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	179.3	179.3	179.3	179.3	0.0	0.0	0.0	MCKENZIE CREEK
76-P-2060	Agricultural	Field and Pasture Crops	557204	4758266	17	Surface	800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	140.2	140.2	140.2	140.2	0.0	0.0	0.0	MCKENZIE CREEK
1125-6PGR53	Agricultural	Other - Agricultural	551672	4762708	17	Surface	736,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.0	129.0	129.0	129.0	0.0	0.0	0.0	MCKENZIE CREEK
1125-6PGR53	Agricultural	Other - Agricultural	552316	4763140	17	Surface	736,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.0	129.0	129.0	129.0	0.0	0.0	0.0	MCKENZIE CREEK
5185-62NL5E	Agricultural	Field and Pasture Crops	551790	4765248	17	Surface	699,644	Estimated Volume	0.0	0.0	0.0	0.0	0.0	122.7	122.7	122.7	122.7	0.0	0.0	0.0	MCKENZIE CREEK
4085-6E3QSZ	Agricultural	Other - Agricultural	553291	4763248	17	Surface	1,635,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	95.7	95.7	95.7	95.7	0.0	0.0	0.0	MCKENZIE CREEK
4085-6E3QSZ	Agricultural	Other - Agricultural	552808	4763299	17	Surface	1,635,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	95.4	95.4	95.4	95.4	0.0	0.0	0.0	MCKENZIE CREEK
1845-6AHQR9	Agricultural	Field and Pasture Crops	555223	4766574	17	Surface	2,147,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	94.1	94.1	94.1	94.1	0.0	0.0	0.0	MCKENZIE CREEK
8888-6PPFLR	Agricultural	Field and Pasture Crops	553537	4762888	17	Surface	1,402,440	Estimated Volume	0.0	0.0	0.0	0.0	0.0	81.9	81.9	81.9	81.9	0.0	0.0	0.0	MCKENZIE CREEK
8888-6PPFLR	Agricultural	Field and Pasture Crops	553640	4762825	17	Surface	1,402,440	Estimated Volume	0.0	0.0	0.0	0.0	0.0	81.9	81.9	81.9	81.9	0.0	0.0	0.0	MCKENZIE CREEK
8888-6PPFLR	Agricultural	Field and Pasture Crops	553577	4762854	17	Surface	1,402,440	Estimated Volume	0.0	0.0	0.0	0.0	0.0	81.9	81.9	81.9	81.9	0.0	0.0	0.0	MCKENZIE CREEK
7768-6PUHUS	Agricultural	Field and Pasture Crops	589821	4763539	17	Surface	167,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	29.3	29.3	29.3	29.3	0.0	0.0	0.0	MCKENZIE CREEK
6338-7BQPX5	Agricultural	Market Gardens / Flowers	561421	4760507	17	Surface	72,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	12.6	12.6	12.6	12.6	0.0	0.0	0.0	MCKENZIE CREEK
00-P-1226	Agricultural	Field and Pasture Crops	543489	4781089	17	Surface	2,727,600	Estimated Volume	0.0	0.0	0.0	0.0	0.0	478.2	478.2	478.2	478.2	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
99-P-1022	Agricultural	Other - Agricultural	538464	4794069	17	Surface	2,725,488	Estimated Volume	0.0	0.0	0.0	0.0	0.0	477.8	477.8	477.8	477.8	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
00-P-1226	Agricultural	Field and Pasture Crops	543515	4781354	17	Surface	2,072,976	Estimated Volume	0.0	0.0	0.0	0.0	0.0	363.4	363.4	363.4	363.4	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
8188-642PGD	Agricultural	Tobacco	542420	4778471	17	Surface	3,000,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	263.0	263.0	263.0	263.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
00-P-1148	Agricultural	Field and Pasture Crops	545208	4782037	17	Surface	1,363,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	239.1	239.1	239.1	239.1	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
88-P-1001	Agricultural	Field and Pasture Crops	539679	4795347	17	Surface	1,227,420	Estimated Volume	0.0	0.0	0.0	0.0	0.0	215.2	215.2	215.2	215.2	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
99-P-1089	Agricultural	Other - Agricultural	536777	4791457	17	Surface	1,091,040	Estimated Volume	0.0	0.0	0.0	0.0	0.0	191.3	191.3	191.3	191.3	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
63-P-1853	Agricultural	Other - Agricultural	537162	4795432	17	Surface	1,091,040	Estimated Volume	0.0	0.0	0.0	0.0	0.0	191.3	191.3	191.3	191.3	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
3770-6APOBL	Agricultural	Tobacco	545007	4780254	17	Surface	1,294,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	113.4	113.4	113.4	113.4	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
3770-6APOBL	Agricultural	Tobacco	544998	4780169	17	Surface	1,294,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	113.4	113.4	113.4	113.4	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
73-P-0387	Agricultural	Tobacco	543701	4782574	17	Surface	463,692	Estimated Volume	0.0	0.0	0.0	0.0	0.0	81.3	81.3	81.3	81.3	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
03-P-2343	Agricultural	Field and Pasture Crops	543505	4779464	17	Surface	1,364,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	79.7	79.7	79.7	79.7	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
03-P-2343	Agricultural	Field and Pasture Crops	543886	4779833	0	Surface	1,364,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	79.7	79.7	79.7	79.7	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
5005-6QZLV4	Agricultural	Tobacco	540117	4777964	17	Surface	913,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	53.3	53.3	53.3	53.3	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
99-P-1089	Agricultural	Other - Agricultural	535772	4791831	17	Surface	872,832	Estimated Volume	0.0	0.0	0.0	0.0	0.0	51.0	51.0	51.0	51.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
99-P-1089	Agricultural	Other - Agricultural	535928	4791084	17	Surface	872,832	Estimated Volume	0.0	0.0	0.0	0.0	0.0	51.0	51.0	51.0	51.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
99-P-1089	Agricultural	Other - Agricultural	535940	4790641	17	Surface	872,832	Estimated Volume	0.0	0.0	0.0	0.0	0.0	51.0	51.0	51.0	51.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
00-P-1160	Agricultural	Field and Pasture Crops	541239	4788647	17	Surface	141,600	Estimated Volume	0.0	0.0	0.0	0.0	0.0	12.4	12.4	12.4	12.4	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
00-P-1160	Agricultural	Field and Pasture Crops	540609	4788324	17	Surface	141,600	Estimated Volume	0.0	0.0	0.0	0.0	0.0	12.4	12.4	12.4	12.4	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG
0686-764H6K	Agricultural	Market Gardens / Flowers	523118	4805363	17	Surface	720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	31.6	31.6	31.6	31.6	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG
0686-764H6K	Agricultural	Market Gardens / Flowers	523951	4805057	17	Surface	720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	31.6	31.6	31.6	31.6	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG
0686-764H6K	Agricultural	Market Gardens / Flowers	523612	4805179	17	Surface	720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	31.6	31.6	31.6	31.6	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG
0686-764H6K	Agricultural	Market Gardens / Flowers	523265	4805892	17	Surface	720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	31.6	31.6	31.6	31.6	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG
99-P-1008	Agricultural	Other - Agricultural	530000	4780800	17	Surface	7,855,488	Estimated Volume	0.0	0.0	0.0	0.0	0.0	1377.1	1377.1	1377.1	1377.1	0.0	0.0	0.0	WHITEMANS CREEK
6725-6DSQTD	Agricultural	Field and Pasture Crops	552120	4777379	17	Surface	5,238,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	918.3	918.3	918.3	918.3	0.0	0.0	0.0	WHITEMANS CREEK
03-P-2339	Agricultural	Tobacco	551255	4775221	17	Surface	10,100,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	885.3	885.3	885.3	885.3	0.0	0.0	0.0	WHITEMANS CREEK
03-P-2339	Agricultural	Tobacco	551091	4775302	17	Surface	10,100,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	885.3	885.3	885.3	885.3	0.0	0.0	0.0	WHITEMANS CREEK
4243-6APPKL	Agricultural	Tobacco	550825	4775691	17	Surface	2,750,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	482.1	482.1	482.1	482.1	0.0	0.0	0.0	WHITEMANS CREEK
00-P-1081	Agricultural	Other - Agricultural	530371	4784002	17	Surface	5,236,992	Estimated Volume	0.0	0.0	0.0	0.0	0.0	459.0	459.0	459.0	459.0	0.0	0.0	0.0	WHITEMANS CREEK
00-P-1081	Agricultural	Other - Agricultural	530001	4783928	17	Surface	5,236,992	Estimated Volume	0.0	0.0	0.0	0.0	0.0	459.0	459.0	459.0	459.0	0.0	0.0	0.0	WHITEMANS CREEK
1676-6BVR3P	Agricultural	Tobacco	551782	4776861	17	Surface	2,589,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	453.9	453.9	453.9	453.9	0.0	0.0	0.0	WHITEMANS CREEK
4633-63DQLG	Agricultural	Tobacco	545277	4772548	17	Surface	2,272,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	398.3	398.3	398.3	398.3	0.0	0.0	0.0	WHITEMANS CREEK
6754-6FSJ5M	Agricultural	Tobacco	544012	4774329	17	Surface	2,070,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	362.9	362.9	362.9	362.9	0.0	0.0	0.0	WHITEMANS CREEK
99-P-1082	Agricultural	Tobacco	530410	4787920	17	Surface	2,045,700	Estimated Volume	0.0	0.0	0.0	0.0	0.0	358.6	358.6	358.6	358.6	0.0	0.0	0.0	WHITEMANS CREEK
8748-6BVLGH	Agricultural	Sod Farm	539039	4775379	17	Surface	1,964,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	344.3	344.3	344.3	344.3	0.0	0.0	0.0	WHITEMANS CREEK
8465-6BTQVK	Agricultural	Tobacco	543550	4773543	17	Surface	1,681,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	294.7	294.7	294.7	294.7	0.0	0.0	0.0	WHITEMANS CREEK
7607-6D6PQD	Agricultural	Tobacco	538479	4773246	17	Surface	1,640,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	287.5	287.5	287.5	287.5	0.0	0.0	0.0	WHITEMANS CREEK
99-P-1080	Agricultural	Other - Agricultural	534533	4780342	17	Surface	3,273,120	Estimated Volume	0.0	0.0	0.0	0.0	0.0	286.9	286.9	286.9	286.9	0.0	0.0	0.0	WHITEMANS CREEK
3370-6H6RNJ	Agricultural	Tobacco	537521	4777623	17	Surface	1,623,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	284.5	284.5	284.5	284.5	0.0	0.0	0.0	WHITEMANS CREEK
2567-7D4JE6	Agricultural	Field and Pasture Crops	533382	4782344	17	Surface	1,443,420	Estimated Volume	0.0	0.0	0.0	0.0	0.0	253.0	253.0	253.0	253.0	0.0	0.0	0.0	WHITEMANS CREEK
5088-7CVKST	Agricultural	Other - Agricultural	536054	4780361	17	Surface	1,443,420	Estimated Volume	0.0	0.0	0.0	0.0	0.0	253.0	253.0	253.0	253.0	0.0	0.0	0.0	WHITEMANS CREEK
63-P-2566	Agricultural	Tobacco	538209	4776915	17	Surface	1,409,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	247.0	247.0	247.0	247.0	0.0	0.0	0.0	WHITEMANS CREEK
99-P-1125	Agricultural	Other - Agricultural	532070	4786																	

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed							
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
93-P-2026	Miscellaneous	Wildlife Conservation	557306	4792940	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK	
93-P-2027	Miscellaneous	Wildlife Conservation	556858	4793070	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
93-P-2028	Miscellaneous	Wildlife Conservation	556867	4793060	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
93-P-2029	Miscellaneous	Wildlife Conservation	557738	4793683	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK
93-P-2030	Miscellaneous	Wildlife Conservation	557797	4793901	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK
93-P-2031	Miscellaneous	Wildlife Conservation	556828	4793456	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
93-P-2032	Miscellaneous	Wildlife Conservation	557906	4793337	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK
93-P-2033	Miscellaneous	Wildlife Conservation	557639	4793011	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK
93-P-2034	Miscellaneous	Wildlife Conservation	556640	4791656	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
93-P-2035	Miscellaneous	Wildlife Conservation	555195	4788694	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK
93-P-2099	Miscellaneous	Wildlife Conservation	569441	4836549	17	Surface	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ERAMOSIA ABOVE GUELPH
93-P-2100	Miscellaneous	Wildlife Conservation	556546	4789851	17	Surface	8,370,000	Estimated Volume	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	FAIRCHILD CREEK
93-P-2101	Miscellaneous	Wildlife Conservation	553812	4786810	17	Surface	1,040,000	Estimated Volume	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	FAIRCHILD CREEK
96-P-2059	Recreational	Other - Recreational	569333	4842449	17	Surface	393,000	Estimated Volume	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	ERAMOSIA ABOVE GUELPH
96-P-2059	Recreational	Other - Recreational	569295	4842341	17	Surface	393,000	Estimated Volume	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	ERAMOSIA ABOVE GUELPH
03-P-2245	Commercial	Golf Course Irrigation	548995	4805578	17	Surface	1,634,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	70.0	44.1	26.7	36.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
03-P-2245	Commercial	Golf Course Irrigation	548995	4805578	17	Surface	1,634,000	Reported Volume	0.0	0.0	0.0	0.0	39.5	39.5	39.5	39.5	39.5	39.5	39.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
03-P-2366	Commercial	Golf Course Irrigation	525144	4807513	17	Surface	1,310,000	Reported Volume	0.0	0.0	0.0	0.0	184.8	381.5	246.4	225.4	212.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG
1501-6FEJ2B	Industrial	Aggregate Washing	546347	4813083	17	Surface	2,727,000	Reported Volume	0.0	0.0	0.0	18.6	5.4	19.6	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO
1501-6FEJ2B	Industrial	Aggregate Washing	546347	4813083	17	Surface	2,727,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	13.0	3.5	10.5	6.3	18.8	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO
2540-6PLKFX	Commercial	Golf Course Irrigation	554182	4812399	17	Surface	3,273,000	Reported Volume	0.0	0.0	0.0	100.8	415.1	948.5	828.8	711.2	354.9	65.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
3150-6AYMSU	Commercial	Golf Course Irrigation	562739	4821877	17	Surface	1,591,000	Reported Volume	0.0	0.0	0.0	0.0	127.0	141.8	248.3	124.6	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
3150-6AYMSU	Commercial	Golf Course Irrigation	562739	4821877	17	Surface	1,591,000	Reported Volume	0.0	0.0	0.0	0.0	78.4	255.1	171.1	63.0	28.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
3150-6AYMSU	Commercial	Golf Course Irrigation	562699	4821908	17	Surface	900,000	Reported Volume	0.0	0.0	0.0	0.0	123.9	378.0	490.7	435.4	302.4	50.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
3150-6AYMSU	Commercial	Golf Course Irrigation	562699	4821908	17	Surface	900,000	Reported Volume	0.0	0.0	0.0	0.0	127.0	141.8	248.3	124.6	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
3738-6D4Q2S	Industrial	Aggregate Washing	548676	4811572	17	Surface	4,392,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.7	29.3	57.5	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO
64-P-0333	Commercial	Golf Course Irrigation	554124	4802929	17	Surface	655,000	Reported Volume	0.0	0.0	0.0	8.3	312.2	578.2	293.3	315.7	317.1	24.5	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON
68-P-0091	Commercial	Golf Course Irrigation	558891	4824117	17	Surface	467,000	Reported Volume	0.0	0.0	0.0	0.0	12.4	98.7	88.2	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
72-P-0103	Industrial	Aggregate Washing	558939	4815690	17	Surface	273,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
72-P-0103	Industrial	Aggregate Washing	558886	4815582	17	Surface	4,473,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG
72-P-0103	Industrial	Aggregate Washing	558770	4815289	17	Surface	1,309,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG

Table A3 - Surface Water Municipal Permits				Reported Takings with Consumptive Estimates, L/s												Consumptive Factor	Surface Water Subwatershed
Permit	Municipal Taking	Easting	Northing	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
62-P-0117	Eramosa River	567536	4823236	0.0	0.0	0.0	27.7	54.7	70.2	61.6	55.1	53.6	50.8	6.2	0.0	1	Eramosa Above Guelph
97-P-2070	Holmedale Canal Grand River	557200	4776630	102.4	102.0	100.0	109.7	114.0	114.5	122.2	118.6	112.7	112.7	103.9	99.6	0.2	Grand Above York to Brantford
6884-7BEPK5	Mannheim Recharge	547210	4806820	110.9	102.5	106.9	98.3	118.9	117.4	107.0	111.5	111.2	107.9	105.5	108.7	0.2	Grand Above Doon to Conestogo

Table A4 - Groundwater Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area	
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
0752-6AKSR5	Agricultural	Field and Pasture Crops	554759	4767911	17	Ground	16,370,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	860.9	860.9	860.9	860.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
0752-6AKSR5	Agricultural	Field and Pasture Crops	554821	4767585	17	Ground	16,370,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	860.9	860.9	860.9	860.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
99-P-2034	Agricultural	Other - Agricultural	561586	4758412	17	Ground	7,855,488	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	826.3	826.3	826.3	826.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
99-P-2033	Agricultural	Other - Agricultural	556515	4762881	17	Ground	7,855,488	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	826.3	826.3	826.3	826.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
2650-5ZSL9C	Agricultural	Tobacco	544781	4774763	17	Ground	6,377,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	670.8	670.8	670.8	670.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4261-5ZSMDX	Agricultural	Tobacco	545080	4774979	17	Ground	6,377,700	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	670.8	670.8	670.8	670.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4776-5YUR3R	Agricultural	Tobacco	541427	4777695	17	Ground	5,905,224	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	621.1	621.1	621.1	621.1	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
00-P-2398	Agricultural	Market Gardens / Flowers	567579	4837202	17	Ground	5,448,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	573.0	573.0	573.0	573.0	0.0	0.0	0.0	SPEED ABOVE DAM	Upper Speed
7758-7BKLUT	Agricultural	Field and Pasture Crops	550525	4766730	17	Ground	5,237,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	550.8	550.8	550.8	550.8	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
2677-5ZQXZF	Agricultural	Field and Pasture Crops	549291	4771186	17	Ground	5,236,992	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	550.8	550.8	550.8	550.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7607-63RPKH	Agricultural	Field and Pasture Crops	546614	4769558	17	Ground	5,236,992	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	550.8	550.8	550.8	550.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5120-5Y2MK4	Agricultural	Field and Pasture Crops	544080	4776907	17	Ground	4,582,368	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	482.0	482.0	482.0	482.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
0110-5Z4HQM	Agricultural	Field and Pasture Crops	543410	4777971	17	Ground	4,582,368	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	482.0	482.0	482.0	482.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
89-P-2052	Agricultural	Other - Agricultural	572512	4790608	17	Ground	4,363,636	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	459.0	459.0	459.0	459.0	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
03-P-2214	Agricultural	Field and Pasture Crops	547230	4770180	17	Ground	3,928,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	413.2	413.2	413.2	413.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
88-P-2034	Agricultural	Tobacco	553673	4764656	17	Ground	3,927,744	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	413.1	413.1	413.1	413.1	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
7506-5TXH8B	Agricultural	Tobacco	538494	4776870	17	Ground	3,840,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	403.9	403.9	403.9	403.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7506-5TXH8B	Agricultural	Tobacco	538709	4772821	17	Ground	3,840,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	403.9	403.9	403.9	403.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2339	Agricultural	Field and Pasture Crops	547153	4770544	17	Ground	3,816,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	401.4	401.4	401.4	401.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
69-P-0374	Agricultural	Other - Agricultural	553183	4774740	17	Ground	3,805,202	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	400.2	400.2	400.2	400.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
1071-5Y2MU3	Agricultural	Field and Pasture Crops	546079	4771004	17	Ground	3,764,088	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	395.9	395.9	395.9	395.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
3527-5Y2JY7	Agricultural	Field and Pasture Crops	546851	4769542	17	Ground	3,764,088	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	395.9	395.9	395.9	395.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4248-5Z5NY6	Agricultural	Field and Pasture Crops	540601	4774303	17	Ground	3,764,088	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	395.9	395.9	395.9	395.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
3300-68ESHK	Agricultural	Field and Pasture Crops	542769	4776681	17	Ground	3,764,088	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	395.9	395.9	395.9	395.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
2040-63RPDY	Agricultural	Tobacco	542638	4777577	17	Ground	3,540,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	372.3	372.3	372.3	372.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
3571-5YUQNH	Agricultural	Tobacco	536466	4775533	17	Ground	3,474,630	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	365.5	365.5	365.5	365.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
0426-6E2KUB	Agricultural	Tobacco	550985	4772542	17	Ground	3,276,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	344.6	344.6	344.6	344.6	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
00-P-2514	Agricultural	Tobacco	550740	4775473	17	Ground	3,273,120	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	344.3	344.3	344.3	344.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7847-62ENT9	Agricultural	Field and Pasture Crops	545894	4770754	17	Ground	3,273,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	344.3	344.3	344.3	344.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
88-P-2077	Agricultural	Other - Agricultural	546832	4770289	17	Ground	3,272,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	344.2	344.2	344.2	344.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
0550-6BTRD6	Agricultural	Field and Pasture Crops	533271	4777715	17	Ground	3,208,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	337.4	337.4	337.4	337.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7807-642QKY	Agricultural	Tobacco	544282	4775230	17	Ground	6,408,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	337.0	337.0	337.0	337.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7807-642QKY	Agricultural	Tobacco	543756	4775003	17	Ground	6,408,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	337.0	337.0	337.0	337.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
99-P-2145	Agricultural	Other - Agricultural	556253	4768936	17	Ground	3,109,474	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	327.1	327.1	327.1	327.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
1344-6AJNRR	Agricultural	Tobacco	539959	4776053	17	Ground	2,946,240	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	309.9	309.9	309.9	309.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
73-P-0172	Agricultural	Tobacco	535900	4779500	17	Ground	2,880,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	302.9	302.9	302.9	302.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
6726-62MQ4V	Agricultural	Tobacco	552135	4772527	17	Ground	2,873,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	302.2	302.2	302.2	302.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
8753-6C8RA9	Agricultural	Field and Pasture Crops	555276	4765510	17	Ground	2,861,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	300.9	300.9	300.9	300.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0025-6AKSZK	Agricultural	Field and Pasture Crops	550646	4772235	17	Ground	3,930,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	293.1	293.1	293.1	293.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
63-P-1123	Agricultural	Tobacco	539044	4772860	17	Ground	2,771,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	291.5	291.5	291.5	291.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4208-6AQTHJ	Agricultural	Field and Pasture Crops	552215	4764855	17	Ground	2,760,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	290.3	290.3	290.3	290.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
01-P-2179	Agricultural	Other - Agricultural	563859	4758181	17	Ground	2,728,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.9	286.9	286.9	286.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
63-P-2231	Agricultural	Other - Agricultural	552434	4765211	17	Ground	2,727,600	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.9	286.9	286.9	286.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
4368-6FRNKT	Agricultural	Field and Pasture Crops	555515	4762700	17	Ground	5,451,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.7	286.7	286.7	286.7	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
4368-6FRNKT	Agricultural	Field and Pasture Crops	555134	4762821	17	Ground	5,451,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.7	286.7	286.7	286.7	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2714	Agricultural	Other - Agricultural	553435	4766799	17	Ground	2,725,429	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.7	286.7	286.7	286.7	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2255	Agricultural	Other - Agricultural	548443	4773518	17	Ground	2,720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	286.1	286.1	286.1	286.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4525-6C8LOZ	Agricultural	Field and Pasture Crops	543819	4773665	17	Ground	2,620,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	275.6	275.6	275.6	275.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4607-62LL52	Agricultural	Field and Pasture Crops	547392	4775945	17	Ground	3,928,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	275.6	275.6	275.6	275.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2779	Agricultural	Tobacco	558910	4770435	17	Ground	2,615,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	275.1	275.1	275.1	275.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
03-P-2323	Agricultural	Tobacco	549589	4774455	17	Ground	2,592,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	272.6	272.6	272.6	272.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
6503-63HLCJ	Agricultural	Tobacco	552165	4775780	17	Ground	2,589,120	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	272.3	272.3	272.3	272.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7402-5TLS4Y	Agricultural	Tobacco	551224	4773909	17	Ground	2,589,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	272.3	272.3	272.3	272.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
3243-642M69	Agricultural	Tobacco	538281	477																			

Table A4 - Groundwater Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
8465-6BTQVK	Agricultural	Tobacco	543545	4773539	17	Ground	1,681,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	176.8	176.8	176.8	176.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
01-P-2070	Agricultural	Field and Pasture Crops	548170	4770886	17	Ground	1,637,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	172.2	172.2	172.2	172.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7581-6BTHHV	Agricultural	Tobacco	552686	4770497	17	Ground	1,637,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	172.2	172.2	172.2	172.2	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
99-P-1080	Agricultural	Other - Agricultural	534200	4780300	17	Ground	3,273,120	Estimated Volume	0.0	0.0	0.0	0.0	0.0	172.1	172.1	172.1	172.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
1167-5VVFZ2	Agricultural	Tobacco	540969	4770453	17	Ground	1,636,560	Estimated Volume	0.0	0.0	0.0	0.0	0.0	172.1	172.1	172.1	172.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7314-62MHSJ	Agricultural	Field and Pasture Crops	555053	4765982	17	Ground	1,589,868	Estimated Volume	0.0	0.0	0.0	0.0	0.0	167.2	167.2	167.2	167.2	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2258	Agricultural	Other - Agricultural	540510	4775321	17	Ground	7,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	164.1	164.1	164.1	164.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2258	Agricultural	Other - Agricultural	540568	4775908	17	Ground	7,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	164.1	164.1	164.1	164.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2258	Agricultural	Other - Agricultural	540365	4775223	17	Ground	7,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	164.1	164.1	164.1	164.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2258	Agricultural	Other - Agricultural	540092	4775484	17	Ground	7,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	164.1	164.1	164.1	164.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2258	Agricultural	Other - Agricultural	539911	4775827	17	Ground	7,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	164.1	164.1	164.1	164.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
3178-75FL9H	Agricultural	Field and Pasture Crops	552837	4766795	17	Ground	1,543,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	162.3	162.3	162.3	162.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
4520-6BVKLV	Agricultural	Tobacco	540722	4774039	17	Ground	1,522,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	160.1	160.1	160.1	160.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4520-6BVKLW	Agricultural	Tobacco	540448	4774656	17	Ground	1,522,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	160.1	160.1	160.1	160.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2346	Agricultural	Market Gardens / Flowers	560610	4757837	17	Ground	1,500,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2722	Agricultural	Tobacco	551332	4770698	17	Ground	1,500,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
01-P-2067	Agricultural	Tobacco	552071	4770764	17	Ground	3,000,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
01-P-2067	Agricultural	Tobacco	552885	4771229	17	Ground	3,000,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2722	Agricultural	Tobacco	551233	4771007	17	Ground	1,500,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
8188-642PGD	Agricultural	Tobacco	542465	4777972	17	Ground	3,000,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	157.8	157.8	157.8	157.8	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
5278-7BTL2D	Agricultural	Field and Pasture Crops	526550	4784000	17	Ground	1,488,240	Estimated Volume	0.0	0.0	0.0	0.0	0.0	156.5	156.5	156.5	156.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2513	Agricultural	Field and Pasture Crops	556021	4759547	17	Ground	1,472,904	Estimated Volume	0.0	0.0	0.0	0.0	0.0	154.9	154.9	154.9	154.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2169	Agricultural	Field and Pasture Crops	556446	4758976	17	Ground	2,945,808	Estimated Volume	0.0	0.0	0.0	0.0	0.0	154.9	154.9	154.9	154.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2169	Agricultural	Field and Pasture Crops	556525	4758998	17	Ground	2,945,808	Estimated Volume	0.0	0.0	0.0	0.0	0.0	154.9	154.9	154.9	154.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2247	Agricultural	Market Gardens / Flowers	553181	4767874	17	Ground	1,472,400	Estimated Volume	0.0	0.0	0.0	0.0	0.0	154.9	154.9	154.9	154.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
01-P-2164	Agricultural	Other - Agricultural	559003	4761386	17	Ground	1,440,172	Estimated Volume	0.0	0.0	0.0	0.0	0.0	151.5	151.5	151.5	151.5	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0202-6FJGVQ	Agricultural	Nursery	571340	4788987	17	Ground	1,435,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	150.9	150.9	150.9	150.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
4866-6AXR7A	Agricultural	Field and Pasture Crops	552595	4763392	17	Ground	2,759,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	145.1	145.1	145.1	145.1	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0072-6FHP7B	Agricultural	Field and Pasture Crops	551097	4762427	0	Ground	1,375,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	144.6	144.6	144.6	144.6	0.0	0.0	0.0		
93-P-2049	Agricultural	Field and Pasture Crops	541646	4775323	17	Ground	1,364,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.5	143.5	143.5	143.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
69-P-0199	Agricultural	Other - Agricultural	540476	4772932	17	Ground	1,363,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.4	143.4	143.4	143.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
91-P-2008	Agricultural	Other - Agricultural	589181	4757255	17	Ground	1,363,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.4	143.4	143.4	143.4	0.0	0.0	0.0	GRAND ABOVE DUNNVILLE TO YORK	Grand Above Dunnville to York
00-P-2458	Agricultural	Other - Agricultural	545596	4778594	17	Ground	1,363,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.4	143.4	143.4	143.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
99-P-1097	Agricultural	Tobacco	529736	4786634	17	Ground	1,363,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.4	143.4	143.4	143.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
2247-6AKLAR	Agricultural	Field and Pasture Crops	553904	4765563	17	Ground	1,363,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.4	143.4	143.4	143.4	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2591	Agricultural	Other - Agricultural	554879	4765212	17	Ground	1,362,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.3	143.3	143.3	143.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
67-P-0229	Agricultural	Other - Agricultural	553499	4772512	17	Ground	1,362,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	143.3	143.3	143.3	143.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
6224-645HPF	Agricultural	Field and Pasture Crops	557547	4767448	17	Ground	1,344,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	141.4	141.4	141.4	141.4	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
4525-6C8LQZ	Agricultural	Field and Pasture Crops	544052	4773602	17	Ground	1,310,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	137.8	137.8	137.8	137.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4607-62LL52	Agricultural	Field and Pasture Crops	547360	4776021	17	Ground	1,309,300	Estimated Volume	0.0	0.0	0.0	0.0	0.0	137.7	137.7	137.7	137.7	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
89-P-2023	Agricultural	Other - Agricultural	571857	4793025	17	Ground	1,309,091	Estimated Volume	0.0	0.0	0.0	0.0	0.0	137.7	137.7	137.7	137.7	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
1787-6C8RLU	Agricultural	Other - Agricultural	561928	4819232	17	Ground	1,309,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	137.7	137.7	137.7	137.7	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
7841-62UFXG	Agricultural	Tobacco	549693	4774364	17	Ground	1,296,065	Estimated Volume	0.0	0.0	0.0	0.0	0.0	136.3	136.3	136.3	136.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2473	Agricultural	Other - Agricultural	556445	4758968	17	Ground	1,276,517	Estimated Volume	0.0	0.0	0.0	0.0	0.0	134.3	134.3	134.3	134.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
4704-6EMHSP	Agricultural	Field and Pasture Crops	537603	4772082	17	Ground	1,250,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	131.5	131.5	131.5	131.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
01-P-2108	Agricultural	Other - Agricultural	583254	4782179	17	Ground	1,640,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	131.1	131.1	131.1	131.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
5410-6KZQDB	Agricultural	Field and Pasture Crops	556463	4767649	17	Ground	1,234,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.8	129.8	129.8	129.8	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
8864-63LPK7	Agricultural	Tobacco	553494	4765931	17	Ground	1,232,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.6	129.6	129.6	129.6	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
5546-5ZSJ5M	Agricultural	Tender Fruit	533443	4787033	17	Ground	2,455,200	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.1	129.1	129.1	129.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5546-5ZSJ5M	Agricultural	Tender Fruit	533775	4786691	17	Ground	2,455,200	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.1	129.1	129.1	129.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
01-P-2203	Agricultural	Other - Agricultural	550582	4765234	17	Ground	1,227,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.1	129.1	129.1	129.1	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2406	Agricultural	Other - Agricultural	551067	4766014	17	Ground	1,227,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	129.1	129.1	129.1	129.1	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
6358-6AKSFU	Agricultural	Tobacco	552539	4766697	17	Ground	1,200,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	126.2	126.2	126.2	126.2	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0471-6MXMBJ	Agricultural	Tobacco	545930	4773526	17	Ground	2,376,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	125.0	125.0	125.0	125.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5382-6CRQBW	Agricultural	Sod Farm	540665	4775585	17	Ground	1,181,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	124.2	124.2	124.2	124.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
72-P-0403	Agricultural	Other - Agricultural	555452	4767523	17	Ground	1,178,323	Estimated Volume	0.0													

Table A4 - Groundwater Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
00-P-2259	Agricultural	Other - Agricultural	541372	4774552	17	Ground	2,043,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	107.4	107.4	107.4	107.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2259	Agricultural	Other - Agricultural	541627	4775377	17	Ground	2,043,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	107.4	107.4	107.4	107.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
2567-7D4J66	Agricultural	Field and Pasture Crops	533490	4782572	17	Ground	2,454,840	Estimated Volume	0.0	0.0	0.0	0.0	0.0	106.4	106.4	106.4	106.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
8655-6BGSP6	Agricultural	Tobacco	537904	4776109	17	Ground	1,998,691	Estimated Volume	0.0	0.0	0.0	0.0	0.0	105.1	105.1	105.1	105.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
69-P-0203	Agricultural	Tobacco	545254	4775626	17	Ground	999,324	Estimated Volume	0.0	0.0	0.0	0.0	0.0	105.1	105.1	105.1	105.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
2767-6APJF9	Agricultural	Tobacco	543073	4774080	17	Ground	999,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	105.1	105.1	105.1	105.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
01-P-2203	Agricultural	Other - Agricultural	550603	4765259	17	Ground	982,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	103.3	103.3	103.3	103.3	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
77-P-2000	Agricultural	Other - Agricultural	545446	4771840	17	Ground	982,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	103.3	103.3	103.3	103.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2246	Agricultural	Other - Agricultural	555175	4769080	17	Ground	981,600	Estimated Volume	0.0	0.0	0.0	0.0	0.0	103.2	103.2	103.2	103.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
99-P-2154	Agricultural	Other - Agricultural	546934	4769407	17	Ground	965,400	Estimated Volume	0.0	0.0	0.0	0.0	0.0	101.3	101.3	101.3	101.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2055	Agricultural	Other - Agricultural	538262	4773563	17	Ground	954,666	Estimated Volume	0.0	0.0	0.0	0.0	0.0	100.4	100.4	100.4	100.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
3141-6L5JYV	Agricultural	Sod Farm	552625	4809248	17	Ground	1,908,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	100.3	100.3	100.3	100.3	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
2743-6FUJ5L	Agricultural	Tobacco	536753	4778857	17	Ground	931,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	97.9	97.9	97.9	97.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7814-6DUJ2X	Agricultural	Tobacco	530891	4782649	17	Ground	927,384	Estimated Volume	0.0	0.0	0.0	0.0	0.0	97.5	97.5	97.5	97.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
79-P-2024	Agricultural	Other - Agricultural	538545	4777869	17	Ground	916,474	Estimated Volume	0.0	0.0	0.0	0.0	0.0	96.4	96.4	96.4	96.4	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2174	Agricultural	Tobacco	550284	4767633	17	Ground	908,400	Estimated Volume	0.0	0.0	0.0	0.0	0.0	95.5	95.5	95.5	95.5	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0840-7D3N34	Agricultural	Nursery	562816	4797653	17	Ground	900,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	94.7	94.7	94.7	94.7	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
71-P-0072	Agricultural	Other - Agricultural	552041	4768287	17	Ground	1,772,940	Estimated Volume	0.0	0.0	0.0	0.0	0.0	93.2	93.2	93.2	93.2	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
71-P-0072	Agricultural	Other - Agricultural	553094	4767736	17	Ground	1,772,940	Estimated Volume	0.0	0.0	0.0	0.0	0.0	93.2	93.2	93.2	93.2	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
03-P-2375	Agricultural	Field and Pasture Crops	557079	4765779	17	Ground	886,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	93.2	93.2	93.2	93.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
90-P-2015	Agricultural	Other - Agricultural	548436	4775248	17	Ground	851,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	89.5	89.5	89.5	89.5	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5567-5FYGP7H	Agricultural	Field and Pasture Crops	550722	4772139	17	Ground	819,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	86.1	86.1	86.1	86.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
01-P-2045	Agricultural	Nursery	582132	4780057	17	Ground	1,637,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	86.1	86.1	86.1	86.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
01-P-2045	Agricultural	Nursery	581642	4780071	17	Ground	1,637,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	86.1	86.1	86.1	86.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
72-P-0403	Agricultural	Other - Agricultural	555555	4767332	17	Ground	818,280	Estimated Volume	0.0	0.0	0.0	0.0	0.0	86.1	86.1	86.1	86.1	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
00-P-2681	Agricultural	Sod Farm	551316	4808472	17	Ground	818,280	Estimated Volume	0.0	0.0	0.0	0.0	0.0	86.1	86.1	86.1	86.1	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
8811-5X8JUN	Agricultural	Field and Pasture Crops	541920	4778093	17	Ground	3,240,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	85.2	85.2	85.2	85.2	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
8811-5X8JUN	Agricultural	Field and Pasture Crops	541910	4778367	17	Ground	3,240,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	85.2	85.2	85.2	85.2	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
8811-5X8JUN	Agricultural	Field and Pasture Crops	542316	4777091	17	Ground	3,240,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	85.2	85.2	85.2	85.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
8811-5X8JUN	Agricultural	Field and Pasture Crops	542130	4777463	17	Ground	3,240,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	85.2	85.2	85.2	85.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
0184-6LDLVK	Agricultural	Field and Pasture Crops	606602	4752232	17	Ground	795,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	83.6	83.6	83.6	83.6	0.0	0.0	0.0	GRAND ABOVE DUNNVILLE TO YORK	Grand Above Dunnville to York
65-P-0182	Agricultural	Tobacco	526907	4787767	17	Ground	757,080	Estimated Volume	0.0	0.0	0.0	0.0	0.0	79.6	79.6	79.6	79.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2345	Agricultural	Market Gardens / Flowers	560590	4759360	17	Ground	1,500,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	78.9	78.9	78.9	78.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2345	Agricultural	Market Gardens / Flowers	560686	4759332	17	Ground	1,500,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	78.9	78.9	78.9	78.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
03-P-2199	Agricultural	Field and Pasture Crops	551553	4766535	17	Ground	737,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	77.5	77.5	77.5	77.5	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
1787-6C8RLU	Agricultural	Other - Agricultural	562478	4820358	17	Ground	737,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	77.5	77.5	77.5	77.5	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
01-P-2242	Agricultural	Field and Pasture Crops	547535	4769093	17	Ground	2,816,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	74.0	74.0	74.0	74.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7714-5WZSQ9K	Agricultural	Fruit Orchards	554556	4762675	17	Ground	654,624	Estimated Volume	0.0	0.0	0.0	0.0	0.0	68.9	68.9	68.9	68.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
7714-5WZSQ9K	Agricultural	Fruit Orchards	554664	4762966	17	Ground	654,625	Estimated Volume	0.0	0.0	0.0	0.0	0.0	68.8	68.8	68.8	68.8	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
66-P-0534	Agricultural	Tobacco	539063	4776684	17	Ground	1,308,206	Estimated Volume	0.0	0.0	0.0	0.0	0.0	68.8	68.8	68.8	68.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
66-P-0534	Agricultural	Tobacco	539556	4776318	17	Ground	1,308,206	Estimated Volume	0.0	0.0	0.0	0.0	0.0	68.8	68.8	68.8	68.8	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
2347-6AQRW	Agricultural	Field and Pasture Crops	556166	4765741	17	Ground	1,288,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	67.7	67.7	67.7	67.7	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
2347-6AQRW	Agricultural	Field and Pasture Crops	556314	4765889	17	Ground	1,288,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	67.7	67.7	67.7	67.7	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
5172-6CCLCN	Agricultural	Fruit Orchards	570420	4785159	17	Ground	636,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	66.9	66.9	66.9	66.9	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5428-6CBRS9	Agricultural	Tender Fruit	569788	4785029	17	Ground	636,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	66.9	66.9	66.9	66.9	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5428-6CBRS9	Agricultural	Tender Fruit	569639	4785109	17	Ground	636,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	66.9	66.9	66.9	66.9	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5736-6CCL73	Agricultural	Tender Fruit	568151	4783730	17	Ground	636,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	66.9	66.9	66.9	66.9	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5782-6AYNCF	Agricultural	Sod Farm	540738	4778018	17	Ground	591,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	62.2	62.2	62.2	62.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4504-5XZKJ6	Agricultural	Tobacco	538400	4778552	17	Ground	590,522	Estimated Volume	0.0	0.0	0.0	0.0	0.0	62.1	62.1	62.1	62.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4504-5XZKJ6	Agricultural	Tobacco	538568	4778149	17	Ground	590,522	Estimated Volume	0.0	0.0	0.0	0.0	0.0	62.1	62.1	62.1	62.1	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
68-P-0417	Agricultural	Tobacco	529817	4786980	17	Ground	589,200	Estimated Volume	0.0	0.0	0.0	0.0	0.0	62.0	62.0	62.0	62.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2372	Agricultural	Tobacco	545120	4771197	17	Ground	2,291,840	Estimated Volume	0.0	0.0	0.0	0.0	0.0	60.3	60.3	60.3	60.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2372	Agricultural	Tobacco	545049	4771588	17	Ground	2,291,840	Estimated Volume	0.0	0.0	0.0	0.0	0.0	60.3	60.3	60.3	60.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2372	Agricultural	Tobacco	544708	4771147	17	Ground	2,291,840	Estimated Volume	0.0	0.0	0.0	0.0	0.0	60.3	60.3	60.3	60.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2372	Agricultural	Tobacco	544607	4771512	17	Ground	2,291,840	Estimated Volume	0.0	0.0	0.0	0.0	0.0	60.3	60.3	60.3	60.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5773-6RWM79	Agricultural	Field and Pasture Crops	621247	4753032	17	Ground	1,118,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	58.8	58.8	58.8	58.8	0.0	0.0	0.0	GRAND ABOVE DUNNVILLE TO YORK	Grand Above Dunnville to York
65-P-0554	Agricultural	Other - Agricultural	544667	4777255	17	Ground	556,000	Estimated Volume	0.0	0.0	0.0											

Table A4 - Groundwater Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area	
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
01-P-2186	Agricultural	Nursery	583291	4779953	17	Ground	491,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	51.6	51.6	51.6	51.6	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
1051-6AHLXU	Agricultural	Tobacco	538811	4772117	17	Ground	982,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	51.6	51.6	51.6	51.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
1051-6AHLXU	Agricultural	Tobacco	538709	4772359	17	Ground	982,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	51.6	51.6	51.6	51.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
03-P-2343	Agricultural	Field and Pasture Crops	543556	4779790	17	Ground	1,364,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	47.8	47.8	47.8	47.8	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
99-P-2055	Agricultural	Other - Agricultural	558983	4769068	17	Ground	1,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	47.3	47.3	47.3	47.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
99-P-2055	Agricultural	Other - Agricultural	558884	4769109	17	Ground	1,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	47.3	47.3	47.3	47.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
99-P-2055	Agricultural	Other - Agricultural	558966	4769174	17	Ground	1,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	47.3	47.3	47.3	47.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
99-P-2055	Agricultural	Other - Agricultural	558801	4769147	17	Ground	1,800,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	47.3	47.3	47.3	47.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
4506-5WZSDJ	Agricultural	Field and Pasture Crops	543628	4772241	17	Ground	409,140	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
69-P-0294	Agricultural	Other - Agricultural	552122	4762231	17	Ground	818,280	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
00-P-2554	Agricultural	Other - Agricultural	561709	4759300	17	Ground	409,140	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
99-P-2033	Agricultural	Other - Agricultural	556519	4762870	17	Ground	409,140	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
63-P-0712	Agricultural	Other - Agricultural	555260	4766412	17	Ground	1,636,560	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
63-P-0712	Agricultural	Other - Agricultural	555113	4766728	17	Ground	1,636,560	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
63-P-0712	Agricultural	Other - Agricultural	554858	4767458	17	Ground	1,636,560	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
63-P-0712	Agricultural	Other - Agricultural	554704	4766562	17	Ground	1,636,560	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
69-P-0294	Agricultural	Other - Agricultural	552446	4761976	17	Ground	818,280	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	43.0	43.0	43.0	43.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
01-P-2108	Agricultural	Other - Agricultural	583347	4782169	17	Ground	393,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	41.3	41.3	41.3	41.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
6224-645HPF	Agricultural	Field and Pasture Crops	557537	4767409	17	Ground	383,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	40.3	40.3	40.3	40.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
4802-6BDPLJ	Agricultural	Tobacco	544520	4773032	17	Ground	1,090,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	38.2	38.2	38.2	38.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4802-6BDPLJ	Agricultural	Tobacco	545025	4773938	17	Ground	1,090,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	38.2	38.2	38.2	38.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2725	Agricultural	Other - Agricultural	557617	4759732	17	Ground	360,043	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	37.9	37.9	37.9	37.9	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
63-P-0711	Agricultural	Field and Pasture Crops	544417	4775975	17	Ground	1,080,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	37.9	37.9	37.9	37.9	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
4545-6GXHNF	Agricultural	Nursery	572323	4785746	17	Ground	1,025,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	35.9	35.9	35.9	35.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
4545-6GXHNF	Agricultural	Nursery	572261	4785740	17	Ground	1,025,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	35.9	35.9	35.9	35.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
4545-6GXHNF	Agricultural	Nursery	572223	4785718	17	Ground	1,025,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	35.9	35.9	35.9	35.9	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
00-P-2417	Agricultural	Other - Agricultural	566898	4836647	17	Ground	654,624	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	34.4	34.4	34.4	34.4	0.0	0.0	0.0	ERAMOSA ABOVE GUELPH	Upper Speed
00-P-2417	Agricultural	Other - Agricultural	567174	4837007	17	Ground	654,624	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	34.4	34.4	34.4	34.4	0.0	0.0	0.0	ERAMOSA ABOVE GUELPH	Upper Speed
0305-6GAHLY	Agricultural	Nursery	565672	4790731	17	Ground	614,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	32.3	32.3	32.3	32.3	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
0305-6GAHLY	Agricultural	Nursery	565846	4790651	17	Ground	614,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	32.3	32.3	32.3	32.3	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5005-6GZLV4	Agricultural	Tobacco	539870	4778053	17	Ground	913,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	32.1	32.1	32.1	32.1	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
4025-6BGSE9	Agricultural	Field and Pasture Crops	538262	4777496	17	Ground	278,400	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3	29.3	29.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
01-P-2005	Agricultural	Other - Agricultural	541742	4774197	17	Ground	556,395	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3	29.3	29.3	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
02-P-2064	Agricultural	Nursery	569356	4811814	17	Ground	273,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	28.7	28.7	28.7	28.7	0.0	0.0	0.0	MILL CREEK	Mill Creek
01-P-2180	Agricultural	Other - Agricultural	556018	4767856	17	Ground	273,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	28.7	28.7	28.7	28.7	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
2102-5ZTK8U	Agricultural	Field and Pasture Crops	559416	4769179	17	Ground	272,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	28.7	28.7	28.7	28.7	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
0446-63RPV2	Agricultural	Field and Pasture Crops	551360	4764282	17	Ground	261,850	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	27.5	27.5	27.5	27.5	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0446-63RPV2	Agricultural	Field and Pasture Crops	551304	4764355	17	Ground	261,850	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	27.5	27.5	27.5	27.5	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
5336-6C8R2N	Agricultural	Field and Pasture Crops	563036	4821307	17	Ground	252,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	26.5	26.5	26.5	26.5	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
5574-6G8LQY	Agricultural	Nursery	569456	4788240	17	Ground	491,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	25.8	25.8	25.8	25.8	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
5574-6G8LQY	Agricultural	Nursery	569354	4787759	17	Ground	491,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	25.8	25.8	25.8	25.8	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
3706-7DXKD6	Agricultural	Sod Farm	535554	4778758	17	Ground	240,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	25.2	25.2	25.2	25.2	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
00-P-2010	Agricultural	Other - Agricultural	549405	4791483	17	Ground	218,208	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	23.0	23.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith
0550-6BTRD6	Agricultural	Field and Pasture Crops	533014	4777874	17	Ground	196,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	20.6	20.6	20.6	20.6	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5336-6C8R2N	Agricultural	Field and Pasture Crops	563010	4820588	17	Ground	175,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	18.4	18.4	18.4	18.4	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
2018-6DCR45	Agricultural	Field and Pasture Crops	542256	4800883	17	Ground	164,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	17.3	17.3	17.3	17.3	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
01-P-2045	Agricultural	Nursery	581686	4780055	17	Ground	164,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	17.3	17.3	17.3	17.3	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
02-P-2060	Agricultural	Nursery	548754	4815632	17	Ground	164,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	17.3	17.3	17.3	17.3	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek
02-P-2061	Agricultural	Nursery	548769	4815586	17	Ground	164,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	17.3	17.3	17.3	17.3	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	

Table A4 - Groundwater Agricultural Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area				
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
0646-6CCPMP	Agricultural	Field and Pasture Crops	532183	4809748	17	Ground	546,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	24.0	17.6	43.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand	
7522-6LELTV	Agricultural	Field and Pasture Crops	557844	4760556	17	Ground	1,719,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	39.3	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek	
7522-6LELTV	Agricultural	Field and Pasture Crops	557844	4760556	17	Ground	1,719,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.7	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek	
63-P-0759	Agricultural	Tobacco	554687	4768513	17	Ground	1,132,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	198.6	28.4	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford	
0145-5RNJYJ	Agricultural	Other - Agricultural	534993	4779588	17	Ground	2,318,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	174.6	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
5272-6BVJMM	Agricultural	Other - Agricultural	540792	4814806	17	Ground	150,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	43.3	49.7	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand	
03-P-2367	Agricultural	Nursery	542396	4773865	17	Ground	688,000	Reported Volume	0.0	0.0	0.0	0.0	8.7	53.3	39.3	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
03-P-2367	Agricultural	Nursery	542396	4773865	17	Ground	688,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	16.5	24.1	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
00-P-2700	Agricultural	Tobacco	557275	4770962	17	Ground	123,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	18.5	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford	
3411-64SLMD	Agricultural	Field and Pasture Crops	548169	4773753	17	Ground	219,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	12.2	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
03-P-2367	Agricultural	Nursery	542837	4774099	17	Ground	216,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
03-P-2324	Agricultural	Field and Pasture Crops	562417	4762784	17	Ground	1,909,320	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek	
3411-64SLMD	Agricultural	Field and Pasture Crops	548169	4773753	17	Ground	219,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	5.8	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
3411-64SLMD	Agricultural	Field and Pasture Crops	548151	4773460	17	Ground	131,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
3411-64SLMD	Agricultural	Field and Pasture Crops	548144	4773453	17	Ground	219,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
2353-6C8K6W	Agricultural	Field and Pasture Crops	555934	4770577	17	Ground	2,670,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford	
0361-6HQMQM	Agricultural	Field and Pasture Crops	557488	4758442	17	Ground	355,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek	
5850-698MGL	Agricultural	Field and Pasture Crops	562652	4758023	17	Ground	7,856,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.3	0.0	0.0	0.0	0.0	0.0	0.0			
7522-6LELTV	Agricultural	Field and Pasture Crops	557844	4760556	17	Ground	1,719,000	Reported Volume	0.0	0.0	0.0	0.0	62.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
0361-6HQMQM	Agricultural	Field and Pasture Crops	557513	4758603	17	Ground	54,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	445.0	0.0	MCKENZIE CREEK	McKenzie Creek	
5850-698MGL	Agricultural	Field and Pasture Crops	562652	4758023	17	Ground	7,856,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
03-P-2090	Agricultural	Field and Pasture Crops	544111	4772202	17	Ground	1,673,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
03-P-2388	Agricultural	Nursery	528430	4809125	17	Ground	1,552,000	Reported Volume	0.0	0.0	0.0	0.0	12.9	213.3	297.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG	Upper Nith
03-P-2388	Agricultural	Nursery	528414	4809122	17	Ground	1,227,000	Reported Volume	0.0	0.0	0.0	0.0	17.3	420.0	308.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG	Upper Nith
7680-64CJYK	Agricultural	Sod Farm	533389	4778888	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	0.0	56.0	203.3	70.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
0022-6APKVT	Agricultural	Sod Farm	546798	4770069	17	Ground	5,042,200	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek	
5882-6K2SXZ	Agricultural	Sod Farm	552035	4763452	17	Ground	518,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
7680-64CJYK	Agricultural	Sod Farm	533389	4778888	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7680-64CJYK	Agricultural	Sod Farm	533420	4778827	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	20.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7680-64CJYK	Agricultural	Sod Farm	533461	4778832	17	Ground	3,475,080	Reported Volume	0.0	0.0	0.0	370.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7680-64CJYK	Agricultural	Sod Farm	533395	4778824	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	571.9	56.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7680-64CJYK	Agricultural	Sod Farm	533395	4778824	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	56.0	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
7680-64CJYK	Agricultural	Sod Farm	533420	4778827	17	Ground	1,310,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek
5005-6QZLV4	Agricultural	Tobacco	540473	4777189	17	Ground	913,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	157.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	WHITEMANS CREEK	Whitemans Creek

Table A5 - Groundwater Non-Agricultural Non-Municipal Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area											
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1640-6PR6J	Remediation	Groundwater	540719	4811234	17	Ground	57,600	Estimated Volume	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	GRAND ABOVE BRANTFORD TO DOON	Central Grand						
1640-6PR6J	Remediation	Groundwater	540719	4811320	17	Ground	3,456	Estimated Volume	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	GRAND ABOVE BRANTFORD TO DOON	Central Grand					
1640-6PR6J	Remediation	Groundwater	540723	4811239	17	Ground	25,920	Estimated Volume	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	GRAND ABOVE BRANTFORD TO DOON	Central Grand					
1640-6PR6J	Remediation	Groundwater	540730	4811269	17	Ground	3,456	Estimated Volume	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	GRAND ABOVE BRANTFORD TO DOON	Central Grand				
1644-6J8MWWX	Commercial	Golf Course Irrigation	546016	4806057	0	Ground	759,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	380.5	380.5	380.5	380.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand					
1644-6J8MWWX	Commercial	Golf Course Irrigation	547188	4806340	0	Ground	2,045,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	1025.2	1025.2	1025.2	1025.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand					
1663-7CHLV4	Commercial	Golf Course Irrigation	575590	4788514	17	Ground	2,180,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	1774.8	1774.8	1774.8	1774.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek					
1728-7BTK2E	Commercial	Golf Course Irrigation	558978	4786247	0	Ground	64,800	Estimated Volume	0.0	0.0	0.0	0.0	0.0	65.0	65.0	65.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek					
1738-6D5PZG	Commercial	Golf Course Irrigation	580143	4780925	17	Ground	655,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	218.7	218.7	218.7	218.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek					
1743-6RGJA9	Water Supply	Campgrounds	557585	4792061	17	Ground	102,000	Estimated Volume	0.0	0.0	0.0	0.0	51.3	51.3	51.3	51.3	51.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek					
2202-6X9GTU	Commercial	Aquaculture	566033	4845329	17	Ground	654,000	Estimated Volume	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	653.9	ERAMOSIA ABOVE GUELPH	Upper Speed				
2558-7EPJ32	Commercial	Snowmaking	547076	4809508	17	Ground	1,311,000	Estimated Volume	1292.9	1292.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand					
2558-7EPJ32	Commercial	Snowmaking	547101	4809551	17	Ground	196,000	Estimated Volume	193.3	193.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	193.3	GRAND ABOVE DOON TO CONESTOGO	Central Grand				
2558-7EPJ32	Commercial	Snowmaking	547126	4809571	17	Ground	1,311,000	Estimated Volume	1292.9	1292.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1292.9	GRAND ABOVE DOON TO CONESTOGO	Central Grand				
2640-6CFH9G	Water Supply	Campgrounds	535531	4803398	17	Ground	108,000	Estimated Volume	0.0	0.0	0.0	0.0	108.6	108.6	108.6	108.6	108.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand				
2688-7BRKDG	Remediation	Groundwater	557408	4801531	17	Ground	38,000	Estimated Volume	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand			
2688-7BRKDG	Remediation	Groundwater	557425	4801474	17	Ground	115,000	Estimated Volume	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand			
2688-7BRKDG	Remediation	Groundwater	557476	4801412	17	Ground	213,000	Estimated Volume	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand			
2715-5Z6QVP	Commercial	Other - Commercial	532087	4786336	17	Ground	130,925	Estimated Volume	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	WHITEMANS CREEK	Whitemans Creek			
2718-6ZQW3	Industrial	Aggregate Washing	534410	4807908	17	Ground	9,720,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand				
2718-6ZQW3	Industrial	Aggregate Washing	534417	4807908	17	Ground	327,000	Estimated Volume	0.0	0.0	0.0	0.0	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	328.6	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand			
2768-60XRCC	Industrial	Manufacturing	557427	4815114	17	Ground	79,200	Estimated Volume	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand			
2817-6V9P32	Industrial	Other - Industrial	549872	4801566	17	Ground	115,000	Estimated Volume	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand			
3024-6CPJ32	Commercial	Golf Course Irrigation	565555	4820350	17	Ground	456,500	Estimated Volume	0.0	0.0	0.0	0.0	0.0	456.2	456.2	456.2	456.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed			
3036-60PKHE	Institutional	Other - Institutional	560000	4823000	17	Ground	136,800	Estimated Volume	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	136.8	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed			
3063-68EMWK	Industrial	Other - Industrial	554500	4780500	17	Ground	1,375,200	Estimated Volume	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	GRAND ABOVE BRANTFORD TO DOON	Lower Nith			
3063-68EMWK	Industrial	Other - Industrial	554501	4780501	17	Ground	655,200	Estimated Volume	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	655.1	GRAND ABOVE BRANTFORD TO DOON	Lower Nith			
3166-6CKJFD	Water Supply	Other - Water Supply	538975	4814875	17	Ground	81,000	Estimated Volume	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand			
3234-74ER7S	Industrial	Aggregate Washing	568280	4810400	17	Ground	23,568,000	Estimated Volume	0.0	0.0	0.0	0.0	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	0.0	MILL CREEK	Mill Creek		
3367-6Z5S4S	Remediation	Other - Remediation	535399	4825774	17	Ground	1,962,000	Estimated Volume	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	1961.8	GRAND ABOVE CONESTOGO TO SHAND	Cangagowie Creek		
3568-7BYOVL	Commercial	Golf Course Irrigation	556352	4779090	17	Ground	1,214,000	Estimated Volume	0.0	0.0	0.0	0.0	1217.2	1217.2	1217.2	1217.2	1217.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford			
3615-79ULJX	Commercial	Golf Course Irrigation	548305	4800773	17	Ground	816,000	Estimated Volume	0.0	0.0	0.0	0.0	409.1	409.1	409.1	409.1	409.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith			
3615-79ULJX	Commercial	Golf Course Irrigation	548334	4800724	17	Ground	764,000	Estimated Volume	0.0	0.0	0.0	0.0	409.0	409.0	409.0	409.0	409.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith			
3646-6ZBOEL	Remediation	Groundwater	535339	4825062	17	Ground	4,540,000	Estimated Volume	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	4539.5	GRAND ABOVE CONESTOGO TO SHAND	Cangagowie Creek			
3646-6ZBOEL	Remediation	Groundwater	535347	4825062	17	Ground	6,447,000	Estimated Volume	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	GRAND ABOVE CONESTOGO TO SHAND	Cangagowie Creek		
3648-73XR8D	Industrial	Aggregate Washing	568377	4809923	17	Ground	61,200	Estimated Volume	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	MILL CREEK	Mill Creek	
3648-73XR8D	Industrial	Aggregate Washing	568416	4809853	17	Ground	61,200	Estimated Volume	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	MILL CREEK	Mill Creek
3648-73XR																																	

Table A5 - Groundwater Non-Agricultural Non-Municipal Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area										
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
6066-6VXQU2	Commercial	Golf Course Irrigation	561189	4803847	17	Ground	1,965,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	1970.2	1970.2	1970.2	1970.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand					
6066-6VXQU2	Commercial	Golf Course Irrigation	561196	4803854	17	Ground	34,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	34.1	34.1	34.1	34.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand				
6106-7AJRJV	Industrial	Manufacturing	538333	4817271	17	Ground	370,080	Estimated Volume	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	CONESTOGO BELOW DAM	Conestogo Below Dam		
6106-7AJRJV	Industrial	Manufacturing	538333	4817271	17	Ground	216,000	Estimated Volume	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	216.0	CONESTOGO BELOW DAM	Conestogo Below Dam		
6375-6CKLMT	Water Supply	Campgrounds	547600	4876100	17	Ground	21,600	Estimated Volume	0.0	0.0	0.0	0.0	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	GRAND ABOVE LEGATT	Grand Above Legatt		
6375-6CKLMT	Water Supply	Campgrounds	547642	4876206	17	Ground	345,600	Estimated Volume	0.0	0.0	0.0	0.0	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	347.6	GRAND ABOVE LEGATT	Grand Above Legatt		
6512-6VQKW8	Industrial	Aggregate Washing	547590	4798226	17	Ground	3,000	Estimated Volume	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith		
6560-6DYPGH	Industrial	Manufacturing	569847	4811446	17	Ground	200,000	Estimated Volume	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	MILL CREEK	Mill Creek		
6560-6DYPGH	Industrial	Manufacturing	570188	4811581	17	Ground	250,000	Estimated Volume	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	MILL CREEK	Mill Creek		
6634-6ZAHEZ	Remediation	Other - Remediation	536292	4826881	17	Ground	27,360	Estimated Volume	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536312	4826727	17	Ground	33,120	Estimated Volume	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536315	4826763	17	Ground	21,600	Estimated Volume	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536315	4826995	17	Ground	17,280	Estimated Volume	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536324	4826744	17	Ground	103,680	Estimated Volume	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536325	4826791	17	Ground	17,280	Estimated Volume	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536326	4826996	17	Ground	27,360	Estimated Volume	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536337	4826964	17	Ground	27,360	Estimated Volume	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536342	4826918	17	Ground	17,280	Estimated Volume	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536343	4826829	17	Ground	48,960	Estimated Volume	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536350	4826851	17	Ground	33,120	Estimated Volume	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6634-6ZAHEZ	Remediation	Other - Remediation	536351	4826901	17	Ground	27,360	Estimated Volume	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek	
6661-65YPPD	Remediation	Other - Remediation	558706	4801766	17	Ground	980,000	Estimated Volume	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	979.9	GRAND ABOVE BRANTFORD TO DOON	Central Grand	
6708-6FLNRH	Industrial	Cooling Water	539175	4810390	17	Ground	5,238,000	Estimated Volume	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	2618.7	GRAND ABOVE BRANTFORD TO DOON	Central Grand	
6708-6FLNRH	Industrial	Cooling Water	539490	4810810	17	Ground	4,256,000	Estimated Volume	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	2617.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand	
6800-72CLOH	Industrial	Other - Industrial	558858	4823140	17	Ground	1,635,000	Estimated Volume	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	1634.8	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed	
6877-6EWLNM	Commercial	Golf Course Irrigation	531366	4806544	17	Ground	2,619,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	2625.9	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand	
6877-6EWLNM	Commercial	Golf Course Irrigation	531366	4806475	17	Ground	47,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand	
6877-6EWLNM	Commercial	Golf Course Irrigation	531699	4806432	17	Ground	5,454,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	5468.3	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand	
69-P-0241	Water Supply	Communal	547680	4813810	17	Ground	818,280	Estimated Volume	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	818.2	NITH ABOVE GRAND TO CONESTOGO	Central Grand	
7175-6LCO2M	Commercial	Golf Course Irrigation	574049	4832866	17	Ground	238,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	238.6	ERAMOSIA ABOVE GUELPH	Upper Speed	
71-P-0362	Water Supply	Communal	526367	4804866	17	Ground	65,500	Estimated Volume	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	NITH ABOVE NEW HAMBURG	Upper Nith	
72-P-0109	Dewatering	Pits and Quarries	587329	4754999	17	Ground	3,927,744	Estimated Volume	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	981.8	GRAND ABOVE DUNNVILLE TO YORK	Grand Above Dunnville to York	
72-P-0432	Industrial	Other - Industrial	537467	4816423	17	Ground	1,636,560	Estimated Volume	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	1636.4	GRAND ABOVE DOON TO CONESTOGO	Central Grand	
72-P-0453	Industrial	Aggregate Washing	568922	4812609	17	Ground	8,182,800	Estimated Volume	0.0	0.0	0.0	0.0	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	MILL CREEK	Mill Creek
7316-6GAJ3X	Industrial	Manufacturing	547738	4799810	17	Ground	150,000	Estimated Volume	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith	

Table A5 - Groundwater Non-Agricultural Non-Municipal Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area							
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
8701-7F5TCH	Industrial	Food Processing	543944	4793303	17	Ground	1,045,000	Estimated Volume	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith			
8701-7F5TCH	Industrial	Food Processing	543955	4793286	17	Ground	1,045,000	Estimated Volume	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	522.4	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith		
8708-6L1S22	Commercial	Golf Course Irrigation	549354	4817908	17	Ground	909,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	528.6	528.6	528.6	528.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek		
8708-6L1S22	Commercial	Golf Course Irrigation	549441	4817845	17	Ground	382,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	383.0	383.0	383.0	383.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek		
8708-6L1S22	Commercial	Golf Course Irrigation	549471	4817836	17	Ground	1,817,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	910.9	910.9	910.9	910.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek		
87-P-2009	Industrial	Cooling Water	545061	4806746	17	Ground	1,634,000	Estimated Volume	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	GRAND ABOVE BRANTFORD TO DOON	Central Grand		
87-P-2009	Industrial	Cooling Water	545076	4806746	17	Ground	1,634,000	Estimated Volume	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	GRAND ABOVE BRANTFORD TO DOON	Central Grand		
87-P-2009	Industrial	Cooling Water	545076	4806748	17	Ground	1,634,000	Estimated Volume	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1	GRAND ABOVE BRANTFORD TO DOON	Central Grand		
87-P-2018	Miscellaneous	Heat Pumps	567192	4858827	17	Ground	229,118	Estimated Volume	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt		
87-P-2018	Miscellaneous	Heat Pumps	567364	4859360	17	Ground	78,600	Estimated Volume	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt		
8887-6DSH94	Water Supply	Other - Water Supply	522664	4835583	17	Ground	79,000	Estimated Volume	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	CONESTOGO BELOW DAM	Conestogo Below Dam		
88-P-2029	Water Supply	Other - Water Supply	566601	4800523	17	Ground	545,042	Estimated Volume	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	FAIRCHILD CREEK	Fairchild Creek		
88-P-2069	Industrial	Other - Industrial	558681	4816893	17	Ground	654,623	Estimated Volume	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	654.6	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand		
88-P-2070	Commercial	Aquaculture	559242	4792452	17	Ground	65,462	Estimated Volume	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	FAIRCHILD CREEK	Fairchild Creek		
88-P-2070	Commercial	Aquaculture	559246	4792452	17	Ground	327,312	Estimated Volume	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	327.3	FAIRCHILD CREEK	Fairchild Creek		
89-P-2014	Industrial	Other - Industrial	569462	4812611	17	Ground	78,600	Estimated Volume	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	MILL CREEK	Mill Creek		
89-P-2049	Water Supply	Campgrounds	525786	4856366	17	Ground	170,202	Estimated Volume	0.0	0.0	0.0	171.2	171.2	171.2	171.2	171.2	171.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam		
89-P-2059	Water Supply	Other - Water Supply	553036	4785502	17	Ground	648,000	Estimated Volume	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith	
89-P-2059	Water Supply	Other - Water Supply	553216	4785322	17	Ground	648,000	Estimated Volume	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith	
90-P-2013	Industrial	Food Processing	540346	4816059	17	Ground	737,000	Estimated Volume	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	GRAND ABOVE DOON TO CONESTOGO	Central Grand	
90-P-2013	Industrial	Food Processing	540359	4816066	17	Ground	737,000	Estimated Volume	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	GRAND ABOVE DOON TO CONESTOGO	Central Grand	
92-P-2010	Remediation	Groundwater	567410	4791650	17	Ground	202,000	Estimated Volume	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	202.0	FAIRCHILD CREEK	Fairchild Creek	
93-P-2010	Miscellaneous	Wildlife Conservation	557466	4791910	17	Ground	0	Estimated Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek	
93-P-2103	Commercial	Golf Course Irrigation	564921	4819386	17	Ground	544,000	Estimated Volume	0.0	0.0	0.0	0.0	0.0	545.4	545.4	545.4	545.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed	
94-P-2029	Miscellaneous	Wildlife Conservation	561440	4813500	17	Ground	66,500	Estimated Volume	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand	
95-P-2024	Dewatering	Construction	540670	4807663	17	Ground	418,405	Estimated Volume	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4	GRAND ABOVE BRANTFORD TO DOON	Central Grand	
97-P-2001	Water Supply	Communal	536853	4817847	17	Ground	460,000	Estimated Volume	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	CONESTOGO BELOW DAM	Conestogo Below Dam	
97-P-2001	Water Supply	Communal	536861	4817909	17	Ground	460,000	Estimated Volume	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	CONESTOGO BELOW DAM	Conestogo Below Dam	
97-P-2027	Industrial	Other - Industrial	550238	4841057	17	Ground	92,160	Estimated Volume	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	GRAND ABOVE CONESTOGO TO SHAND	Ivive River	
97-P-2038	Industrial	Other - Industrial	560466	4788078	17	Ground	981,936	Estimated Volume	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	FAIRCHILD CREEK	Fairchild Creek	
97-P-2038	Industrial	Other - Industrial	560466	4788078	17	Ground	981,936	Estimated Volume	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	FAIRCHILD CREEK	Fairchild Creek	
97-P-2041	Dewatering	Other - Dewatering	586083	4770371	17	Ground	7,086,240	Estimated Volume	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	7085.5	GRAND ABOVE YORK TO BRANTFORD	Big Creek
97-P-2041	Dewatering	Other - Dewatering	586083	4770389	17	Ground	1,635,840	Estimated Volume	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	1635.7	GRAND ABOVE YORK TO BRANTFORD	Big Creek
98-P-2011	Dewatering	Other - Dewatering	543374	4816571	17	Ground	5,455,308	Estimated Volume	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	5454.7	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek
98-P-2030	Water Supply	Communal	566791	4799552	17	Ground	1,309,000	Estimated Volume	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	1308.9	FAIRCHILD CREEK	Fairchild Creek
98-P-2039	Institutional	Other - Institutional	540818	4808768	17	Ground	164,000	Estimated Volume	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
98-P-2041	Commercial	Mall / Business	560648	4809366	17	Ground	209,120	Estimated Volume	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand	
98-P-2041	Commercial	Mall / Business	560679	4809389	17	Ground	100,014	Estimated Volume	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
98-P-2041	Commercial	Mall / Business																											

Table A5 - Groundwater Non-Agricultural Non-Municipal Permits

Permit	General Purpose	Specific Purpose	Easting	Northing	UTM Zone	Source Type	Max Litres Per Day Permitted	Reported	Estimated Consumptive Takings, m ³ /d												Surface Water Subwatershed	Groundwater Assessment Area
									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
5201-6B7HDA	Industrial	Other - Industrial	567598	4812203	17	Ground	114,600	Reported Volume	1.9	2.0	2.1	2.3	3.0	4.3	3.9	4.3	4.3	3.7	3.7	2.2	MILL CREEK	Mill Creek
5201-6B7HDA	Industrial	Other - Industrial	567808	4811999	17	Ground	802,000	Reported Volume	0.0	0.0	0.0	30.4	74.5	72.8	53.6	42.9	69.6	38.6	30.7	4.2	MILL CREEK	Mill Creek
5557-6BUKDB	Industrial	Aggregate Washing	542434	4833490	17	Ground	3,000,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	22.8	153.4	149.2	94.9	99.1	0.0	GRAND ABOVE CONESTOGO TO SHAND	Invine River
6053-642QD4	Recreational	Other - Recreational	544393	4813559	17	Ground	1,015,200	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
6053-642QD4	Recreational	Other - Recreational	544485	4813802	17	Ground	1,015,200	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
6053-642QD4	Recreational	Other - Recreational	544534	4813823	17	Ground	1,015,200	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
6054-6RNHEW	Commercial	Golf Course Irrigation	557972	4781203	17	Ground	1,278,000	Reported Volume	0.0	0.0	0.0	0.0	103.6	708.4	575.1	281.8	174.1	17.4	0.0	0.0	FAIRCHILD CREEK	Fairchild Creek
6064-756QHD	Industrial	Aggregate Washing	551192	4800879	17	Ground	9,820,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
6178-625SVE	Remediation	Other - Remediation	535656	4826289	17	Ground	1,962,000	Reported Volume	542.0	247.0	378.0	529.0	96.5	0.0	0.0	0.0	0.0	389.0	928.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagique Creek
6268-6QJLB3	Industrial	Aggregate Washing	547580	4811942	17	Ground	5,942,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	420.1	360.0	502.5	451.6	428.0	427.1	383.6	GRAND ABOVE DOON TO CONESTOGO	Central Grand
6480-74BKR4	Commercial	Bottled Water	568384	4847833	17	Ground	1,113,000	Reported Volume	558.0	453.0	480.0	387.0	661.0	482.0	702.0	429.0	817.0	753.0	154.0	115.0	ERAMOSA ABOVE GUELPH	Upper Speed
6512-6WQKW8	Industrial	Aggregate Washing	547479	4797792	17	Ground	8,990,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
6826-7AHHRN	Industrial	Cooling Water	525205	4804343	17	Ground	420,000	Reported Volume	144.0	109.0	106.0	169.0	113.0	131.0	107.0	84.0	107.0	109.0	142.0	98.0	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
7043-74BL3K	Commercial	Bottled Water	568935	4812721	17	Ground	3,600,000	Reported Volume	2536.0	2188.0	2061.0	2217.0	2486.0	2728.0	2789.0	2589.0	2169.0	2065.0	2666.0	2261.0	MILL CREEK	Mill Creek
7240-65YKTN	Dewatering	Pits and Quarries	559873	4819122	17	Ground	13,750,000	Reported Volume	5676.0	9169.0	7868.0	3524.0	7879.0	3885.0	6507.0	8082.0	9834.0	11122.0	11498.0	9613.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
7240-65YKTN	Dewatering	Pits and Quarries	559967	4818962	17	Ground	13,750,000	Reported Volume	4435.0	6553.0	5698.0	3304.0	6340.0	3508.0	3376.0	6044.0	7026.0	7975.0	8252.0	6863.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
72-P-0092	Industrial	Food Processing	522721	4851267	17	Ground	872,000	Reported Volume	301.0	322.0	309.0	301.5	268.0	263.0	239.5	249.0	306.5	288.0	331.0	364.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
72-P-0092	Industrial	Food Processing	552838	4851283	17	Ground	523,000	Reported Volume	301.0	322.0	309.0	301.5	268.0	263.0	239.5	249.0	306.5	288.0	331.0	364.0	GRAND ABOVE CONESTOGO TO SHAND	Invine River
7642-6EVGTY	Commercial	Golf Course Irrigation	534025	4828530	17	Ground	2,815,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.3	0.3	0.1	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagique Creek
7642-6EVGTY	Commercial	Golf Course Irrigation	534032	4828556	17	Ground	2,815,000	Reported Volume	0.0	0.0	0.0	0.0	147.0	616.0	443.0	325.0	339.0	39.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagique Creek
7642-6EVGTY	Commercial	Golf Course Irrigation	534032	4828556	17	Ground	2,815,000	Reported Volume	0.0	0.0	0.0	2.4	194.0	753.0	370.0	0.0	0.0	5.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagique Creek
7710-6DTL4T	Industrial	Aggregate Washing	552507	4799223	17	Ground	6,048,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
7724-76VQCX	Industrial	Aggregate Washing	551228	4799139	17	Ground	13,440,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
7724-76VQCX	Industrial	Aggregate Washing	551270	4799187	17	Ground	523,000	Reported Volume	0.0	0.0	0.0	0.0	349.0	322.0	78.0	149.0	33.0	29.5	9.1	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
7724-76VQCX	Industrial	Aggregate Washing	551402	4799113	17	Ground	656,000	Reported Volume	0.0	0.0	0.0	0.0	402.0	435.0	200.0	104.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
8075-6DTJY6	Industrial	Aggregate Washing	545384	4794988	17	Ground	6,048,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
87-P-2026	Industrial	Other - Industrial	530535	4822038	17	Ground	68,190	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.1	0.2	0.2	0.1	CONESTOGO BELOW DAM	Conestogo Below Dam
87-P-2048	Industrial	Other - Industrial	530453	4822212	17	Ground	136,380	Reported Volume	0.0	0.0	0.0	0.0	25.0	43.0	35.0	40.0	29.0	30.0	34.0	15.0	CONESTOGO BELOW DAM	Conestogo Below Dam
87-P-2057	Commercial	Aquaculture	550887	4765789	17	Ground	720,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MCKENZIE CREEK	McKenzie Creek
89-P-2082	Water Supply	Campgrounds	569900	4779324	17	Ground	65,712	Reported Volume	0.0	0.0	0.0	0.0	0.0	14.6	26.5	271.6	14.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
89-P-2082	Water Supply	Campgrounds	569900	4779324	17	Ground	65,712	Reported Volume	0.0	0.0	0.0	0.0	0.0	23.0	32.3	31.3	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
89-P-2082	Water Supply	Campgrounds	569900	4779324	17	Ground	65,712	Reported Volume	0.0	0.0	0.0	0.0	0.0	27.1	35.7	30.6	30.2	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
93-P-2103	Commercial	Golf Course Irrigation	565004	4819478	17	Ground	540,000	Reported Volume	0.0	0.0	0.0	0.0	0.0	97.5	142.0	132.0	94.5	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
97-P-2042	Dewatering	Other - Dewatering	588435	4768793	17	Ground	1,963,872	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
98-P-2006	Commercial	Golf Course Irrigation	562351	4828140	17	Ground	3,815,280	Reported Volume	0.0	0.0	0.0	0.0	0.0	448.0	404.0	345.0	99.0	0.0	0.0	0.0	SPEED ABOVE DAM	Upper Speed
98-P-2006	Commercial	Golf Course Irrigation	562743	4827768	17	Ground	3,815,280	Reported Volume	0.0	0.0	0.0	0.0	84.0	538.0	485.0	415.0	118.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
99-P-1239	Industrial	Aggregate Washing	538732	4794629	17	Ground	4,910,400	Reported Volume	0.0	0.0	0.0	0.0	0.0	0.0	73.1	96.6	36.7	80.0	61.1	1.9	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
99-P-1239	Industrial	Aggregate Washing	538732	4794629	17	Ground	4,910,400	Reported Volume	18.5	7.3	0.0	36.9	61.9	72.6	61.5	72.0	75.9	22.1	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
99-P-2012	Industrial	Other - Industrial	547882	4812614	0	Ground	410,000	Reported Volume	5349.0	5885.0	6917.0	6831.0	6663.0	7252.0	6721.0	6509.0	6408.0	6690.0	6195.0	6542.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547882	4812614	0	Ground	410,000	Reported Volume	212.0	230.0	339.0	230.0	224.0	205.0	225.0	192.0	203.0	202.0	194.0	186.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547889	4812595	17	Ground	33,000	Reported Volume	160.0	400.0	540.0	190.0	410.0	570.0	350.0	270.0	200.0	240.0	240.0	280.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547889	4812595	17	Ground	33,000	Reported Volume	1.3	6.4	13.2	6.0	5.5	15.7	5.5	20.6	6.0	3.9	6.1	8.4	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547973	4812619	17	Ground	33,000	Reported Volume	73.0	91.0	124.0	80.0	95.0	76.0	86.0	77.0	4.0	38.0	41.0	41.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547973	4812619	17	Ground	33,000	Reported Volume	1.1	1.8	1.7	1.3	1.4	2.3	1.3	1.8	5.7	2.8	1.3	1.6	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547993	4812609	0	Ground	33,000	Reported Volume	17.2	22.5	18.8	21.2	21.1	19.5	17.9	32.1	26.6	22.3	26.5	27.8	GRAND ABOVE DOON TO CONESTOGO	Central Grand
99-P-2012	Industrial	Other - Industrial	547993	4812609	0	Ground	33,000	Reported Volume	1.1	0.8	1.1	0.9	1.1	1.8	0.8	1.2	1.3	1.1	1.5	0.2	GRAND ABOVE DOON TO CONESTOGO	Central Grand

Table A6 - Groundwater Municipal Permits

Municipal System	Easting	Northing	Annual Flow L/s	Jan L/s	Feb L/s	Mar L/s	Apr L/s	May L/s	Jun L/s	Jul L/s	Aug L/s	Sep L/s	Oct L/s	Nov L/s	Dec L/s	Surface Water Subwatershed	Groundwater Assessment Area
Milverton	506543	4823729	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG	Upper Nith
Milverton	507046	4823295	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG	Upper Nith
Drayton	526866	4844790	0.0	4.9	5.4	5.0	4.8	5.4	7.7	6.1	5.3	5.3	5.1	4.8	4.8	CONESTOGO ABOVE DAM	Conestogo Above Dam
Bright	527509	4790718	0.0	0.0	0.1	0.0	0.1	0.4	0.4	0.1	0.5	0.5	0.5	0.5	0.5	WHITEMANS CREEK	Whitemans Creek
Bright	527515	4790696	0.0	1.0	1.1	1.0	1.1	1.2	1.3	1.3	0.6	0.5	0.6	0.5	0.5	WHITEMANS CREEK	Whitemans Creek
Plattsville	530291	4794530	0.0	4.9	4.2	5.2	4.8	4.7	5.0	5.5	4.7	4.4	4.8	4.2	2.4	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
Plattsville	530308	4794513	0.0	3.2	3.4	2.4	3.1	2.9	3.1	2.8	3.1	2.8	3.0	2.6	2.0	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
Arthur	535404	4853233	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
Arthur	536264	4853683	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
Drumbo	536318	4787160	0.0	1.8	1.7	0.4	1.7	2.3	2.2	2.0	2.0	1.6	1.7	1.7	1.6	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Arthur	536982	4853384	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
Arthur	537351	4853237	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
Arthur	537514	4853828	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO ABOVE DAM	Conestogo Above Dam
Princeton	538735	4779893	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Elora	545896	4837407	0.0	7.7	14.3	14.0	15.9	15.5	14.9	12.2	9.3	10.3	11.1	11.0	13.1	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Elora	547142	4835875	0.0	6.0	3.7	3.1	5.0	5.4	5.0	6.6	6.9	9.6	4.2	4.3	6.7	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Paris	548059	4784377	0.0	1.5	2.5	80.9	58.6	0.3	48.7	63.4	10.0	0.6	93.6	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Dundalk	548301	4890237	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE LEGATT	Grand Above Legatt
Dundalk	548454	4890874	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE LEGATT	Grand Above Legatt
Dundalk	548655	4890681	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE LEGATT	Grand Above Legatt
Fergus	549137	4841579	0.0	9.2	7.8	8.1	12.4	8.6	9.8	9.2	7.1	7.8	8.1	8.1	6.0	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Fergus	549992	4840867	0.0	17.6	17.1	17.4	17.4	17.7	17.6	17.1	17.4	17.0	17.2	17.1	17.0	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Brant County	550218	4784899	58.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith
Fergus	550538	4840003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Fergus	550557	4839301	0.0	12.4	11.2	10.5	12.9	13.9	13.2	11.2	10.8	11.0	15.9	13.5	12.1	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Fergus	550725	4838860	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Fergus	551697	4839354	0.0	4.1	6.2	6.2	6.2	6.3	7.8	6.9	6.6	5.5	5.8	6.2	5.1	GRAND ABOVE CONESTOGO TO SHAND	Irvine River
Brant County	552450	4785885	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith
Brant County	553871	4775201	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
Grand Valley	555046	4859789	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Grand Valley	555100	4859769	0.0	1.5	1.5	1.4	1.4	1.6	1.7	1.5	1.5	1.5	1.5	1.4	1.5	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Grand Valley	555132	4860578	0.0	1.7	1.5	1.5	1.5	1.7	1.7	1.5	1.6	1.5	1.5	1.6	1.6	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Grand Valley	555140	4860586	0.0	1.7	1.6	1.7	1.7	1.9	1.9	1.7	1.7	1.7	1.7	1.7	1.7	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Brant County	556125	4770631	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Grand at Brantford
Hamilton Drive	557558	4825915	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
Hamilton Drive	558034	4825851	0.0	0.7	0.7	1.0	0.8	1.1	1.4	1.3	1.7	2.1	0.5	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
Hamilton Drive	558434	4826535	0.0	0.8	0.8	1.4	1.3	1.3	1.8	1.3	1.4	1.0	0.9	0.9	0.9	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
Brant County	560507	4788389	0.0	5.3	5.9	4.8	6.7	5.7	7.0	8.4	8.0	8.3	8.7	6.1	3.9	FAIRCHILD CREEK	Fairchild Creek
Brant County	560532	4788366	0.0	0.1	0.5	0.4	0.2	1.2	0.1	0.3	0.5	0.4	1.0	0.2	0.5	FAIRCHILD CREEK	Fairchild Creek
Brant County	560614	4788366	0.0	6.2	5.1	6.5	4.9	6.1	7.0	7.9	7.1	7.0	6.6	5.8	7.2	FAIRCHILD CREEK	Fairchild Creek
Rockwood	565771	4830032	0.0	5.2	5.2	5.4	5.4	5.7	6.1	7.0	6.3	4.7	4.9	4.8	5.0	SPEED ABOVE DAM	Upper Speed
Rockwood	565771	4830032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE DAM	Upper Speed
Rockwood	568771	4830032	0.0	3.7	4.0	3.7	3.8	5.1	6.6	4.9	5.2	5.2	4.5	4.3	4.6	ERAMOSIA ABOVE GUELPH	Upper Speed
Lynden	570797	4786865	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE YORK TO BRANTFORD	Big Creek
RMOW - Integrated Urban System	532493	4809802	0.0	19.2	18.8	22.3	21.9	18.9	22.2	22.1	14.5	21.6	21.0	21.9	17.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	532496	4809797	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	533127	4809136	0.0	83.2	60.8	77.8	90.2	67.6	90.5	88.6	88.7	87.7	87.0	57.7	35.2	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	533130	4809149	0.0	51.9	37.3	0.0	0.0	30.9	39.4	38.0	37.1	33.2	38.2	40.1	40.7	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	535107	4814661	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	535307	4812506	0.0	12.3	11.8	11.8	11.8	10.1	11.4	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	536538	4805046	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	536770	4804782	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	536868	4813011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	537055	4803861	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537262	4810650	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	537288	4810660	0.0	30.5	33.7	33.7	33.5	20.3	16.0	26.4	15.0	0.8	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	537573	4806489	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	537688	4806011	0.0	0.0	0.0	0.0	0.0	0.0	6.9	8.4	7.7	8.4	11.5	0.8	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand

Table A6 - Groundwater Municipal Permits

Municipal System	Easting	Northing	Annual Flow L/s	Jan L/s	Feb L/s	Mar L/s	Apr L/s	May L/s	Jun L/s	Jul L/s	Aug L/s	Sep L/s	Oct L/s	Nov L/s	Dec L/s	Surface Water Subwatershed	Groundwater Assessment Area
RMOW - Integrated Urban System	537691	4806544	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	537714	4806040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537733	4803204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537764	4805514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537819	4805711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537825	4810480	0.0	7.4	7.0	6.2	6.5	5.7	5.4	6.1	6.1	5.4	4.4	2.0	4.8	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	537877	4810217	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	537904	4805278	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	537952	4805537	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	538114	4805516	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
RMOW - Integrated Urban System	538205	4805721	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	538505	4806484	0.0	28.1	29.5	28.9	28.8	28.9	28.6	27.7	27.8	27.6	27.6	0.9	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	538816	4805709	0.0	49.8	53.4	53.2	51.7	43.9	53.6	49.7	53.1	52.1	51.3	1.8	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	538817	4812281	0.0	6.1	3.8	0.6	12.5	9.3	22.4	21.4	20.8	20.3	0.0	20.9	21.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	538818	4805693	0.0	28.3	29.1	28.5	28.4	23.3	28.4	29.0	28.4	28.7	28.9	1.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	538871	4812289	0.0	37.5	39.9	40.2	36.8	19.3	40.6	39.3	38.8	38.6	0.0	38.5	36.9	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	538875	4812292	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	538875	4812300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	538895	4812298	0.0	9.7	3.5	9.4	2.8	1.0	5.2	6.5	7.2	9.1	0.0	7.9	6.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	538911	4810431	0.0	9.0	9.2	8.6	6.8	4.6	3.1	5.2	7.4	11.5	11.7	3.9	6.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	540437	4808249	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	540545	4808300	0.0	16.4	24.1	16.6	11.7	23.2	24.5	24.2	25.7	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	540568	4808456	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	540569	4808804	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	540774	4808694	0.0	31.5	0.0	0.0	0.0	37.5	37.0	36.0	36.5	48.5	47.7	42.8	39.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	541454	4813517	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	542505	4812923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	543953	4803924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	544033	4804487	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	544524	4807050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	544542	4807033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	544870	4806876	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	546946	4812083	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547063	4812175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547081	4811936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547198	4813664	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547267	4811807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547414	4811755	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	547440	4811890	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	548727	4810550	0.0	0.3	0.0	2.7	11.0	0.2	0.0	0.0	0.0	0.0	0.0	4.9	7.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	548961	4810682	0.0	29.9	31.0	26.8	20.8	20.8	21.1	20.0	19.1	22.1	22.3	20.1	5.1	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	549126	4811021	0.0	25.1	42.9	24.5	39.0	39.5	40.4	38.2	37.1	40.5	46.3	36.6	10.5	GRAND ABOVE DOON TO CONESTOGO	Central Grand
RMOW - Integrated Urban System	550347	4807752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	553871	4802268	0.0	17.3	17.5	17.5	17.4	17.4	16.9	16.3	14.9	17.6	17.0	16.3	17.4	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	554159	4804014	0.0	12.4	9.9	11.1	11.3	10.4	10.8	10.5	11.0	10.5	10.7	10.5	10.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555084	4806561	0.0	18.4	21.7	21.7	21.6	21.4	21.3	19.7	21.4	21.7	11.2	25.9	26.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555170	4798053	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555183	4799708	0.0	37.5	41.8	54.1	40.8	59.3	68.8	56.7	28.5	11.6	14.8	6.1	11.1	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555213	4799683	0.0	109.1	102.8	128.6	117.3	73.7	97.9	75.0	110.4	58.7	65.4	44.1	57.6	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555242	4799693	0.0	78.9	70.9	49.5	33.8	49.5	70.2	47.0	29.4	68.2	67.6	67.6	71.5	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555243	4799687	0.0	0.5	1.0	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555293	4799715	0.0	0.0	0.0	0.0	0.0	35.1	38.8	31.3	30.6	34.6	34.8	36.2	39.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	555314	4808183	0.0	10.1	9.2	6.2	8.3	7.5	8.1	8.4	8.3	7.9	8.1	8.0	7.9	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	555327	4810826	0.0	5.6	3.2	5.9	7.3	6.8	4.1	11.3	10.6	10.7	12.2	12.8	10.7	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	555754	4806616	0.0	12.5	13.2	11.5	12.7	13.0	12.5	12.2	10.5	12.8	12.2	12.1	11.8	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	555792	4806582	0.0	17.1	16.6	15.9	17.2	18.1	18.8	19.7	19.3	18.6	16.7	18.0	18.6	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	556271	4804365	0.0	20.8	20.5	20.4	20.3	23.9	22.9	21.8	19.6	20.7	19.6	18.7	18.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	556355	4805062	0.0	16.2	16.2	15.5	14.9	15.3	15.7	7.8	15.2	14.8	15.2	14.6	15.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand

Table A6 - Groundwater Municipal Permits

Municipal System	Easting	Northing	Annual Flow L/s	Jan L/s	Feb L/s	Mar L/s	Apr L/s	May L/s	Jun L/s	Jul L/s	Aug L/s	Sep L/s	Oct L/s	Nov L/s	Dec L/s	Surface Water Subwatershed	Groundwater Assessment Area
RMOW - Integrated Urban System	556693	4808882	0.0	4.3	0.0	1.2	8.4	6.1	7.2	10.7	4.6	10.9	11.6	11.4	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	556951	4806839	0.0	34.3	31.9	33.2	33.9	36.1	37.1	35.4	36.3	35.5	35.6	35.1	35.1	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	557128	4806110	0.0	19.1	20.2	20.0	24.3	25.1	5.4	18.2	9.4	0.0	0.0	3.4	4.6	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	557140	4806113	0.0	3.7	2.7	3.1	0.1	0.2	14.1	5.1	13.8	20.5	18.7	19.0	17.8	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	557175	4800261	0.0	15.9	12.9	14.8	17.4	15.6	17.2	17.5	15.8	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557290	4802698	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557302	4802637	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	17.6	18.1	17.7	17.9	5.9	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557303	4802639	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557319	4802740	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557324	4802665	0.0	34.9	38.1	39.1	42.6	35.6	35.6	32.0	31.7	32.1	31.4	29.7	11.5	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	557327	4804287	0.0	21.1	20.5	20.4	20.8	20.6	21.6	23.6	23.8	22.7	20.5	22.4	21.2	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	558050	4802493	0.0	23.9	11.4	0.1	7.1	24.4	24.5	25.1	25.2	25.4	24.6	25.9	26.0	GRAND ABOVE BRANTFORD TO DOON	Central Grand
RMOW - Integrated Urban System	558336	4804721	0.0	18.6	18.5	19.2	19.2	19.5	16.4	17.2	17.3	16.9	16.6	18.0	17.5	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
RMOW - Integrated Urban System	558339	4802613	0.0	16.4	0.0	0.0	0.0	15.0	15.6	16.2	17.4	13.1	13.7	13.3	14.9	GRAND ABOVE BRANTFORD TO DOON	Central Grand
Wellesley	518827	4813111	0.0	0.3	4.9	2.6	0.0	4.2	3.4	5.8	1.5	2.5	1.6	1.7	5.4	NITH ABOVE NEW HAMBURG	Upper Nith
Wellesley	518833	4813103	0.0	5.2	0.4	2.7	5.7	1.6	2.9	0.2	4.3	2.7	4.2	3.9	0.4	NITH ABOVE NEW HAMBURG	Upper Nith
Linwood	522138	4825659	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONESTOGO BELOW DAM	Conestogo Below Dam
Linwood	522197	4825625	0.0	1.6	1.8	1.8	1.8	1.9	2.0	1.9	1.9	1.8	1.9	1.8	1.9	CONESTOGO BELOW DAM	Conestogo Below Dam
New Hamburg	523185	4801566	0.0	23.5	23.6	24.0	23.6	26.4	26.4	26.3	23.2	26.1	26.3	24.7	25.6	NITH ABOVE NEW HAMBURG	Middle Nith
Foxboro Green	524278	4807779	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NITH ABOVE NEW HAMBURG	Middle Nith
Foxboro Green	524490	4807493	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	NITH ABOVE NEW HAMBURG	Middle Nith
Foxboro Green	524496	4807490	0.0	0.9	1.0	1.1	1.4	1.4	1.4	1.4	1.5	1.3	1.3	0.7	0.0	NITH ABOVE NEW HAMBURG	Middle Nith
St. Clements	527999	4819425	0.0	1.6	1.4	1.3	1.3	1.9	1.9	1.4	2.0	3.0	2.3	1.2	0.0	CONESTOGO BELOW DAM	Conestogo Below Dam
St. Clements	528026	4819420	0.0	1.2	1.4	1.6	1.6	1.6	1.8	2.2	1.3	0.0	0.5	1.6	2.9	CONESTOGO BELOW DAM	Conestogo Below Dam
St. Agatha	529588	4809462	0.0	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.5	0.5	0.5	0.6	NITH ABOVE NEW HAMBURG	Upper Nith
St. Agatha	529855	4809202	0.0	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.8	0.8	0.7	0.6	0.6	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
St. Agatha	530546	4809266	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
St. Agatha	530549	4809272	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	NITH ABOVE GRAND TO NEW HAMBURG	Central Grand
Heidelberg	531219	4819138	0.0	3.2	3.5	3.4	3.5	0.0	1.8	4.4	0.1	0.0	0.0	1.4	0.6	CONESTOGO BELOW DAM	Conestogo Below Dam
Heidelberg	531220	4819154	0.0	0.2	0.0	0.0	0.0	3.9	2.7	0.1	3.9	3.8	3.6	1.8	2.9	CONESTOGO BELOW DAM	Conestogo Below Dam
New Dundee	537938	4800208	0.0	0.6	0.0	0.0	0.0	0.7	2.1	0.0	0.0	2.7	0.5	3.9	2.9	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
New Dundee	537939	4800210	0.0	2.0	2.6	2.6	2.8	2.3	1.4	3.1	3.2	0.0	2.1	0.0	0.4	NITH ABOVE GRAND TO NEW HAMBURG	Middle Nith
Seagram	538401	4812204	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.9	1.9	2.0	GRAND ABOVE DOON TO CONESTOGO	Central Grand
Conestoga Plains	539511	4821117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek
Conestoga Plains	539521	4821137	0.0	0.4	0.9	0.9	0.9	1.0	1.4	1.3	1.2	0.9	0.8	0.8	0.9	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek
Conestoga Golf	540828	4821478	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Hopewell/Cox Creek
Conestoga Golf	540837	4821487	0.0	1.3	1.3	1.0	1.1	1.7	2.7	2.5	2.4	1.7	1.3	1.0	1.1	GRAND ABOVE CONESTOGO TO SHAND	Hopewell/Cox Creek
Roseville	542778	4799004	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.1	0.0	0.0	0.4	0.7	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Roseville	542787	4799007	0.0	0.8	0.8	0.8	1.0	1.0	1.5	1.1	1.3	1.0	0.8	0.3	0.2	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Ayr	544620	4792889	0.0	1.8	1.2	0.1	2.4	12.0	9.9	10.9	8.7	4.3	0.0	2.6	0.1	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Ayr	544621	4792905	0.0	9.3	9.7	10.8	9.1	1.2	4.5	3.1	5.0	8.6	11.5	10.5	12.6	NITH ABOVE GRAND TO NEW HAMBURG	Lower Nith
Maryhill	549405	4821117	0.0	0.3	0.4	0.3	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek
Maryhill	549454	4820234	0.0	0.7	0.7	0.7	0.8	0.8	0.9	0.3	0.8	0.8	0.6	0.8	0.8	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek
Maryhill	549457	4820230	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE DOON TO CONESTOGO	Hopewell/Cox Creek
Branchton Meadows	559618	4795353	0.0	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.5	0.4	0.0	0.0	0.0	GRAND ABOVE BRANTFORD TO DOON	Lower Nith
Branchton Meadows	559622	4795353	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.4	GRAND ABOVE BRANTFORD TO DOON	Lower Nith
West Montrose	n/a	n/a	0.0	0.8	0.7	0.2	0.7	0.9	0.0	1.0	0.8	0.8	0.0	0.0	0.0	GRAND ABOVE CONESTOGO TO SHAND	Canagagigue Creek
City of Guelph	n/a	n/a	0.0	62.0	68.9	93.1	128.6	194.8	172.0	158.5	137.0	111.6	95.4	92.8	111.6	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	n/a	n/a	0.0	50.1	52.7	60.4	57.5	65.9	59.7	52.2	52.2	49.4	50.7	48.2	53.8	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	554602	4819900	0.0	11.9	8.2	11.5	10.9	9.9	10.3	10.7	10.5	9.8	10.2	10.0	10.2	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
City of Guelph	555601	4819794	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
City of Guelph	556416	4821929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	556748	4820866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	558126	4819636	0.0	15.3	13.4	14.8	14.1	13.9	12.7	12.6	12.9	12.4	12.3	12.2	13.2	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	558482	4818297	0.0	2.6	7.9	9.2	11.2	11.7	11.4	12.2	12.0	11.3	12.7	12.2	12.8	SPEED ABOVE GRAND TO ARMSTRONG	Central Grand
City of Guelph	558488	4822628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	559931	4823351	0.0	29.0	26.4	29.2	26.1	28.7	27.6	24.9	28.3	27.6	28.4	28.3	25.5	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	560293	4819861	0.0	46.8	40.9	43.9	39.8	29.7	40.6	45.8	46.5	43.0	46.8	43.2	35.1	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed

Table A6 - Groundwater Municipal Permits

Municipal System	Easting	Northing	Annual Flow L/s	Jan L/s	Feb L/s	Mar L/s	Apr L/s	May L/s	Jun L/s	Jul L/s	Aug L/s	Sep L/s	Oct L/s	Nov L/s	Dec L/s	Surface Water Subwatershed	Groundwater Assessment Area
City of Guelph	560357	4825777	0.0	12.6	11.3	12.7	10.7	12.1	12.2	12.8	11.3	11.8	12.4	11.6	9.9	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	560430	4823231	0.0	58.8	53.2	58.8	56.3	57.8	55.9	57.8	56.6	54.5	56.0	53.2	52.9	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	560587	4820067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	560773	4820356	0.0	17.1	6.3	9.2	3.1	5.8	10.0	11.4	13.1	11.9	8.8	0.1	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	560997	4819805	0.0	14.4	12.5	13.4	13.0	13.7	13.0	13.1	14.3	14.7	11.6	14.4	15.8	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	561247	4826626	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	561360	4818045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	561613	4819168	0.0	19.4	17.4	19.4	18.9	19.6	19.1	19.6	19.4	18.6	19.2	18.6	19.2	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	561798	4817015	0.0	1.4	43.2	46.9	43.9	44.5	41.0	45.9	51.5	49.6	50.5	48.8	50.1	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	563314	4826013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	563528	4817546	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	563989	4826623	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	564031	4823927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	564128	4815412	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	564864	4821686	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	564870	4820808	0.0	54.7	36.4	40.4	25.2	9.0	31.4	26.9	37.1	29.1	22.2	40.7	38.5	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	565157	4818701	0.0	66.7	59.8	66.3	63.7	66.7	63.0	65.6	65.2	62.6	65.0	63.8	66.1	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	566455	4815838	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	SPEED ABOVE GRAND TO ARMSTRONG	Upper Speed
City of Guelph	567440	4822878	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	567934	4823061	0.0	58.6	41.6	45.7	33.8	28.8	46.8	43.4	41.2	45.3	55.1	33.7	46.3	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	567944	4822434	0.0	13.9	1.8	3.6	5.6	1.7	7.6	8.2	17.7	6.6	4.6	5.2	3.6	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	567993	4822436	0.0	56.8	41.4	50.8	40.3	36.8	41.3	37.4	35.0	40.8	55.1	59.5	35.7	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	568055	4822971	0.0	53.5	52.5	48.8	43.4	34.0	33.5	27.9	24.4	33.3	50.8	32.6	50.0	ERAMOSIA ABOVE GUELPH	Upper Speed
City of Guelph	568096	4823126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ERAMOSIA ABOVE GUELPH	Upper Speed
Waldemar	558114	4860008	0.0	0.8	0.8	0.7	0.7	0.9	1.3	1.4	1.3	1.2	0.8	0.8	1.0	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Waldemar	557915	4860068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Waldemar	558112	4859697	0.0	0.8	0.8	0.7	0.8	0.8	1.2	2.9	1.6	1.3	0.8	0.8	0.8	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Marsville	562210	4852957	0.0	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	GRAND ABOVE SHAND TO LEGATT	Grand Above Shand to Legatt
Moorefield	521161	4846256	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.6	0.5	0.7	0.7	0.7	CONESTOGO ABOVE DAM	Conestogo Above Dam
Moorefield	521161	4846251	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.5	0.7	0.7	0.7	CONESTOGO ABOVE DAM	Conestogo Above Dam



Appendix B – Selected Groundwater Monitoring Wells

Table B1 - Summary of Monitoring Wells

Well Administrator	Well Identifier	Easting	Northing
Guelph	Admiral	564102	4815492
Guelph	Burke-obs	565090	4818701
Guelph	Clair- Puslinch GW TW2-67	564876	4815909
Guelph	Downey-obs	561752	4817014
Guelph	Eastview-PW2/58	561282	4823857
Guelph	Fleming-OW8/66	563299	4826047
Guelph	Hauser-PW7/66	555603	4819578
Guelph	McCurdy-PW10/67	563539	4817510
Guelph	Membro-obs	560255	4819830
Guelph	MW 06-01	555406	4821490
Guelph	MW 06-02	558090	4821804
Guelph	MW 06-03	559688	4824619
Guelph	MW 06-04	559518	4819460
Guelph	MW 06-05	559804	4820985
Guelph	MW 06-06	563132	4819827
Guelph	MW 06-07	565685	4813872
Guelph	MW 06-08	565946	4817135
Guelph	MW 06-09	566130	4818503
Guelph	MW 06-10	567679	4817481
Guelph	MW04-01	560933	4818359
Guelph	MW08-01	560999	4817496
Guelph	MW08-02	560096	4819484
Guelph	MW123	562710	4815368
Guelph	OW10-06	568680	4826606
Guelph	OW1-06	566772	4821308
Guelph	OW11-06	563769	4823687
Guelph	OW2-06	569990	4821372
Guelph	OW3-06	569593	4823593
Guelph	OW4-06	568632	4824518
Guelph	OW5-06	566441	4823588
Guelph	OW6-06	566302	4821825
Guelph	OW7-06	569191	4824879
Guelph	OW8-06	571011	4823050
Guelph	OW9-06	570515	4824670
Guelph	TW04-01	561360	4818045
Guelph	TW04-02	560339	4818016
Guelph	TW04-02	560339	4818016
Guelph	TW08-01 Ironwood Test Well	561763	4817873
Guelph	TW08-02 Steffler Test Well	562109	4818435
Guelph	TW1-08	562969	4814624
Guelph	TW2-08	562183	4815858
Guelph	TW3-08	565391	4815482
ROW	AC1-01	536156	4803609
ROW	AC1-03	538065	4800342
ROW	AC3-01	537487	4801079
ROW	ASR-OW2B-96	538129	4805521
ROW	BBB1-94	543850	4802180
ROW	BH1-90	540663	4808873
ROW	BH1-93	555130	4799682
ROW	BH2A-93	555589	4799782
ROW	BH2B-93	555597	4799775
ROW	BH4-94	554494	4799393
ROW	BH6-94	555238	4799598
ROW	BM1SD-02	559654	4795433
ROW	BMW201-92	541182	4807837
ROW	BMW215A-06	542301	4807207
ROW	BP8-94	529103	4806200
ROW	C2	559342	4806841
ROW	CG2-95	540724	4821411
ROW	CG3-02	541162	4821681
ROW	CG4-02	541704	4821504
ROW	CH59-90	535321	4824575
ROW	CM-OW1-92 (SW)	557018	4805946

Table B1 - Summary of Monitoring Wells

Well Administrator	Well Identifier	Easting	Northing
ROW	CM-OW1A-92	557018	4805946
ROW	CM-OW1BC-92	557014	4805951
ROW	CM-OW5ABCDEFG-94	558346	4806730
ROW	CP1SD-02	539342	4821191
ROW	GB1AB-97	540570	4808814
ROW	GB1ABC-96	540735	4808364
ROW	H4-SB3R	531760	4801685
ROW	H4-SB4	530890	4802830
ROW	H4-SB5	530615	4802430
ROW	H4-SB6	529965	4801495
ROW	H5-S3	530406	4803661
ROW	H5-SB5R	531030	4803850
ROW	HL-SB2	531486	4805255
ROW	K8-78	547244	4811819
ROW	LC9A-91	531255	4812326
ROW	LC9BC-91	531244	4812312
ROW	LWL	559722	4807898
ROW	M4-94	539254	4808106
ROW	MI-OW1-92	555241	4799600
ROW	MI-OW2-92	555245	4799601
ROW	MW1-03	544826	4793038
ROW	MW1-04	535514	4812429
ROW	MW1-05	549450	4821086
ROW	MW1D-04	548530	4810441
ROW	MW2-04	535495	4812411
ROW	MW205	530240	4803810
ROW	MW2-05	549432	4821153
ROW	MW3-04	535634	4812340
ROW	MW6D-06	555480	4800595
ROW	MW-CH07-3	548909	4810640
ROW	MWSTA1-02	530522	4809315
ROW	MWWWN1-02	535260	4812553
ROW	MW-WN1-06S	535276	4812550
ROW	NDOW1-03	537923	4800215
ROW	NDOW2-03	538032	4800457
ROW	NH-TW1-94	522933	4802096
ROW	NH-TW3-94	523261	4800900
ROW	NH-TW5-95	523751	4802114
ROW	NH-TW6-95	523184	4801566
ROW	OW1	540566	4808451
ROW	OW104-90	554573	4800873
ROW	OW10-87	538746	4812198
ROW	OW10-95	547057	4812140
ROW	OW12-78	548986	4810714
ROW	OW13AB-87	537344	4812425
ROW	OW1-65	540807	4808697
ROW	OW16-60	538834	4805719
ROW	OW1-82 (TW10-82)	538914	4810435
ROW	OW1-87	555159	4798045
ROW	OW1-95	554877	4809921
ROW	OW1BC-03	539702	4807070
ROW	OW23-65	539154	4805298
ROW	OW2-69	528447	4805771
ROW	OW2-85	537191	4805605
ROW	OW2-95	556154	4808464
ROW	OW29-94	544034	4804503
ROW	OW322A-02	533529	4809674
ROW	OW332-02	533412	4809821
ROW	OW3-61	537087	4803824
ROW	OW3-85	537990	4805991
ROW	OW3-92	557250	4803752
ROW	OW3-92	534887	4803341
ROW	OW3-95	555560	4806662

Table B1 - Summary of Monitoring Wells

Well Administrator	Well Identifier	Easting	Northing
ROW	OW46-49	538490	4806496
ROW	OW4-65	540602	4808596
ROW	OW4-92	535533	4807584
ROW	OW4A-92	558908	4804869
ROW	OW4B-46	537980	4810351
ROW	OW4BC-92	558911	4804870
ROW	OW5-95	553286	4802223
ROW	OW5A-87	538810	4812279
ROW	OW5B-86	538812	4812277
ROW	OW6-60	544900	4806820
ROW	OW6-94 (TW2-91)	556283	4804365
ROW	OW6ABCD-95	553898	4803784
ROW	OW8-61	536525	4805087
ROW	OW8-95	557571	4799770
ROW	OW8-99	531093	4803926
ROW	OW9-67	530888	4803920
ROW	OW9-95	552449	4801218
ROW	OW9-95	547470	4811873
ROW	PK1-95	544682	4806947
ROW	PK2-95	541123	4805636
ROW	PK3-95	544035	4804504
ROW	PK5-96	544743	4805302
ROW	PK8-96	543455	4806404
ROW	RV2-95	542270	4799225
ROW	SM1-02	557344	4802731
ROW	SM3-93	557938	4803410
ROW	ST-OW1-07	537827	4810474
ROW	ST-OW2-07	537838	4810455
ROW	TW11-69	537746	4803199
ROW	TW1-70	538173	4802613
ROW	TW17-67	530823	4802940
ROW	TW3-69	537580	4803941
ROW	TW3-74	537285	4810636
ROW	TW3-94	557302	4802640
ROW	TW39-66	547033	4812159
ROW	TW4-76	550331	4807756
ROW	TW4-79	539566	4810630
ROW	TW7-67 (TW22)	536534	4805057
ROW	TW7-71	535307	4812499
ROW	TW7A-57	533121	4809127
ROW	TW7B-57	533136	4809127
ROW	UW5-91	527752	4808700
ROW	WCW1-98	529484	4803582
ROW	WCW2-98	528742	4805500
ROW	WH6-76	535432	4823960
ROW	WM14-93	529380	4804800
ROW	WM1-94	537006	4807940
ROW	WM20-93	535470	4804620
ROW	WM21-93	532334	4801390
ROW	WM2-93	531481	4809261
ROW	WM2-94	535430	4806050
ROW	WM3-93	528741	4811454
ROW	WM4-1-98	542120	4826071
ROW	WM4-93	528985	4810186
ROW	WM5-93	533279	4812287
ROW	WM8-93	532519	4810890
ROW	WM-OW1-04	542156	4826169
ROW	WM-OW2-92	541341	4803383
ROW	WM-OW6-92	538332	4808853
PGMN	W003-1 Agreement Forest	572150	4820809
PGMN	W022-1 Huron Rd.	532334	4801390
PGMN	W023-1 Grand Valley	556042	4861497
PGMN	W024-2 Puslinch - shallow	563413	4811252

Table B1 - Summary of Monitoring Wells

Well Administrator	Well Identifier	Easting	Northing
PGMN	W024-4 Puslinch - deep	563413	4811252
PGMN	W035-5 Blair	549524	4801593
PGMN	W036-1 Monastery Ck.- deep	531255	4812326
PGMN	W037-1 Monastery Ck.- shallow	531244	4812312
PGMN	W046-1 Guelph	566283	4821807
PGMN	W065-4 Burford	547480	4771254
PGMN	W178-1 Cayuga	585980	4755200
PGMN	W306-1 Bannister Lake	549864	4793446
PGMN	W307-1 Westfield	568446	4796897
PGMN	W309-2 Edworthy Rd.- shallow	551327	4798438
PGMN	W309-3 Edworthy Rd.- deep	551325	4798438
PGMN	W347-2 Dundalk -shallow	555047	4889094
PGMN	W347-3 Dundalk - deep	555047	4889090
PGMN	W421-1 Jessopville	553176	4877338
PGMN	W423-1 Elmira	538293	4824574
PGMN	W424-1 Linwood	525153	4825506
PGMN	W425-1 Dryden Tract	549732	4797272
PGMN	W426-1 Dryden Tract	549734	4797272
PGMN	W427-1 New Hamburg	526683	4802637
PGMN	W428-1 New Dundee	535231	4800607
PGMN	W429-1 Kings Rd.	546934	4801684
PGMN	W430-1 Kings Rd.	546934	4801684
PGMN	W476 Bannister Lake	549859	4793441
PGMN	W477 Burford Nursery	542566	4773873
PGMN	W478 Chesney Bog	529068	4785858
PGMN	343-3-1-1 Elora Quarry (bunker)	547132	4837666
PGMN	330-3-1-2 Elora Quarry (beach)	547125	4837534
PGMN	514-3-1-4 Guelph Lake	559914	4828916
PGMN	077-3-1-1 Belwood Lake	553347	4842195
PGMN	856-3-1-4 Rockwood	568530	4828738

Table B2 - PGMN Monitoring Wells

Municipality	Subwatershed	Well ID	Location	Easting	Northing
City of Hamilton	Fairchild Creek	W307-1	Westfield	568446	4796897
County of Brant	Whitemans Creek	W065-4	Burford	547480	4771254
County of Brant	Whitemans Creek	W477	Burford Nursery	542566	4773873
Haldimand County	Grand Above Dunnville to York	W178-1	Cayuga	585980	4755200
Regional Municipality of Waterloo	Conestogo Below Dam	W424	Linwood	525153	4825506
Regional Municipality of Waterloo	Grand Above Brantford to Doon	W035-5	Blair	549524	4801593
Regional Municipality of Waterloo	Grand Above Brantford to Doon	W429	Kings Rd.	546934	4801684
Regional Municipality of Waterloo	Grand Above Brantford to Doon	W430	Kings Rd.	546934	4801684
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	W423	Elmira	538293	4824574
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	W036-1	Monastery Ck. - deep	531255	4812326
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	W037-1	Monastery Ck. - shallow	531244	4812312
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W022-1	Huron Rd.	532334	4801390
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W306-1	Bannister Lake	549864	4793446
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W309-2	Edworthy Rd. - shallow	551327	4798438
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W309-3	Edworthy Rd. - deep	551325	4798438
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W425	Dryden Tract	549732	4797272
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W426	Dryden Tract	549734	4797272
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W427	New Hamburg	526683	4802637
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W428	New Dundee	535231	4800607
Regional Municipality of Waterloo	Nith above Grand to New Hamburg	W476	Bannister Lake	549859	4793441
Town of Milton	Eramosa Above Guelph	W003-1	Agreement Forest	572150	4820809
Township of Amaranth	Grand Above Shand to Legatt	W023-1	Grand Valley	556042	4861497
Township of Blandford-Blenheim	Whitemans Creek	W478	Chesney Bog	529068	4785858
Township of Centre Wellington	Grand Above Conestogo to Shand	077-3-1-1	Belwood Lake	553347	4842195
Township of Centre Wellington	Grand Above Conestogo to Shand	330-3-1-2	Elora Quarry (beach)	547125	4837534
Township of Centre Wellington	Grand Above Conestogo to Shand	343-3-1-1	Elora Quarry (bunker)	547132	4837666
Township of East Luther Grand Valley	Grand Above Legatt	W421	Jessopville	553176	4877338
Township of Guelph - Eramosa	Eramosa Above Guelph	856-3-1-4	Rockwood	568530	4828738
Township of Guelph - Eramosa	Speed Above Dam	514-3-1-4	Guelph Lake	559914	4828916
Township of Melancthon	Grand Above Legatt	W347-2	Dundalk - shallow	555047	4889094
Township of Melancthon	Grand Above Legatt	W347-3	Dundalk - deep	555047	4889090
Township of Puslinch	Eramosa Above Guelph	W046-1	Guelph	566283	4821807
Township of Puslinch	Mill Creek	W024-2	Puslinch - shallow	563413	4811252
Township of Puslinch	Mill Creek	W024-4	Puslinch - deep	563413	4811252

Table B3 - Region of Waterloo Monitoring Wells

Municipality	Subwatershed	Well ID	Easting	Northing
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BBB1-94	543850	4802180
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH1-90	540663	4808873
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH1-93	555130	4799682
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH2A-93	555589	4799782
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH2B-93	555597	4799775
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH4-94	554494	4799393
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BH6-94	555238	4799598
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BM1SD-02	559654	4795433
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BMW201-92	541182	4807837
Regional Municipality of Waterloo	Grand Above Brantford to Doon	BMW215A-06	542301	4807207
Regional Municipality of Waterloo	Grand Above Brantford to Doon	GB1AB-97	540570	4808814
Regional Municipality of Waterloo	Grand Above Brantford to Doon	GB1ABC-96	540735	4808364
Regional Municipality of Waterloo	Grand Above Brantford to Doon	M4-94	539254	4808106
Regional Municipality of Waterloo	Grand Above Brantford to Doon	MI-OW1-92	555241	4799600
Regional Municipality of Waterloo	Grand Above Brantford to Doon	MI-OW2-92	555245	4799601
Regional Municipality of Waterloo	Grand Above Brantford to Doon	MW6D-06	555480	4800595
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW1	540566	4808451
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW104-90	554573	4800873
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW1-65	540807	4808697
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW16-60	538834	4805719
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW1-82 (TW10-82)	538914	4810435
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW1-87	555159	4798045
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW1BC-03	539702	4807070
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW23-65	539154	4805298
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW29-94	544034	4804503
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW3-85	537990	4805991
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW3-92	557250	4803752
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW46-49	538490	4806496
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW4-65	540602	4808596
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW4A-92	558908	4804869
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW4B-46	537980	4810351
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW4BC-92	558911	4804870
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW5-95	553286	4802223
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW6-60	544900	4806820
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW6-94 (TW2-91)	556283	4804365
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW6ABCD-95	553898	4803784
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW8-95	557571	4799770
Regional Municipality of Waterloo	Grand Above Brantford to Doon	OW9-95	552449	4801218
Regional Municipality of Waterloo	Grand Above Brantford to Doon	PK1-95	544682	4806947
Regional Municipality of Waterloo	Grand Above Brantford to Doon	PK2-95	541123	4805636
Regional Municipality of Waterloo	Grand Above Brantford to Doon	PK3-95	544035	4804504
Regional Municipality of Waterloo	Grand Above Brantford to Doon	PK5-96	544743	4805302
Regional Municipality of Waterloo	Grand Above Brantford to Doon	PK8-96	543455	4806404
Regional Municipality of Waterloo	Grand Above Brantford to Doon	SM1-02	557344	4802731
Regional Municipality of Waterloo	Grand Above Brantford to Doon	SM3-93	557938	4803410
Regional Municipality of Waterloo	Grand Above Brantford to Doon	ST-OW1-07	537827	4810474
Regional Municipality of Waterloo	Grand Above Brantford to Doon	ST-OW2-07	537838	4810455
Regional Municipality of Waterloo	Grand Above Brantford to Doon	TW3-94	557302	4802640
Regional Municipality of Waterloo	Grand Above Brantford to Doon	TW4-79	539566	4810630

Table B3 - Region of Waterloo Monitoring Wells

Municipality	Subwatershed	Well ID	Easting	Northing
Regional Municipality of Waterloo	Grand Above Brantford to Doon	WM1-94	537006	4807940
Regional Municipality of Waterloo	Grand Above Brantford to Doon	WM-OW2-92	541341	4803383
Regional Municipality of Waterloo	Grand Above Brantford to Doon	WM-OW6-92	538332	4808853
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	CG2-95	540724	4821411
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	CG3-02	541162	4821681
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	CG4-02	541704	4821504
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	CH59-90	535321	4824575
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	CP1SD-02	539342	4821191
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	WH6-76	535432	4823960
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	WM4-1-98	542120	4826071
Regional Municipality of Waterloo	Grand Above Conestogo to Shand	WM-OW1-04	542156	4826169
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	K8-78	547244	4811819
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	LC9A-91	531255	4812326
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	LC9BC-91	531244	4812312
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW1-04	535514	4812429
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW1-05	549450	4821086
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW1D-04	548530	4810441
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW2-04	535495	4812411
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW2-05	549432	4821153
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW3-04	535634	4812340
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW-CH07-3	548909	4810640
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MWWN1-02	535260	4812553
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	MW-WN1-06S	535276	4812550
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW10-87	538746	4812198
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW10-95	547057	4812140
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW12-78	548986	4810714
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW13AB-87	537344	4812425
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW5A-87	538810	4812279
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW5B-86	538812	4812277
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	OW9-95	547470	4811873
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	TW3-74	537285	4810636
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	TW39-66	547033	4812159
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	TW7-71	535307	4812499
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	WM5-93	533279	4812287
Regional Municipality of Waterloo	Grand Above Doon to Conestogo	WM8-93	532519	4810890
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	AC1-01	536156	4803609
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	AC1-03	538065	4800342
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	AC3-01	537487	4801079
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	ASR-OW2B-96	538129	4805521
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	BP8-94	529103	4806200
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H4-SB3R	531760	4801685
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H4-SB4	530890	4802830
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H4-SB5	530615	4802430
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H4-SB6	529965	4801495
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H5-S3	530406	4803661
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	H5-SB5R	531030	4803850
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	HL-SB2	531486	4805255
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	MW1-03	544826	4793038
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	MW205	530240	4803810

Table B3 - Region of Waterloo Monitoring Wells

Municipality	Subwatershed	Well ID	Easting	Northing
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	MWSTA1-02	530522	4809315
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	NDOW1-03	537923	4800215
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	NDOW2-03	538032	4800457
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	NH-TW3-94	523261	4800900
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW2-69	528447	4805771
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW2-85	537191	4805605
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW322A-02	533529	4809674
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW332-02	533412	4809821
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW3-61	537087	4803824
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW3-92	534887	4803341
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW4-92	535533	4807584
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW8-61	536525	4805087
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW8-99	531093	4803926
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	OW9-67	530888	4803920
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	RV2-95	542270	4799225
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW11-69	537746	4803199
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW1-70	538173	4802613
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW17-67	530823	4802940
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW3-69	537580	4803941
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW7-67 (TW22)	536534	4805057
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW7A-57	533121	4809127
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	TW7B-57	533136	4809127
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WCW1-98	529484	4803582
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WCW2-98	528742	4805500
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WM14-93	529380	4804800
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WM20-93	535470	4804620
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WM21-93	532334	4801390
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WM2-93	531481	4809261
Regional Municipality of Waterloo	Nith Above Grand to New Hamburg	WM2-94	535430	4806050
Regional Municipality of Waterloo	Nith Above New Hamburg	NH-TW1-94	522933	4802096
Regional Municipality of Waterloo	Nith Above New Hamburg	NH-TW5-95	523751	4802114
Regional Municipality of Waterloo	Nith Above New Hamburg	NH-TW6-95	523184	4801566
Regional Municipality of Waterloo	Nith Above New Hamburg	UW5-91	527752	4808700
Regional Municipality of Waterloo	Nith Above New Hamburg	WM3-93	528741	4811454
Regional Municipality of Waterloo	Nith Above New Hamburg	WM4-93	528985	4810186
Regional Municipality of Waterloo	Speed Above Grand to Dam	CM-OW1-92 (SW)	557018	4805946
Regional Municipality of Waterloo	Speed Above Grand to Dam	CM-OW1A-92	557018	4805946
Regional Municipality of Waterloo	Speed Above Grand to Dam	CM-OW1BC-92	557014	4805951
Regional Municipality of Waterloo	Speed Above Grand to Dam	CM-OW5ABCDEFG-94	558346	4806730
Regional Municipality of Waterloo	Speed Above Grand to Dam	OW1-95	554877	4809921
Regional Municipality of Waterloo	Speed Above Grand to Dam	OW2-95	556154	4808464
Regional Municipality of Waterloo	Speed Above Grand to Dam	OW3-95	555560	4806662
Regional Municipality of Waterloo	Speed Above Grand to Dam	TW4-76	550331	4807756
Township of Puslinch	Speed Above Grand to Dam	C2	559342	4806841
Township of Puslinch	Speed Above Grand to Dam	LWL	559722	4807898

Table B4 - City of Guelph Monitoring Wells

Municipality	Subwatershed	Well ID	Easting	Northing
City of Guelph	Mill Creek	MW 06-07	565685	4813872
City of Guelph	Speed Above Grand To Dam	Admiral	564102	4815492
City of Guelph	Speed Above Grand To Dam	Burke-obs	565090	4818701
City of Guelph	Speed Above Grand To Dam	Clair- Puslinch GW TW2-67	564876	4815909
City of Guelph	Speed Above Grand To Dam	Downey-obs	561752	4817014
City of Guelph	Speed Above Grand To Dam	Eastview-PW2/58	561282	4823857
City of Guelph	Speed Above Grand To Dam	Hauser-PW7/66	555603	4819578
City of Guelph	Speed Above Grand To Dam	McCurdy-PW10/67	563539	4817510
City of Guelph	Speed Above Grand To Dam	Membro-obs	560255	4819830
City of Guelph	Speed Above Grand To Dam	MW 06-01	555406	4821490
City of Guelph	Speed Above Grand To Dam	MW 06-02	558090	4821804
City of Guelph	Speed Above Grand To Dam	MW 06-03	559688	4824619
City of Guelph	Speed Above Grand To Dam	MW 06-04	559518	4819460
City of Guelph	Speed Above Grand To Dam	MW 06-05	559804	4820985
City of Guelph	Speed Above Grand To Dam	MW 06-06	563132	4819827
City of Guelph	Speed Above Grand To Dam	MW 06-08	565946	4817135
City of Guelph	Speed Above Grand To Dam	MW 06-09	566130	4818503
City of Guelph	Speed Above Grand To Dam	MW 06-10	567679	4817481
City of Guelph	Speed Above Grand To Dam	MW04-01	560933	4818359
City of Guelph	Speed Above Grand To Dam	MW08-01	560999	4817496
City of Guelph	Speed Above Grand To Dam	MW08-02	560096	4819484
City of Guelph	Speed Above Grand To Dam	MW123	562710	4815368
City of Guelph	Speed Above Grand To Dam	OW11-06	563769	4823687
City of Guelph	Speed Above Grand To Dam	TW04-01	561360	4818045
City of Guelph	Speed Above Grand To Dam	TW04-02	560339	4818016
City of Guelph	Speed Above Grand To Dam	TW04-02	560339	4818016
City of Guelph	Speed Above Grand To Dam	TW08-01 Ironwood Test Well	561763	4817873
City of Guelph	Speed Above Grand To Dam	TW08-02 Steffler Test Well	562109	4818435
City of Guelph	Speed Above Grand To Dam	TW1-08	562969	4814624
City of Guelph	Speed Above Grand To Dam	TW2-08	562183	4815858
City of Guelph	Speed Above Grand To Dam	TW3-08	565391	4815482
Regional Municipality of Halton	Eramosa Above Guelph	OW3-06	569593	4823593
Regional Municipality of Halton	Eramosa Above Guelph	OW4-06	568632	4824518
Regional Municipality of Halton	Eramosa Above Guelph	OW8-06	571011	4823050
Regional Municipality of Halton	Eramosa Above Guelph	OW9-06	570515	4824670
Township of Guelph - Eramosa	Eramosa Above Guelph	OW10-06	568680	4826606
Township of Guelph - Eramosa	Eramosa Above Guelph	OW5-06	566441	4823588
Township of Guelph - Eramosa	Eramosa Above Guelph	OW7-06	569191	4824879
Township of Guelph - Eramosa	Speed Above Grand To Dam	Fleming-OW8/66	563299	4826047
Township of Puslinch	Eramosa Above Guelph	OW1-06	566772	4821308
Township of Puslinch	Eramosa Above Guelph	OW2-06	569990	4821372
Township of Puslinch	Eramosa Above Guelph	OW6-06	566302	4821825



Appendix C – Groundwater Model Supporting Information

Legend

- Municipal Boundaries
- Subwatersheds
- Waterbodies
- Streams and Rivers
- Major Roads

**Head Residual (m) Simulated vs. Observed
Overburden Wells**

- > 30
- 20 - 30
- 10 - 20
- 5 - 10
- 0 - 5
- 5 - 0
- 10 - -5
- 20 - -10
- 30 - -20
- < -30



Projection: UTM NAD 83 Zone 17

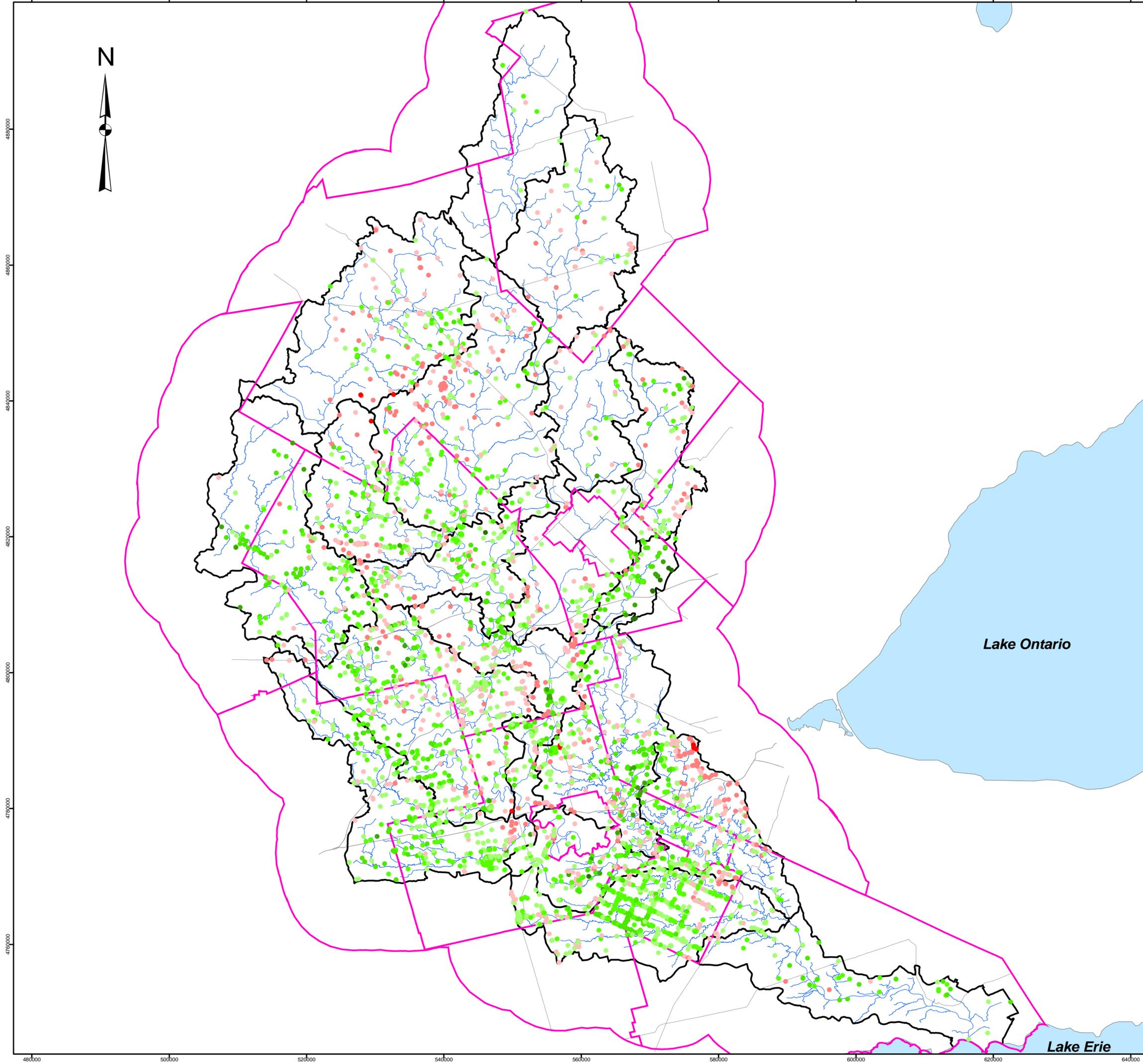
Date: November 28, 2006

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Figure 1.
**Calibration Residuals
(Overburden Wells)**

Draft



4890000
4890000
4890000
4890000
4790000
4790000
4790000

480000 500000 520000 540000 560000 580000 600000 620000 640000

Lake Erie

Lake Ontario

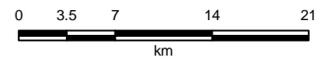
Legend

-  Municipal Boundaries
-  Subwatersheds
-  Waterbodies
-  Streams and Rivers
-  Major Roads

Head Residual (m) Simulated vs. Observed

Bedrock Wells

-  > 30
-  20 - 30
-  10 - 20
-  5 - 10
-  0 - 5
-  -5 - 0
-  -10 - -5
-  -20 - -10
-  -30 - -20
-  < -30



Projection: UTM NAD 83 Zone 17

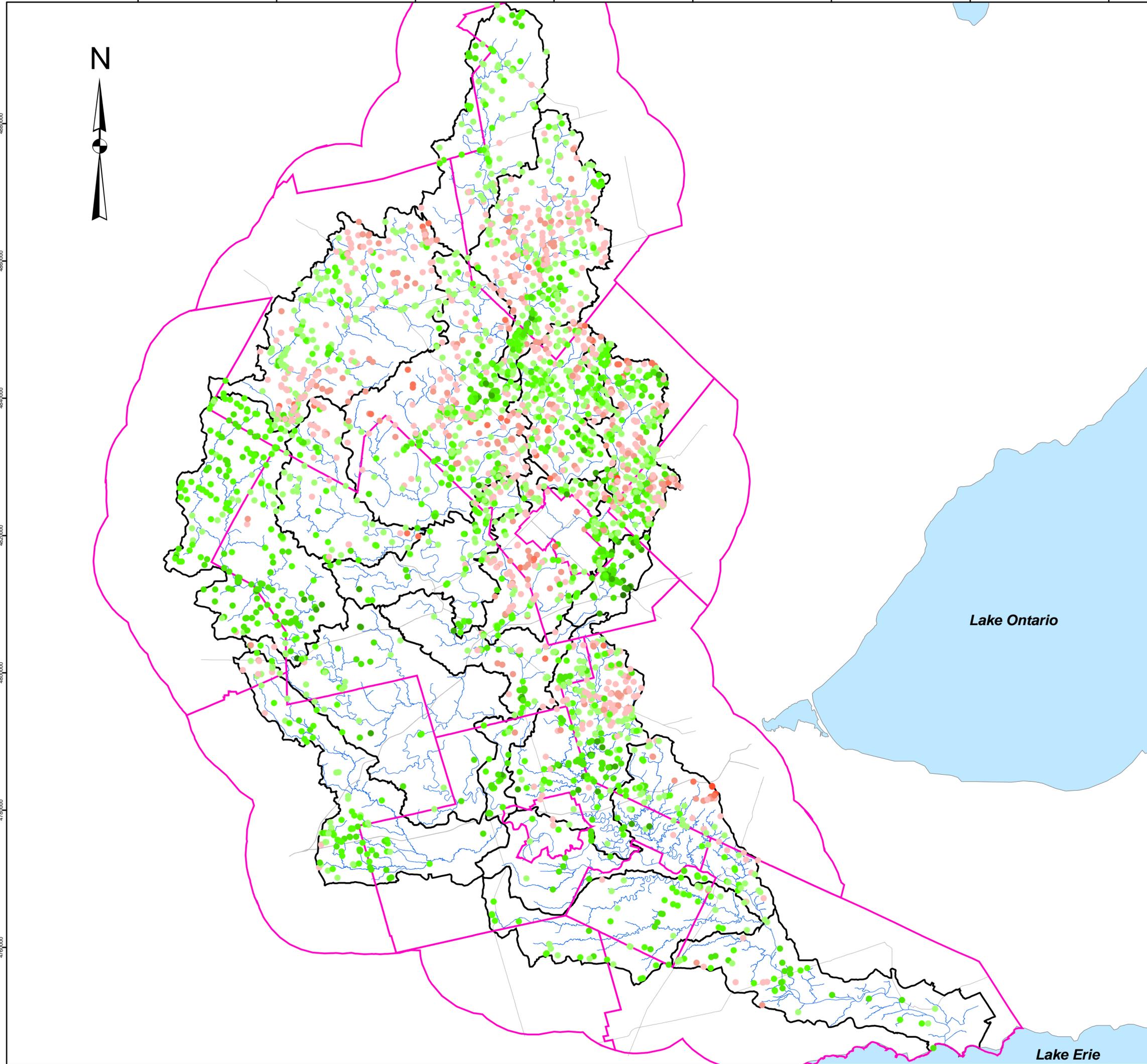
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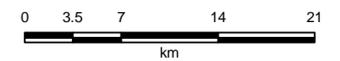
Figure 2.
Calibration Residuals
(Bedrock Wells)

Draft



Legend

- Municipal Boundaries
- Subwatersheds
- Waterbodies
- Streams and Rivers
- Roads
- Groundwater Level Contours
(Slice 1, masl)



Projection: UTM NAD 83 Zone 17

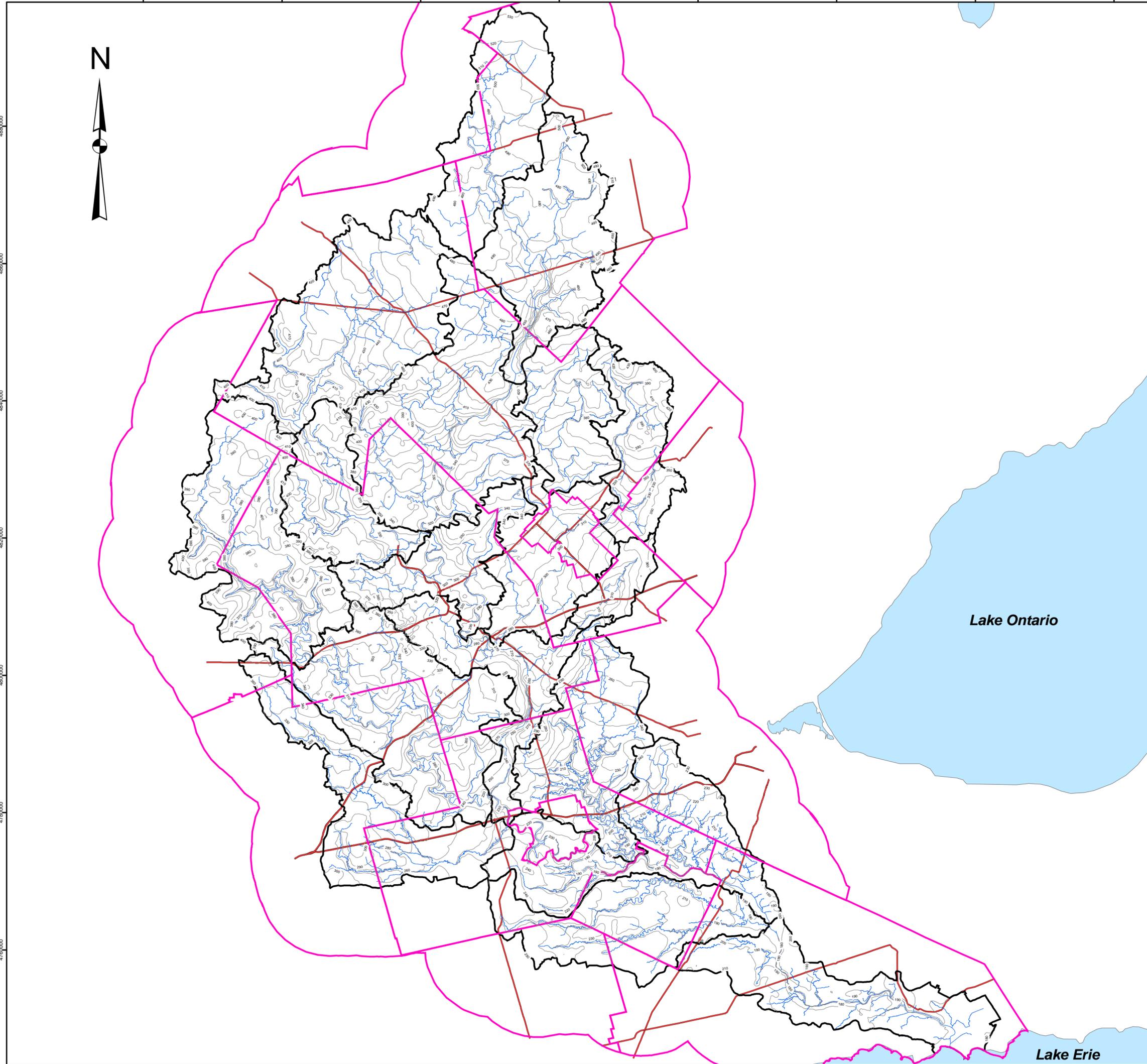
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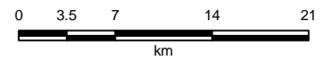
Figure 4.
Potentiometric Surface
(Slice 1)

Draft



Legend

-  Municipal Boundaries
-  Subwatersheds
-  Waterbodies
-  Streams and Rivers
-  Roads
-  Groundwater Level Contours
(Slice 12, masl)



Projection: UTM NAD 83 Zone 17

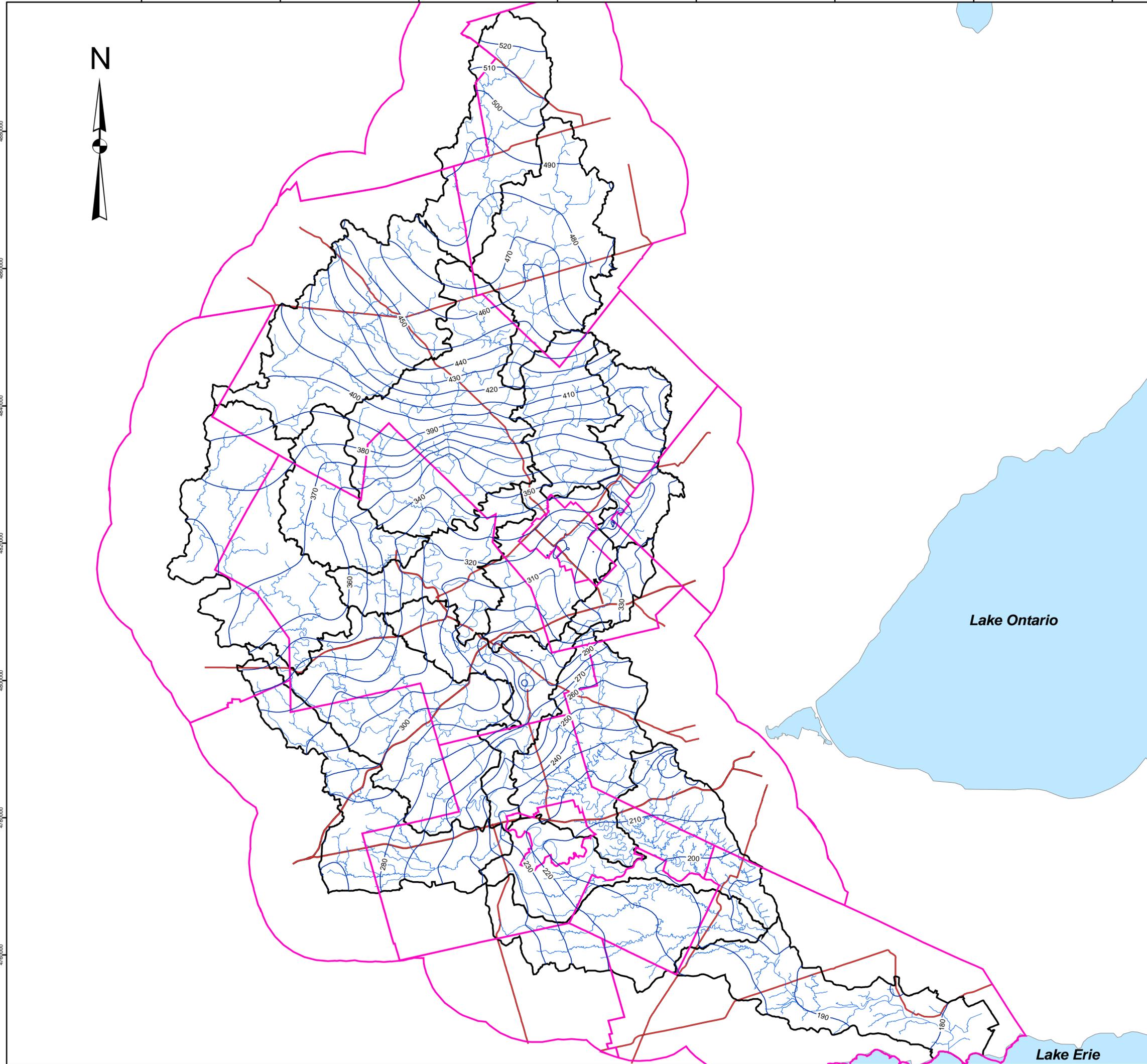
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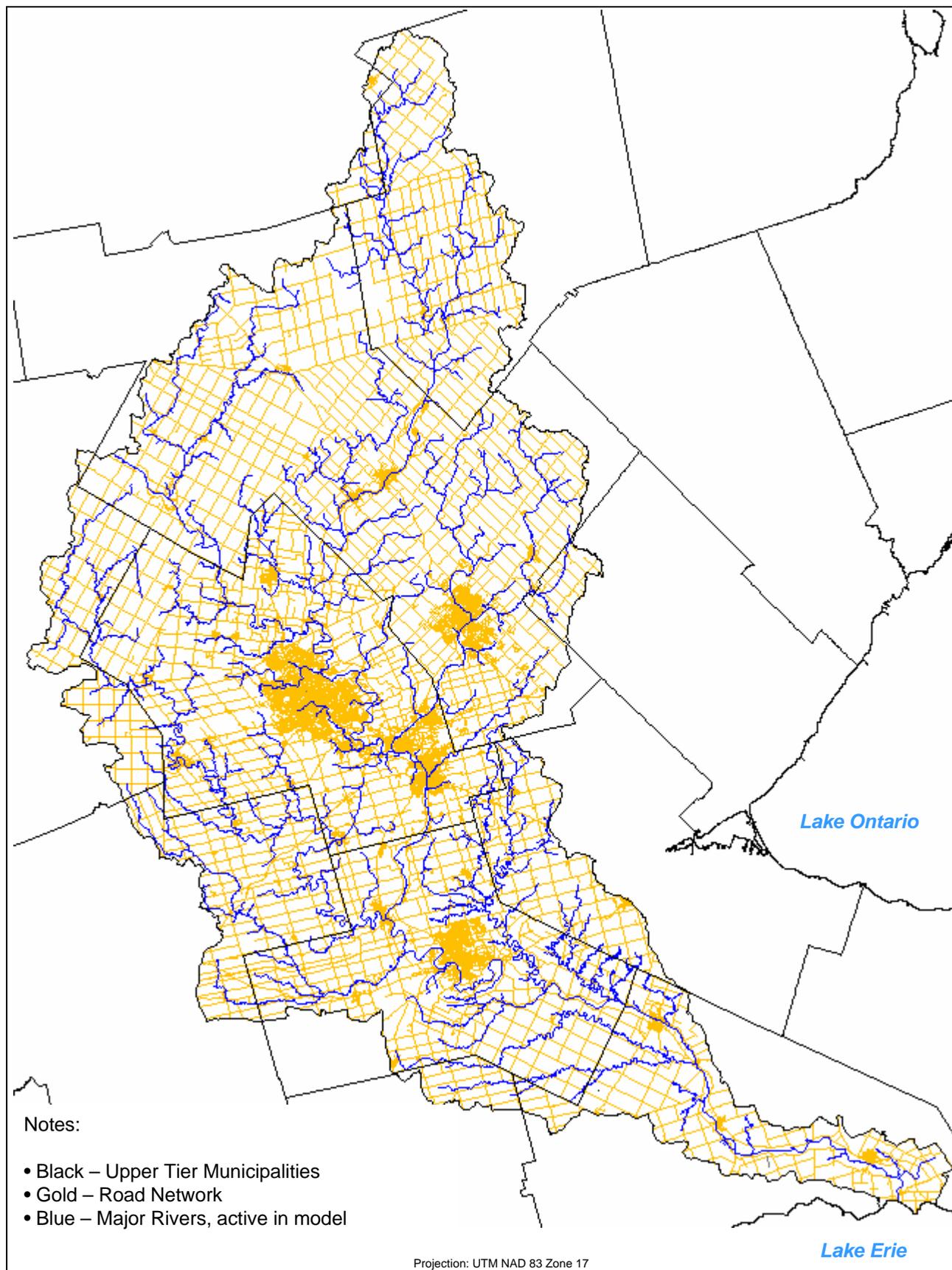
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Figure 5.
**Potentiometric Surface
(Slice 12)**

Draft





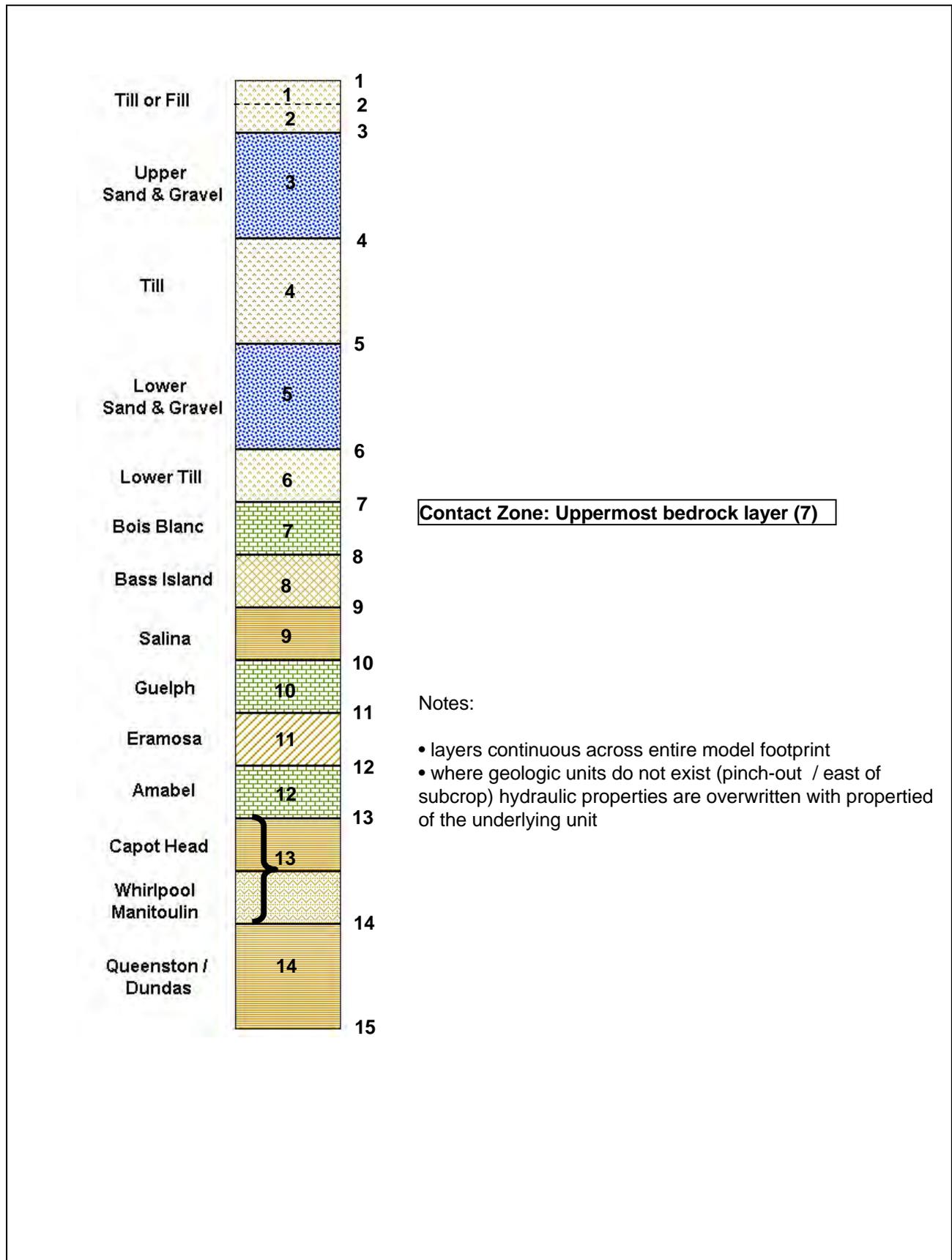
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Figure M0: Basemap for GRCA Regional Model

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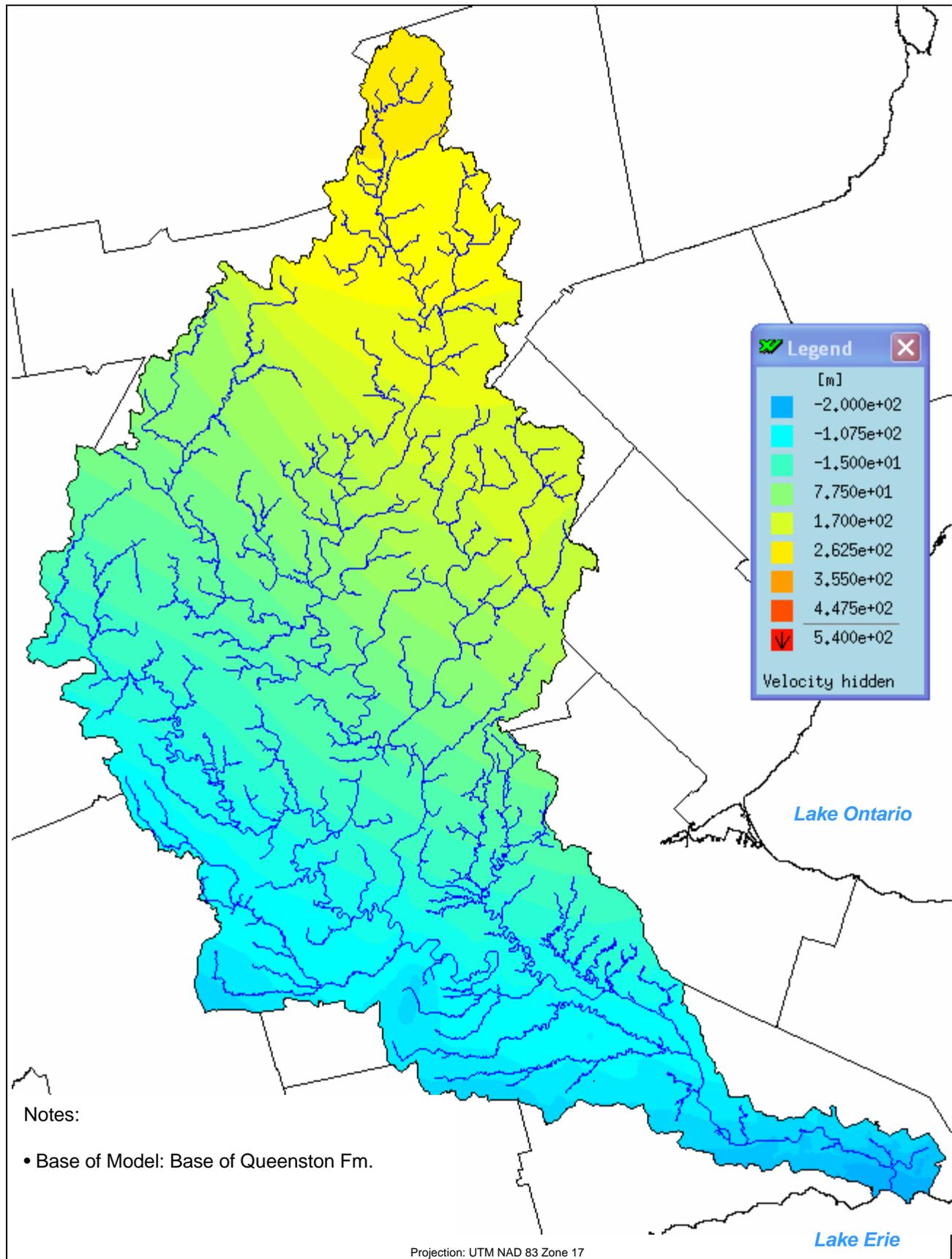
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Figure M1: Layer Structure for GRCA Regional Model

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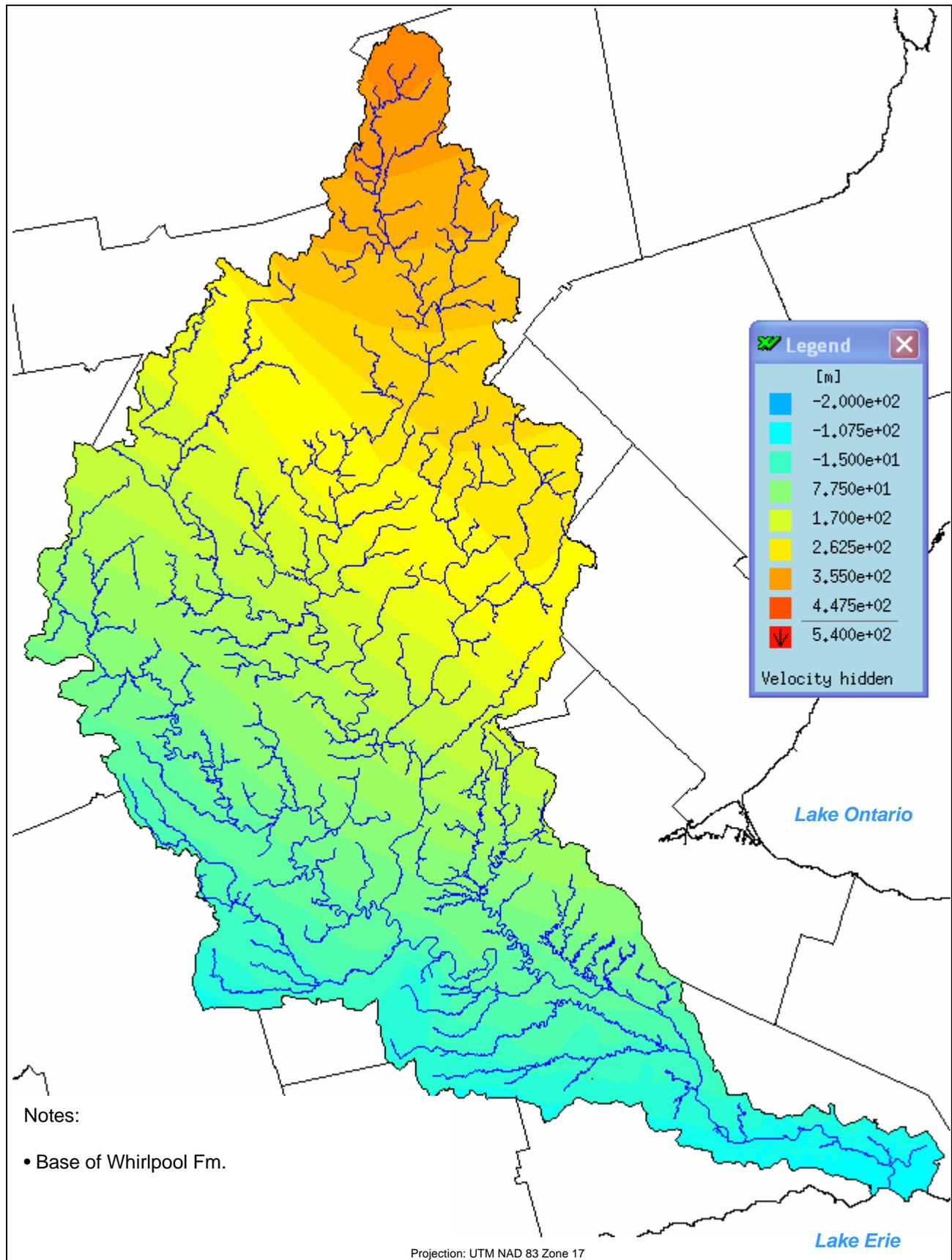
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Figure M2: Layer Elevation for Slice 15

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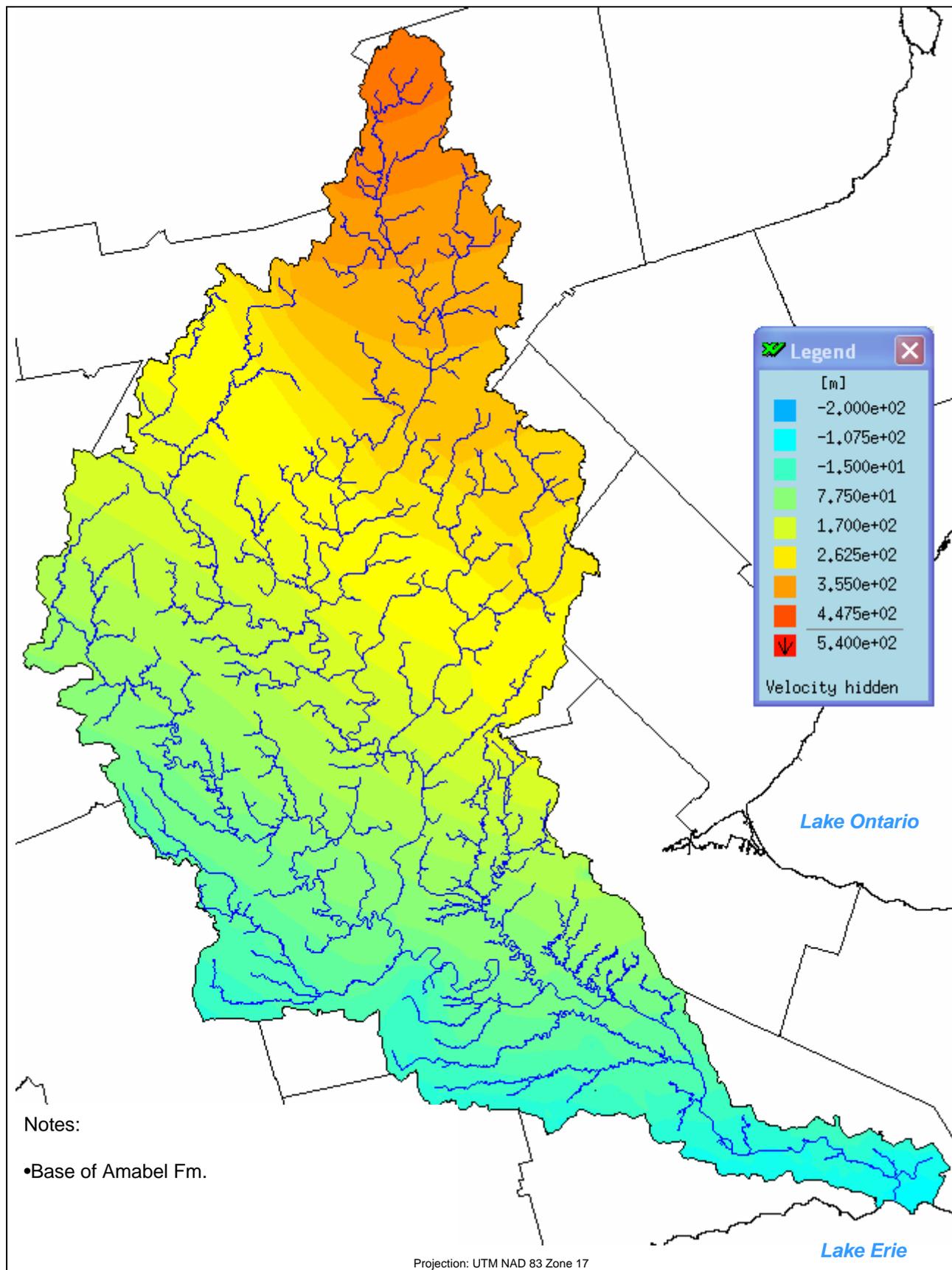
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Figure M3: Layer Elevation for Slice 14

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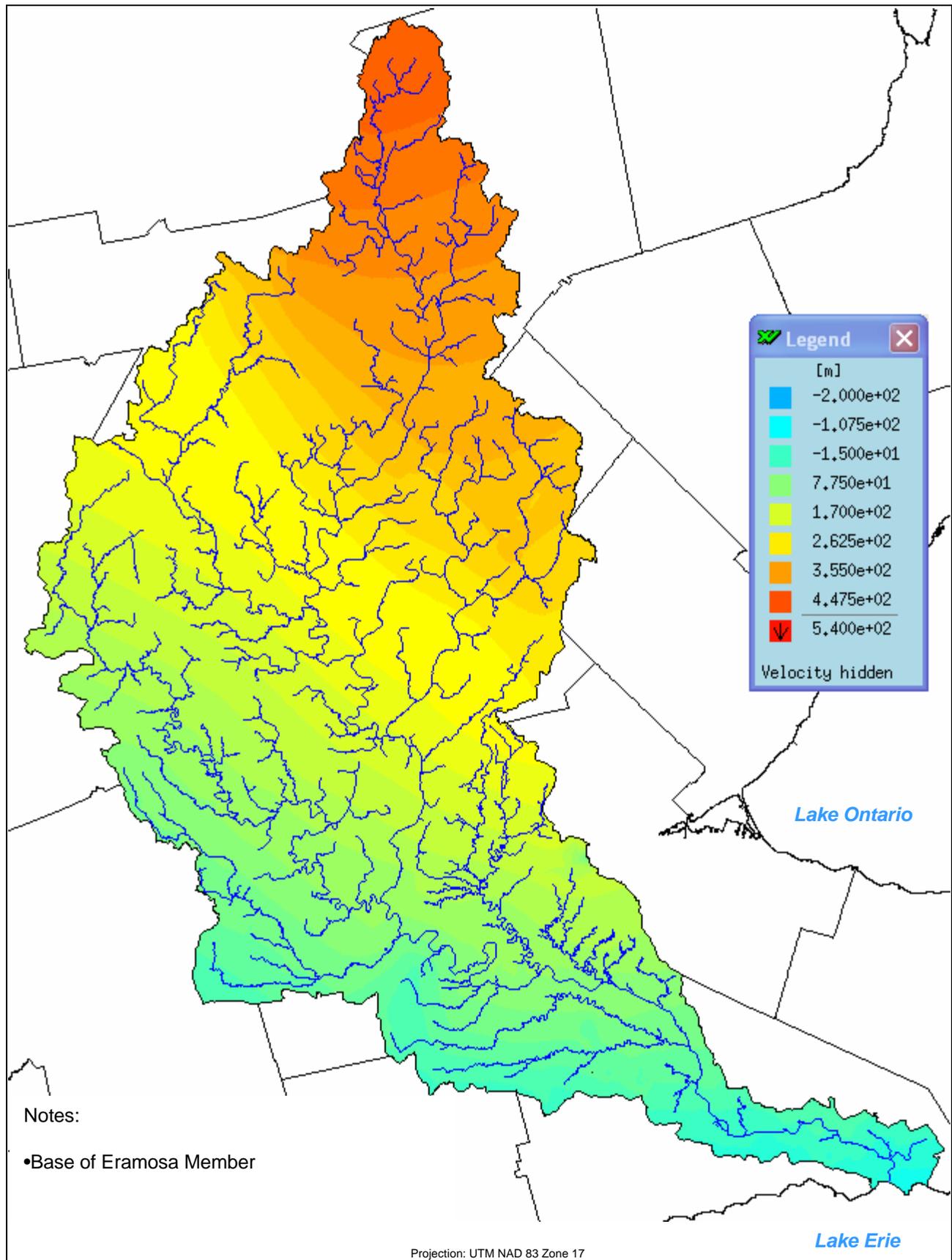
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Figure M4: Layer Elevation for Slice 13

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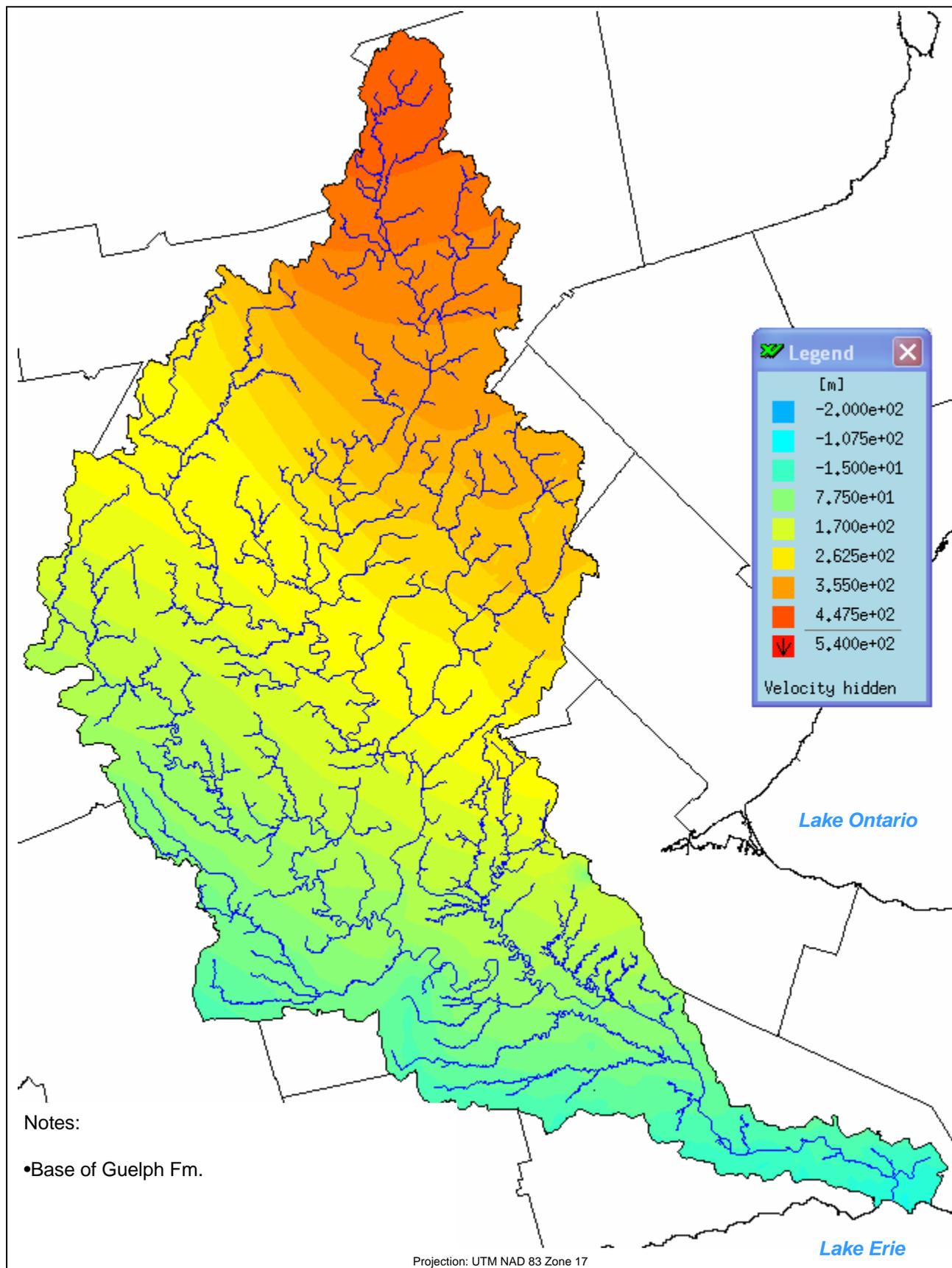
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Figure M5: Layer Elevation for Slice 12

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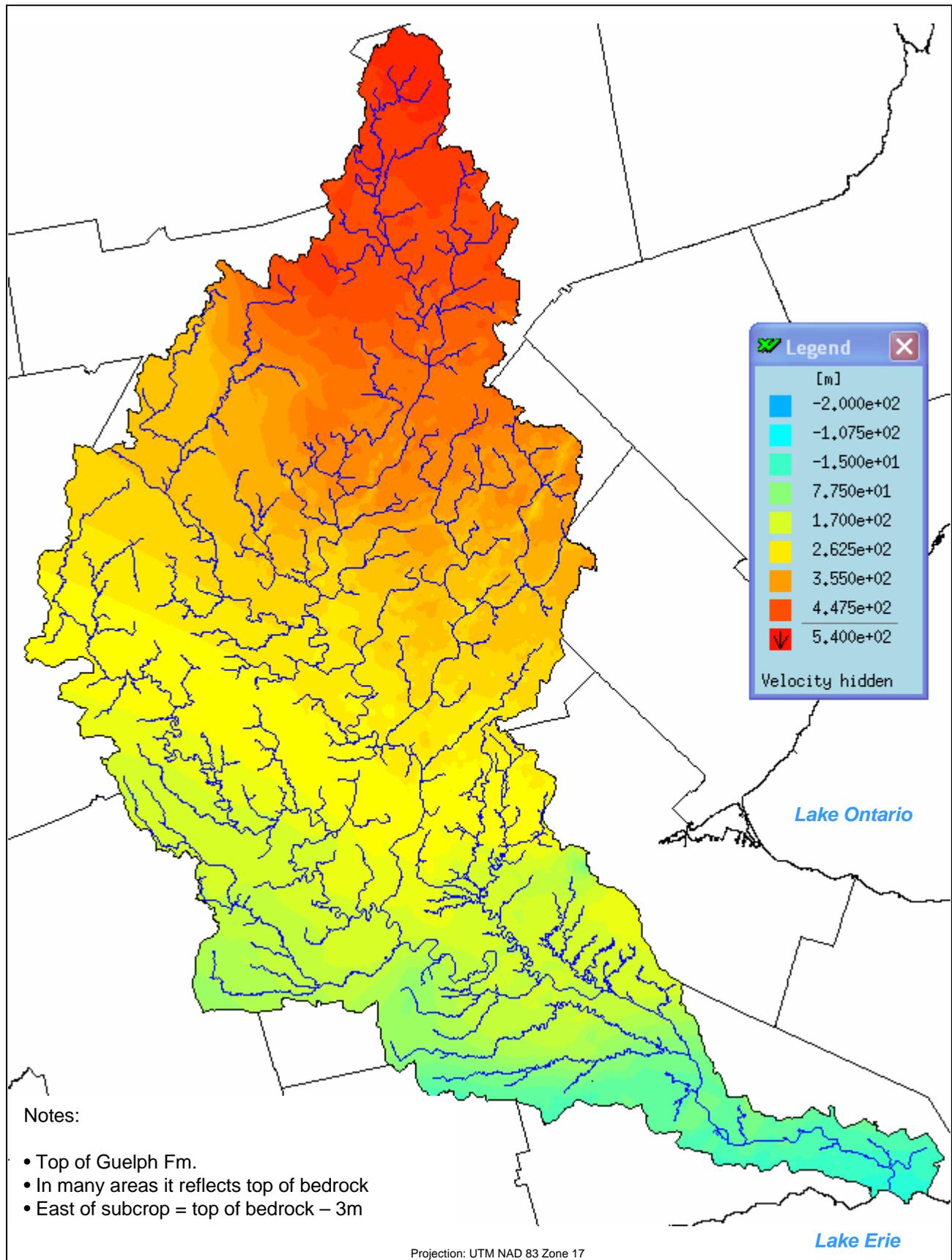


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Figure M6: Layer Elevation for Slice 11



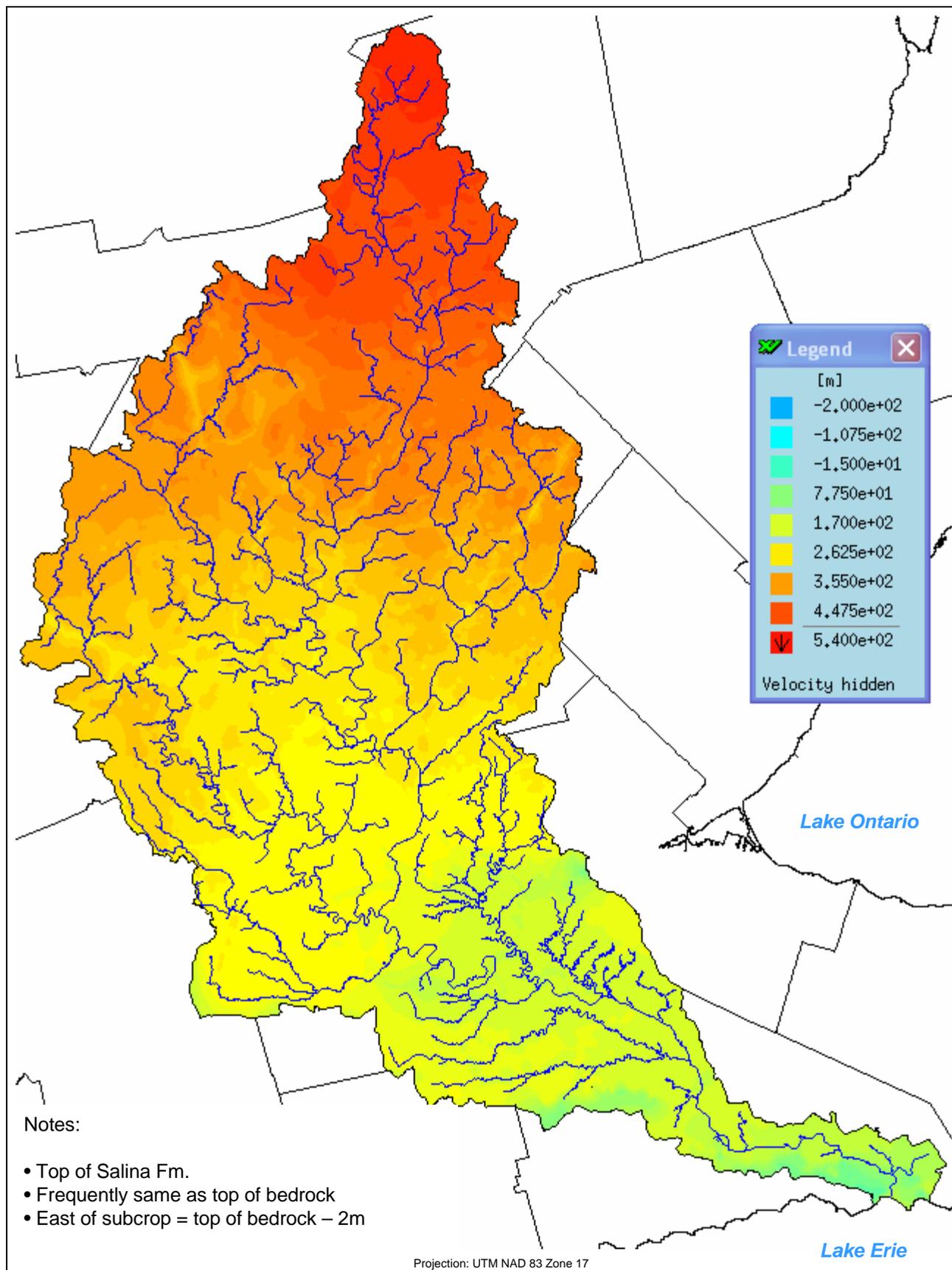
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Figure M7: Layer Elevation for Slice 10

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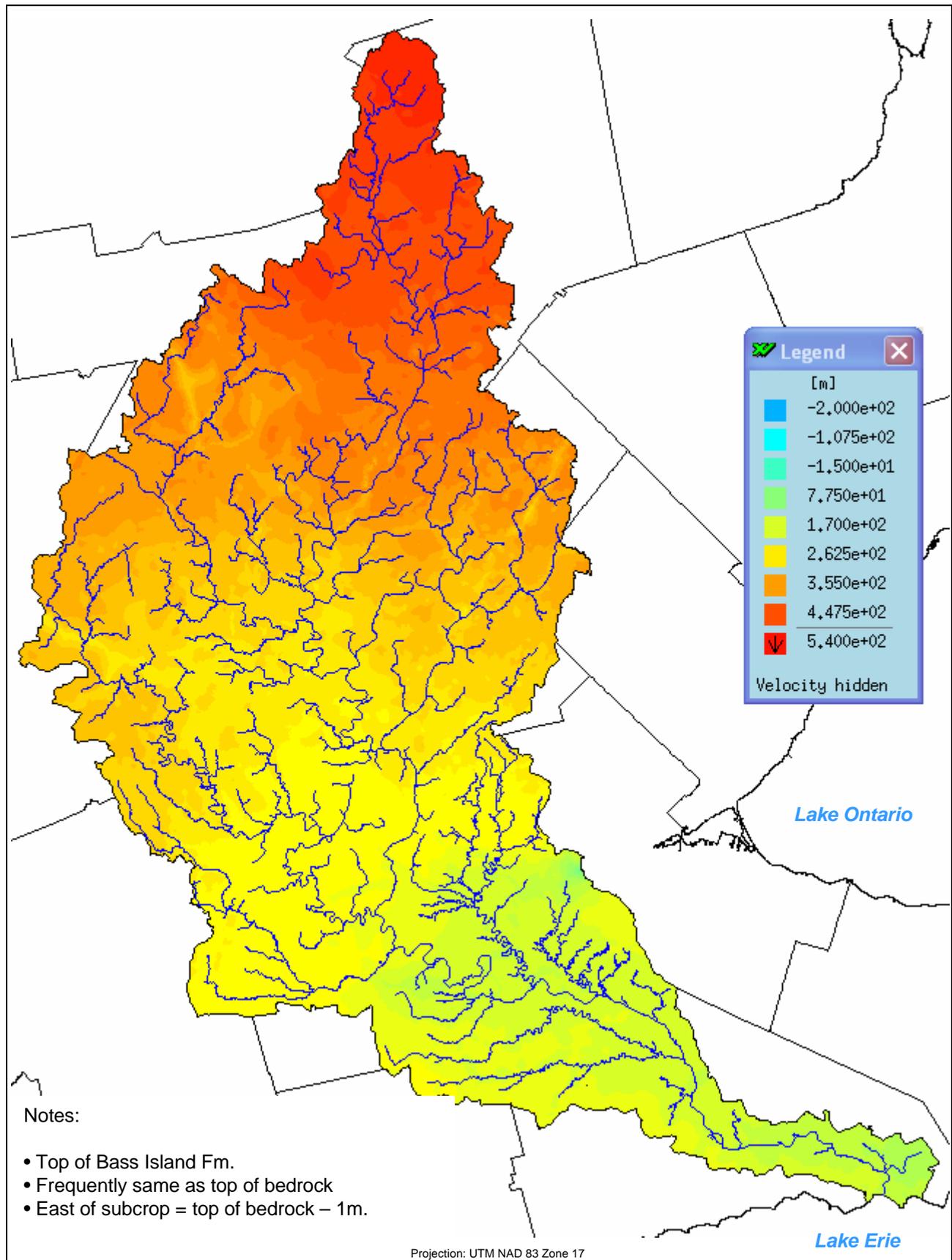
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Figure M8: Layer Elevation for Slice 9

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Figure M9: Layer Elevation for Slice 8

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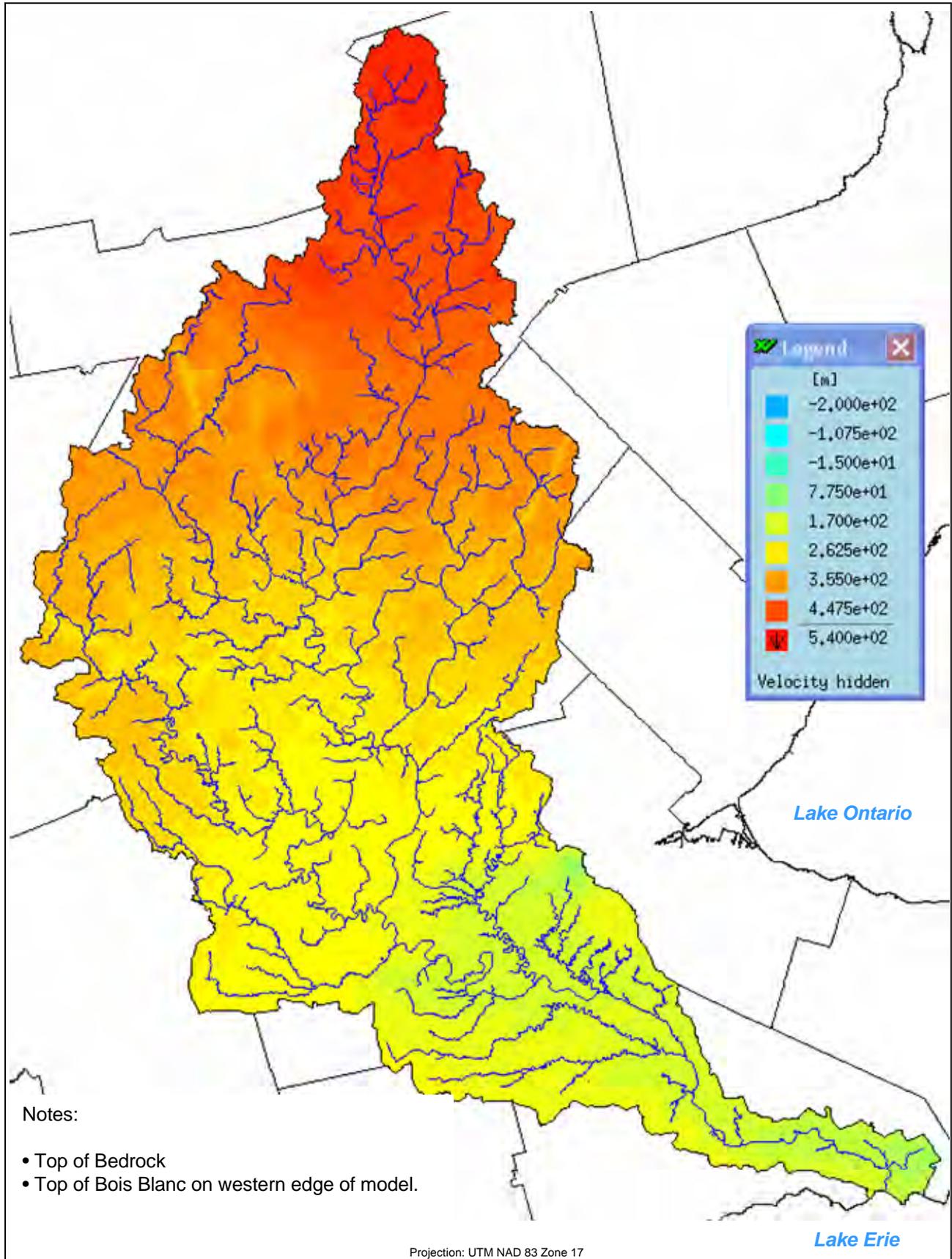


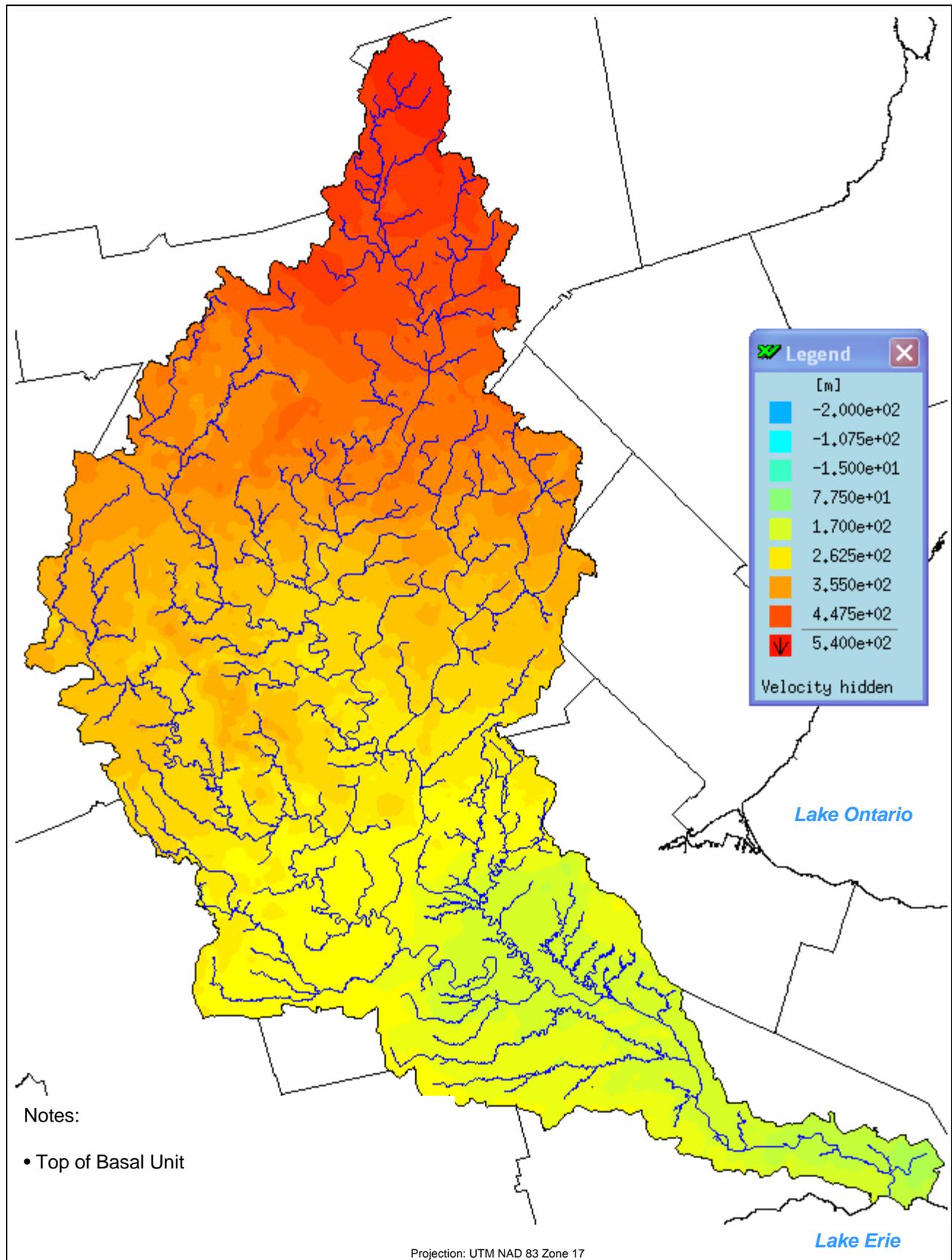
Figure M10: Layer Elevation for Slice 7

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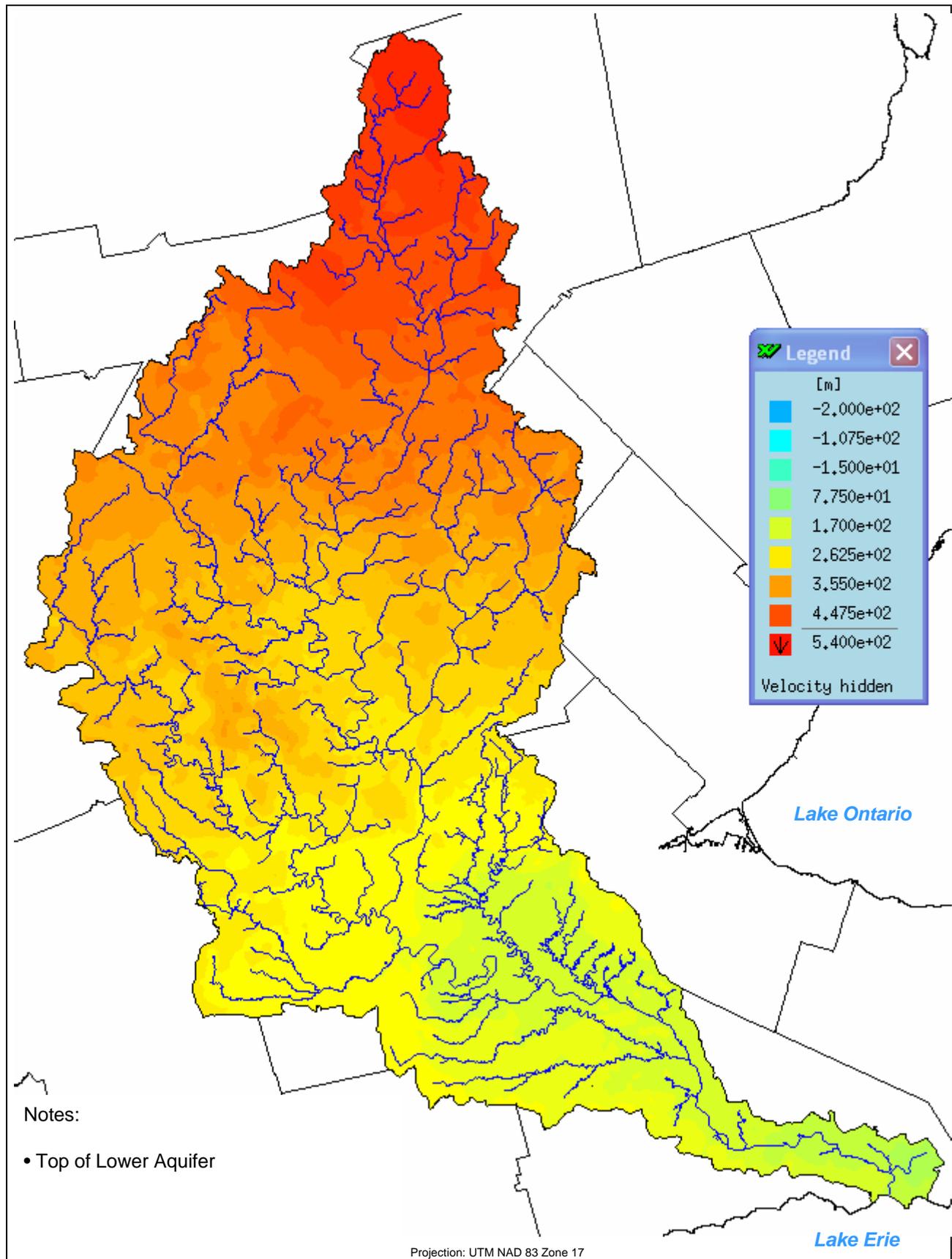
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Figure M11: Layer Elevation for Slice 6

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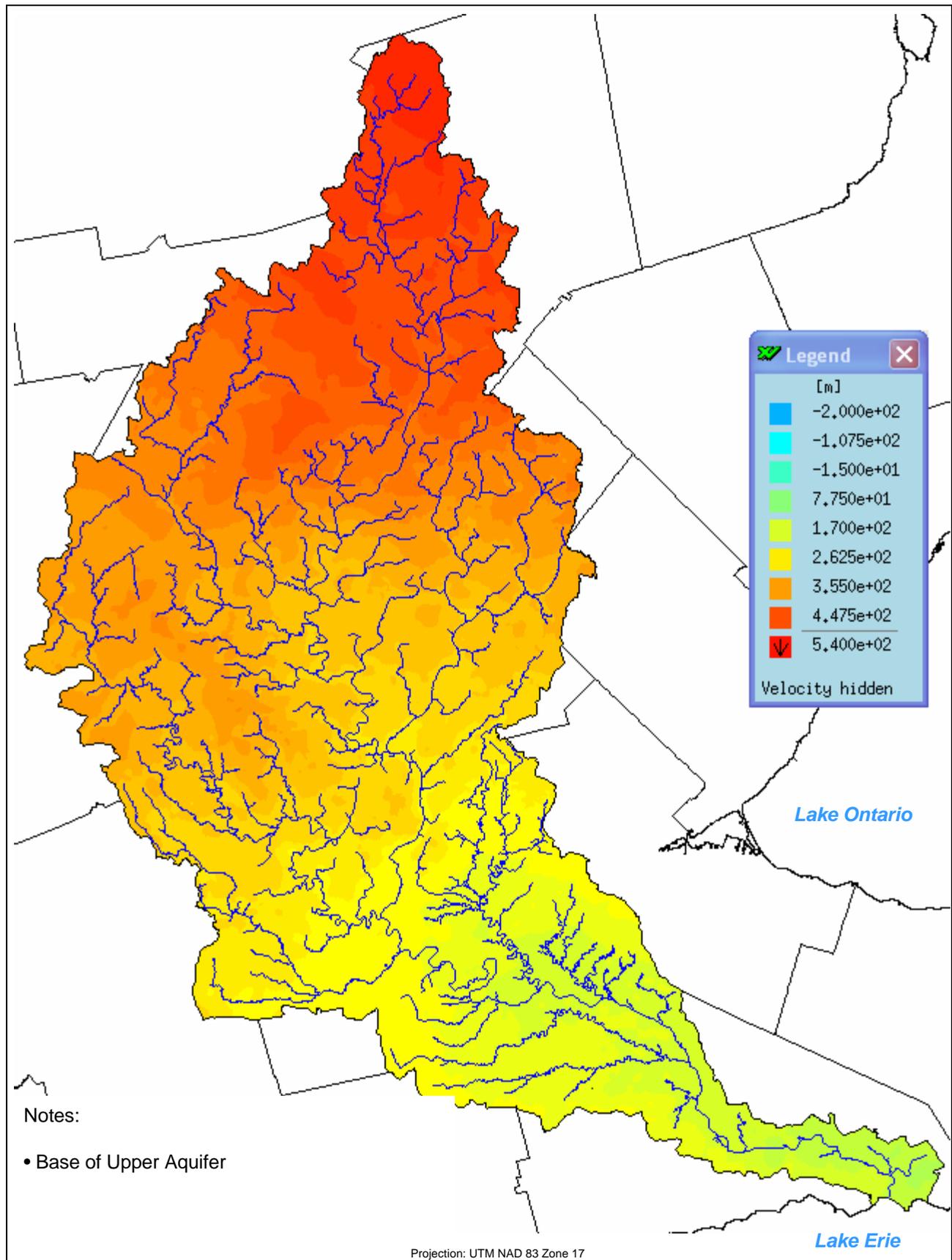
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Figure M12: Layer Elevation for Slice 5

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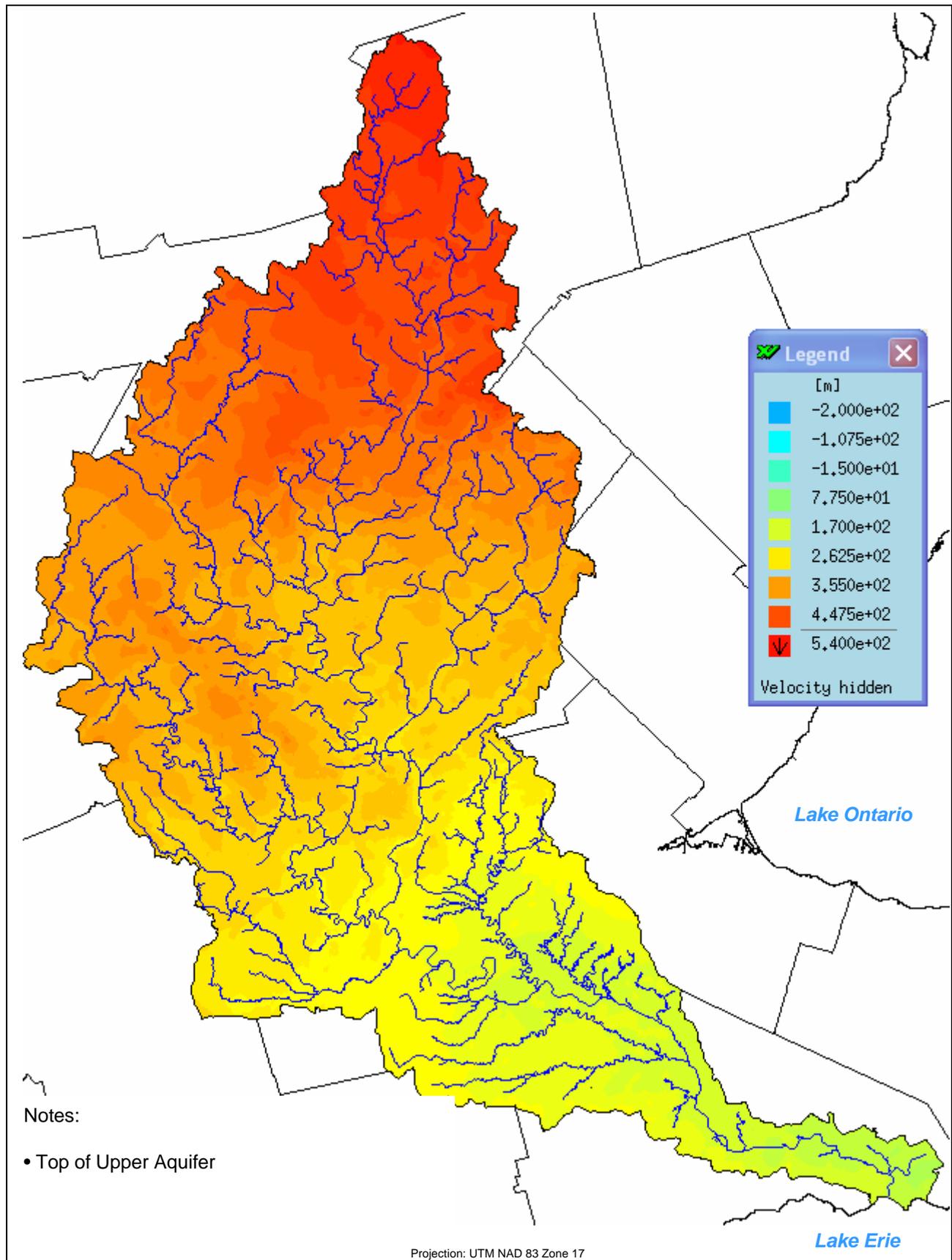
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Figure M13: Layer Elevation for Slice 4

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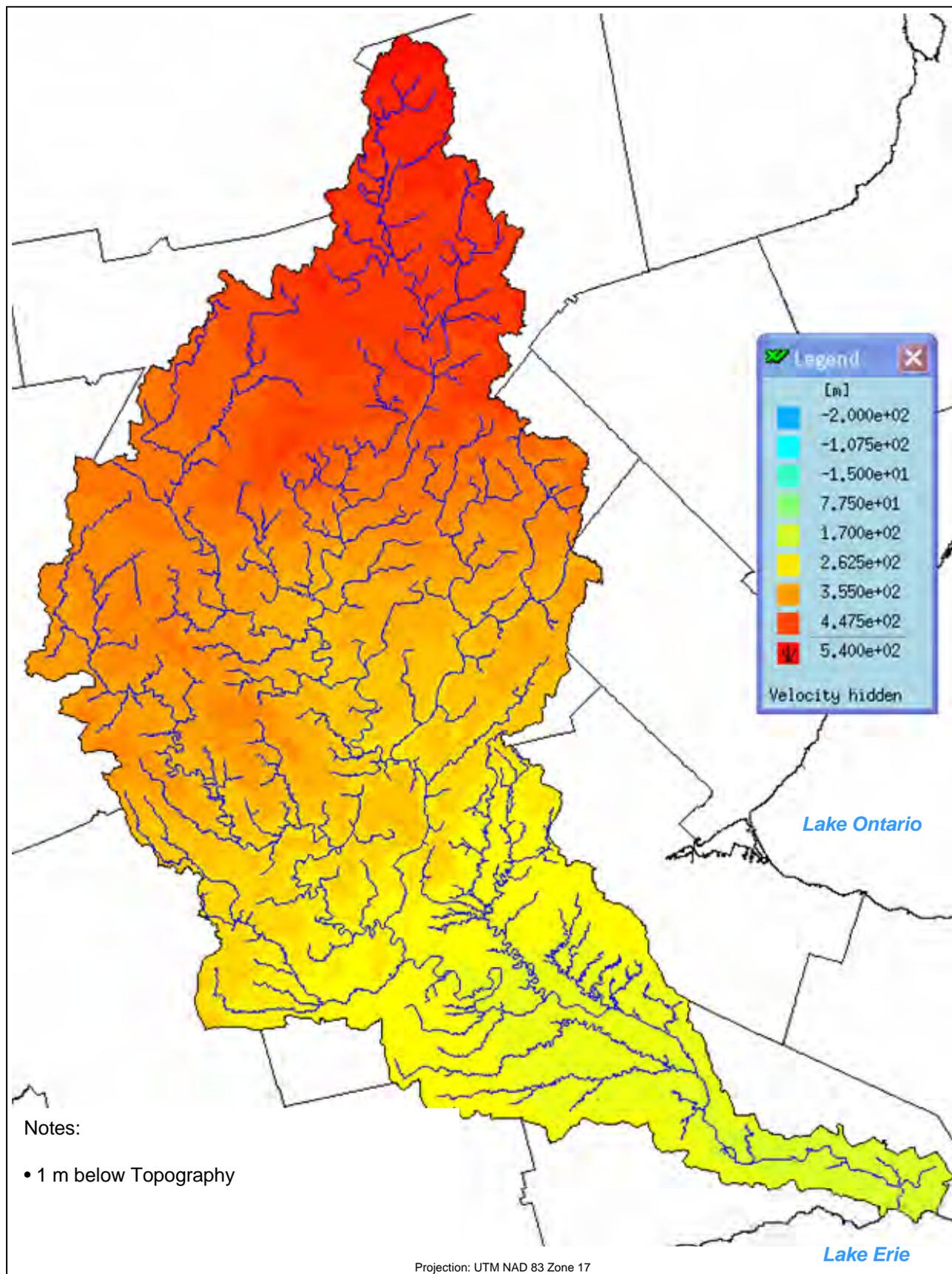
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Figure M14: Layer Elevation for Slice 3

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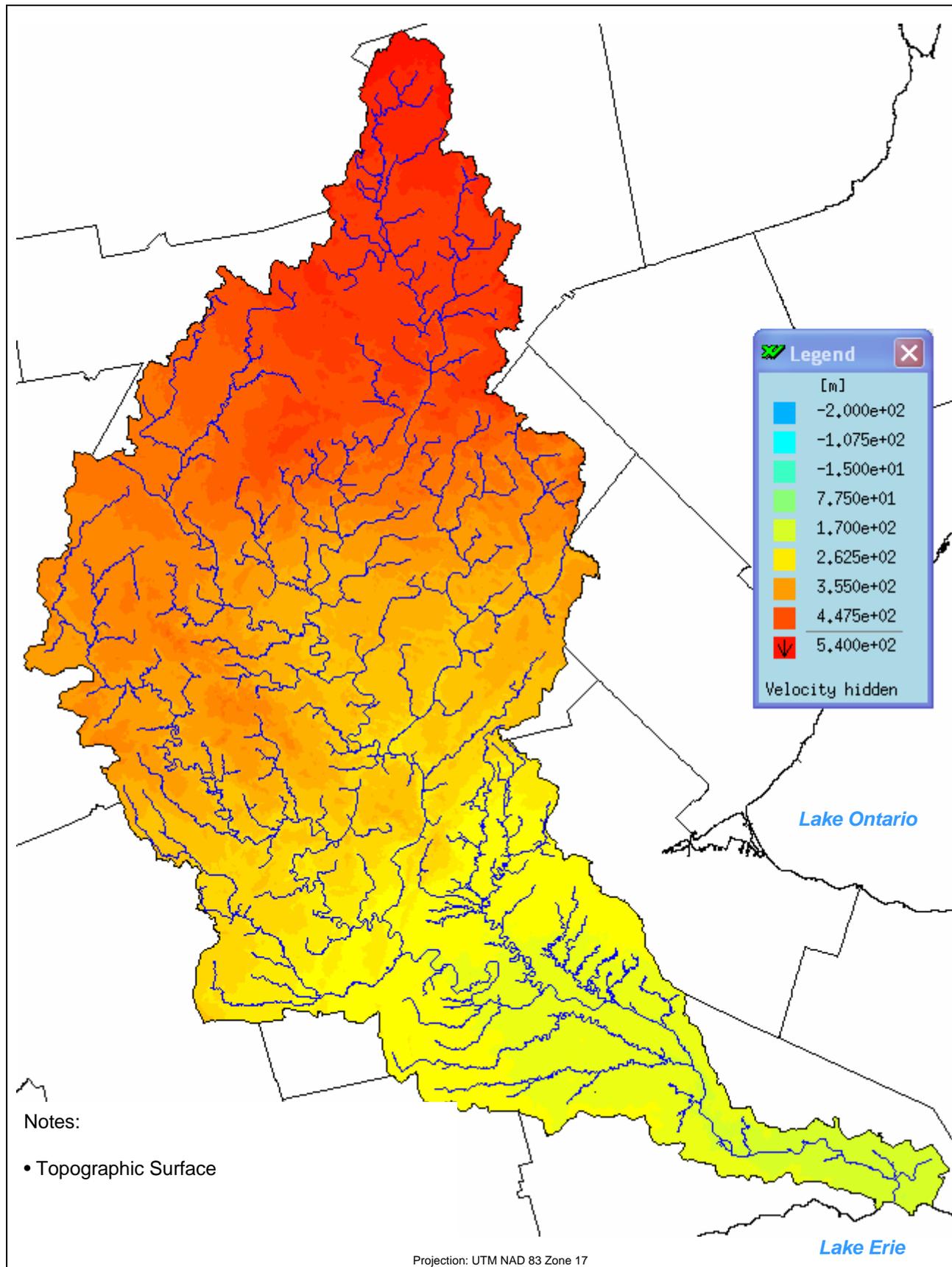


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Figure M15: Layer Elevation for Slice 2

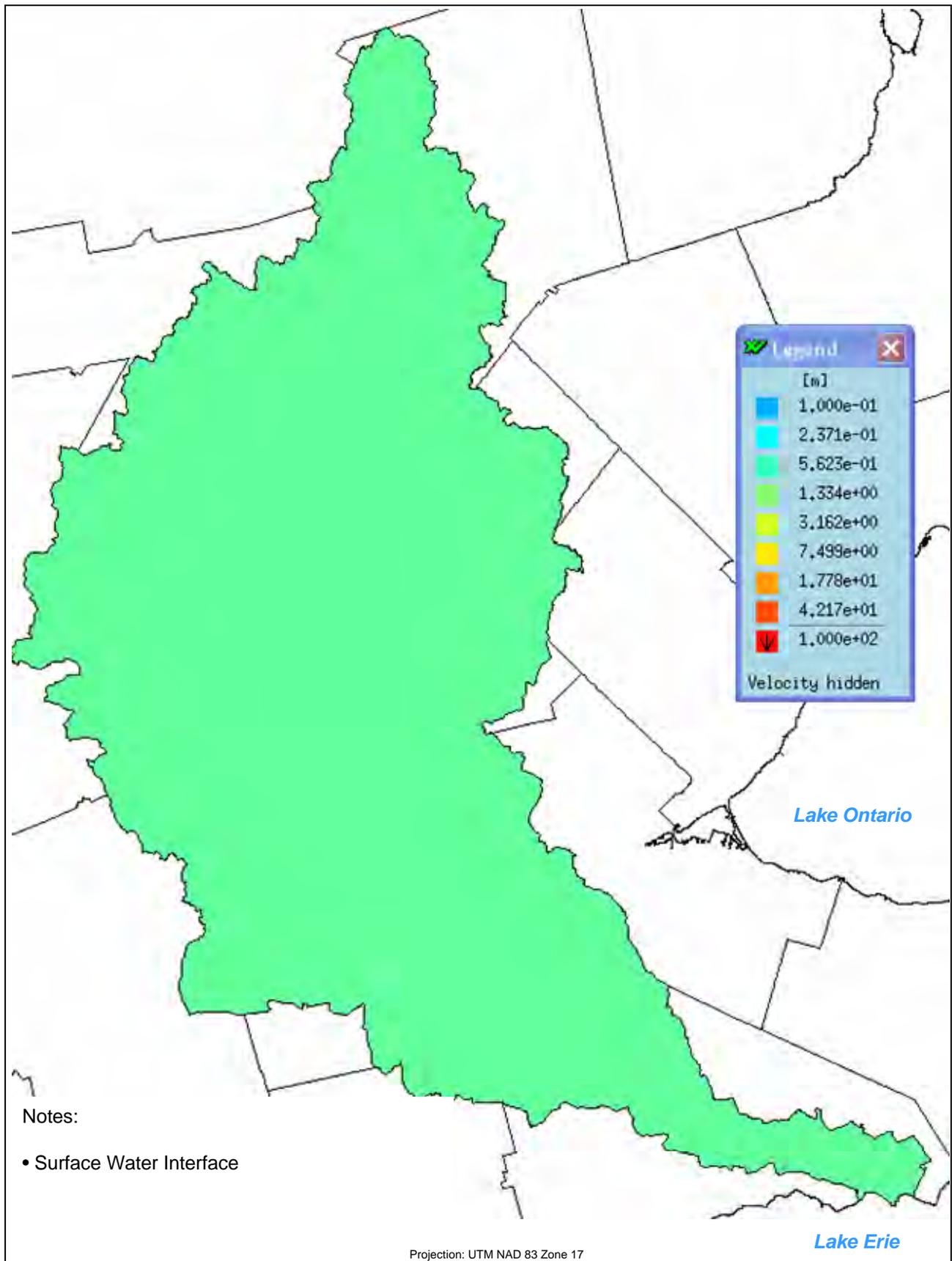


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Figure M16: Layer Elevation for Slice 1



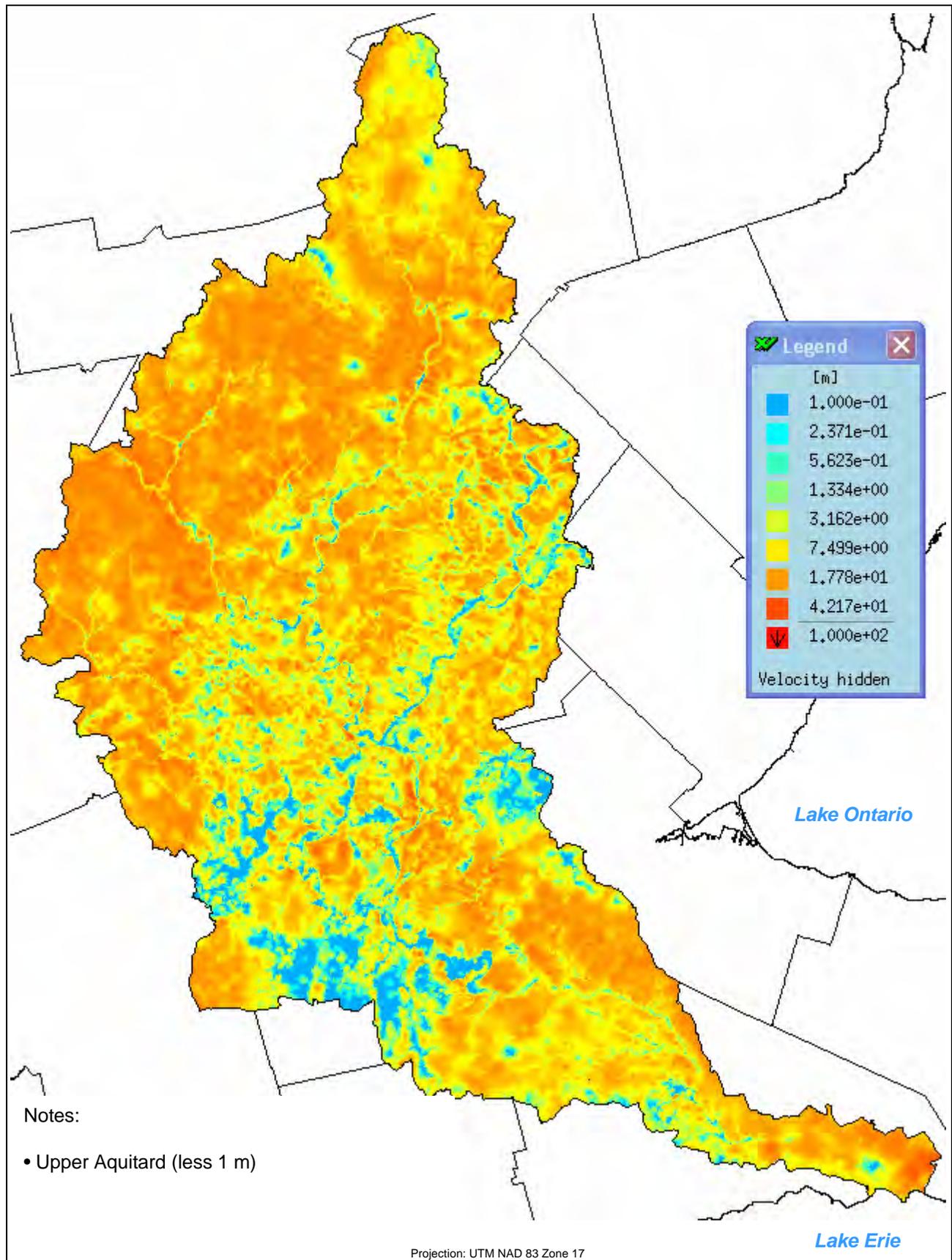
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Figure M17: Thickness of Layer 1

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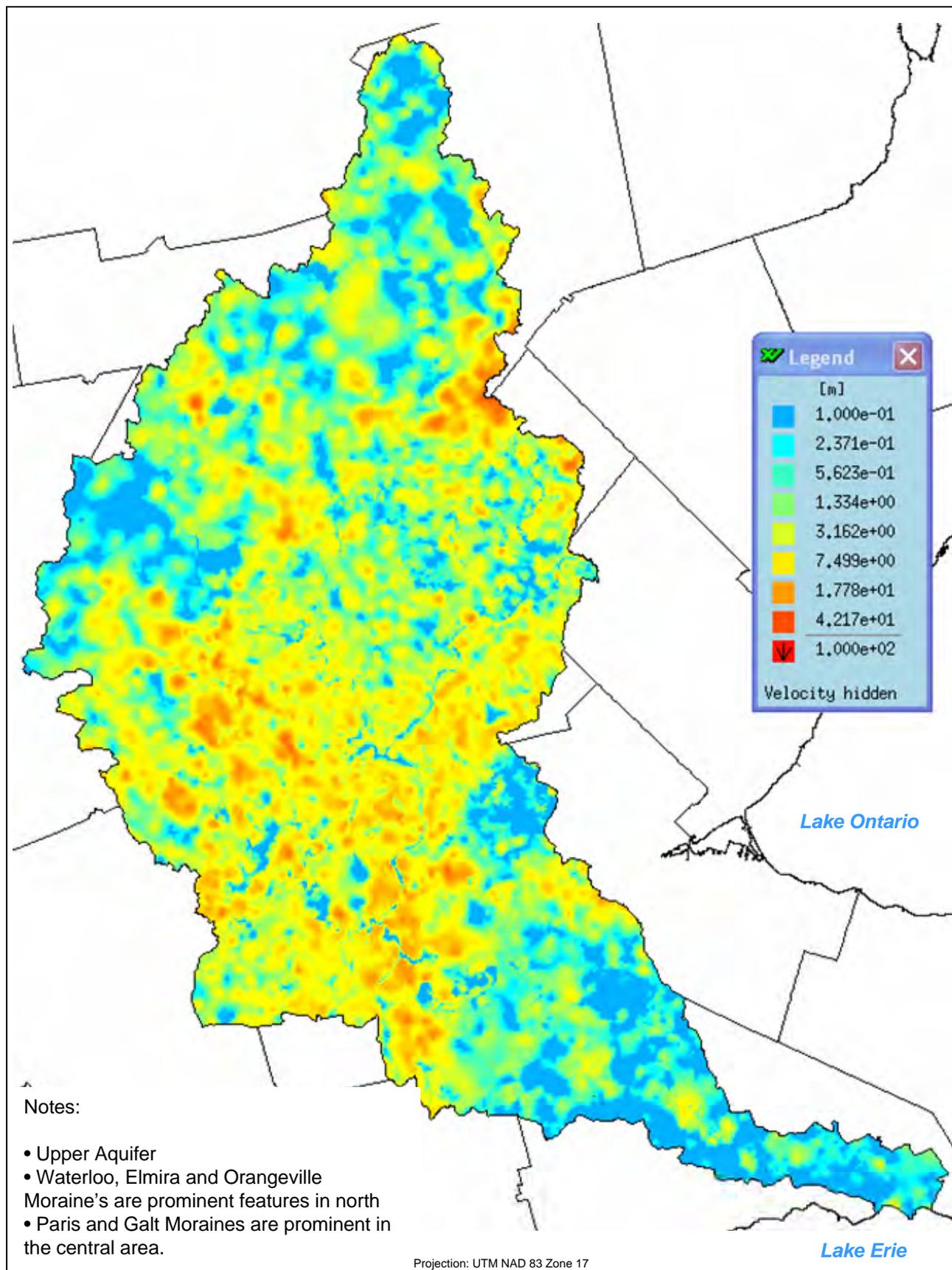
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Figure M18: Thickness of Layer 2

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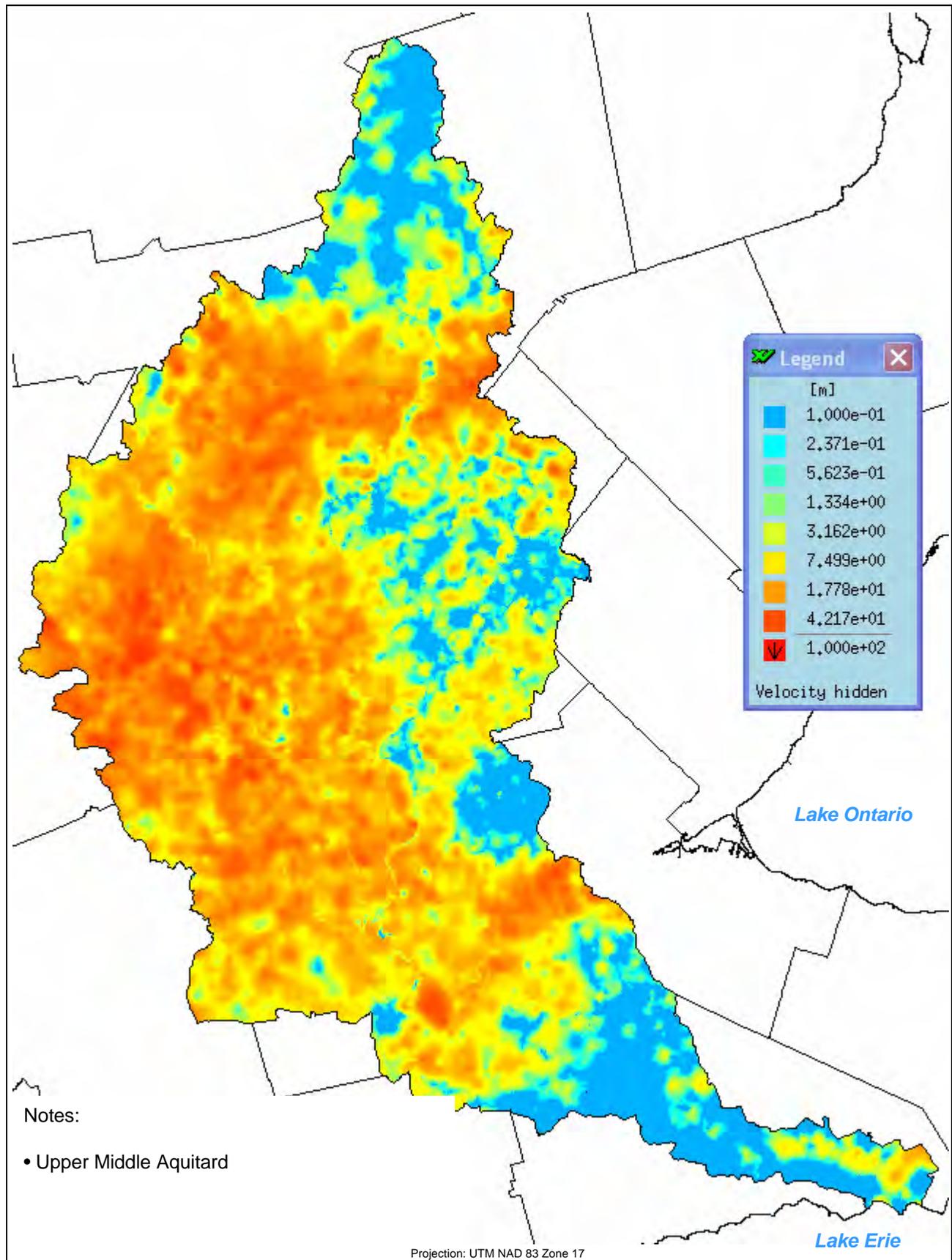


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Figure M19: Thickness of Layer 3



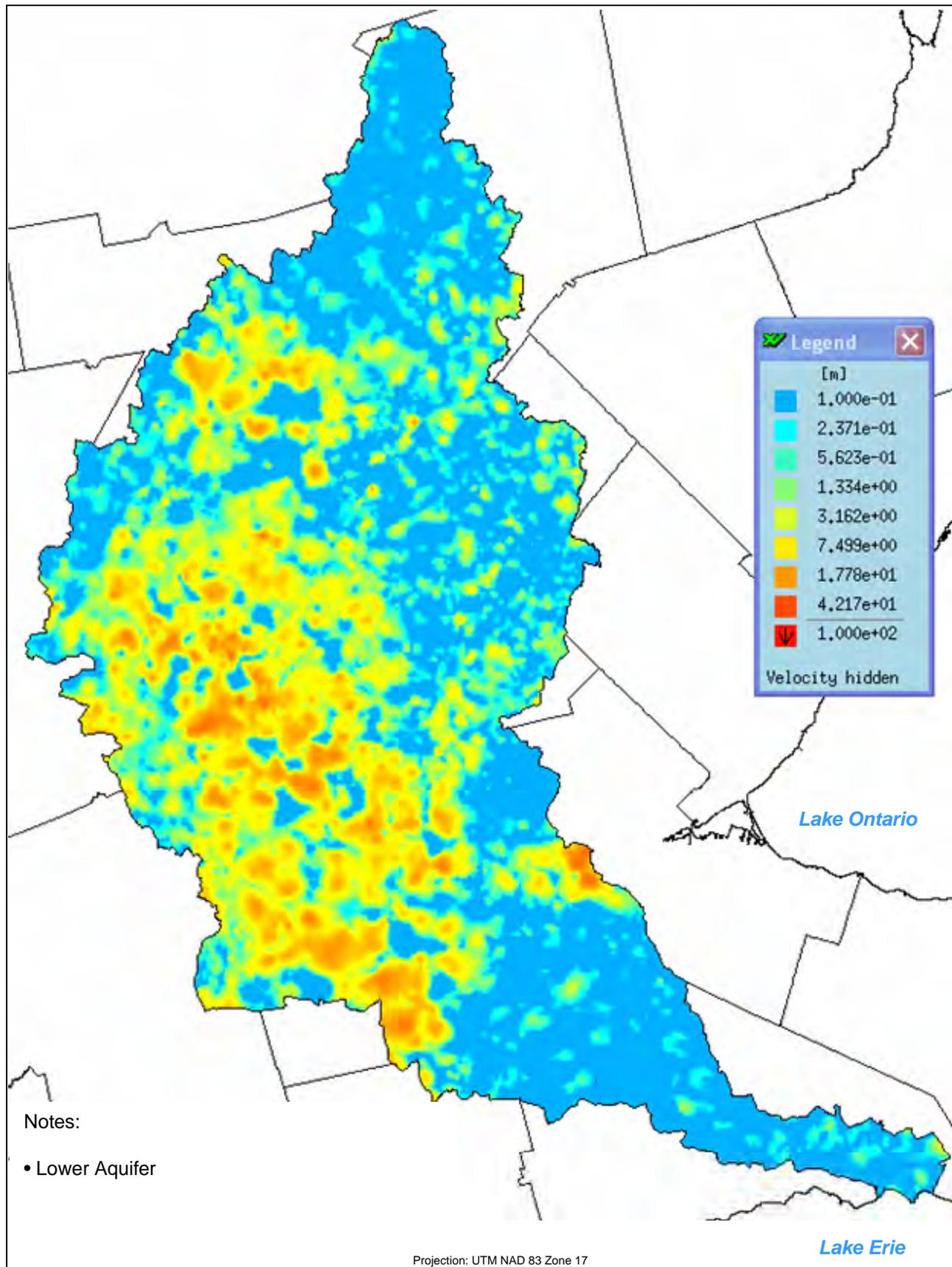
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Figure M20: Thickness of Layer 4

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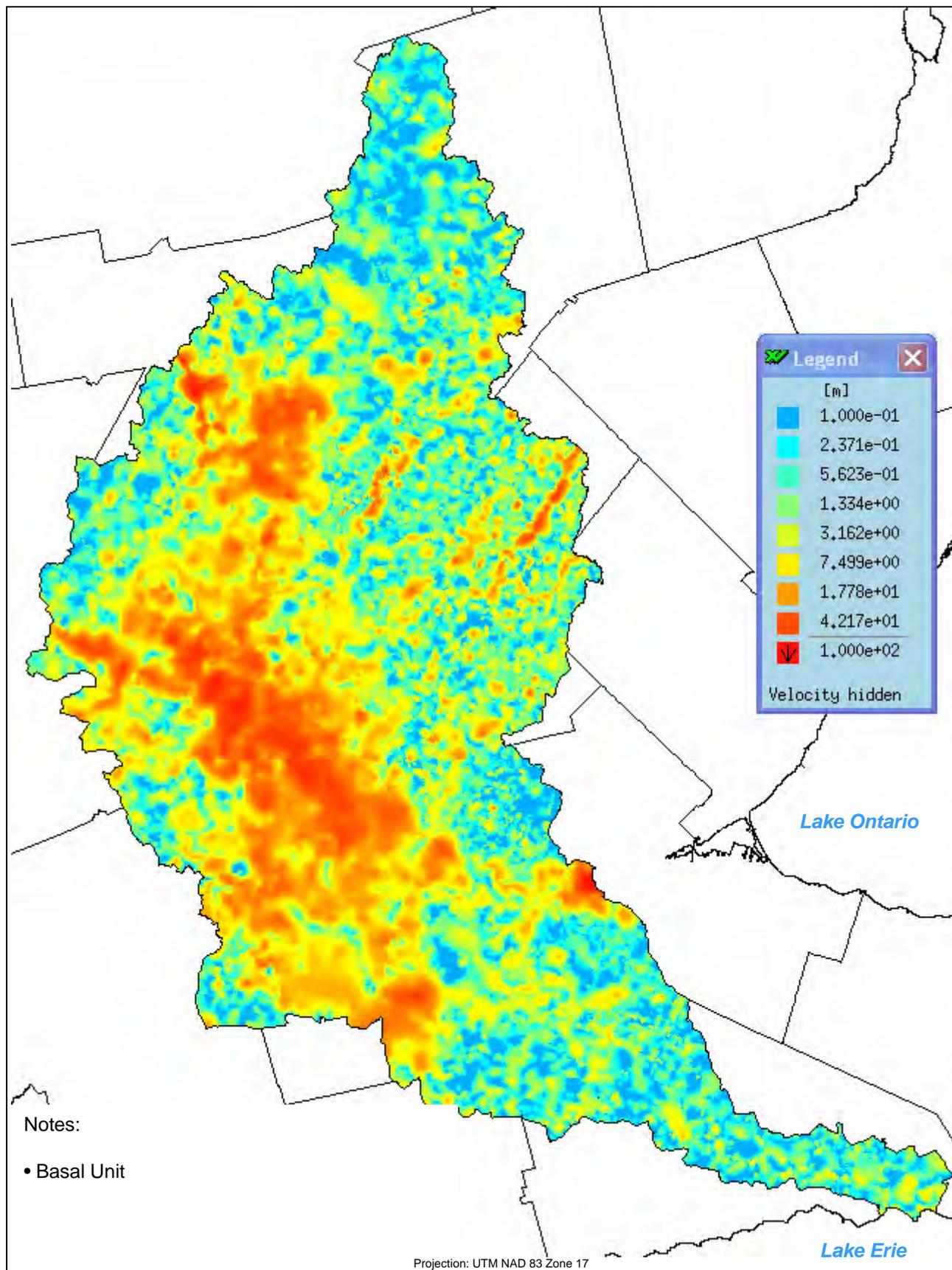
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Figure M21: Thickness of Layer 5

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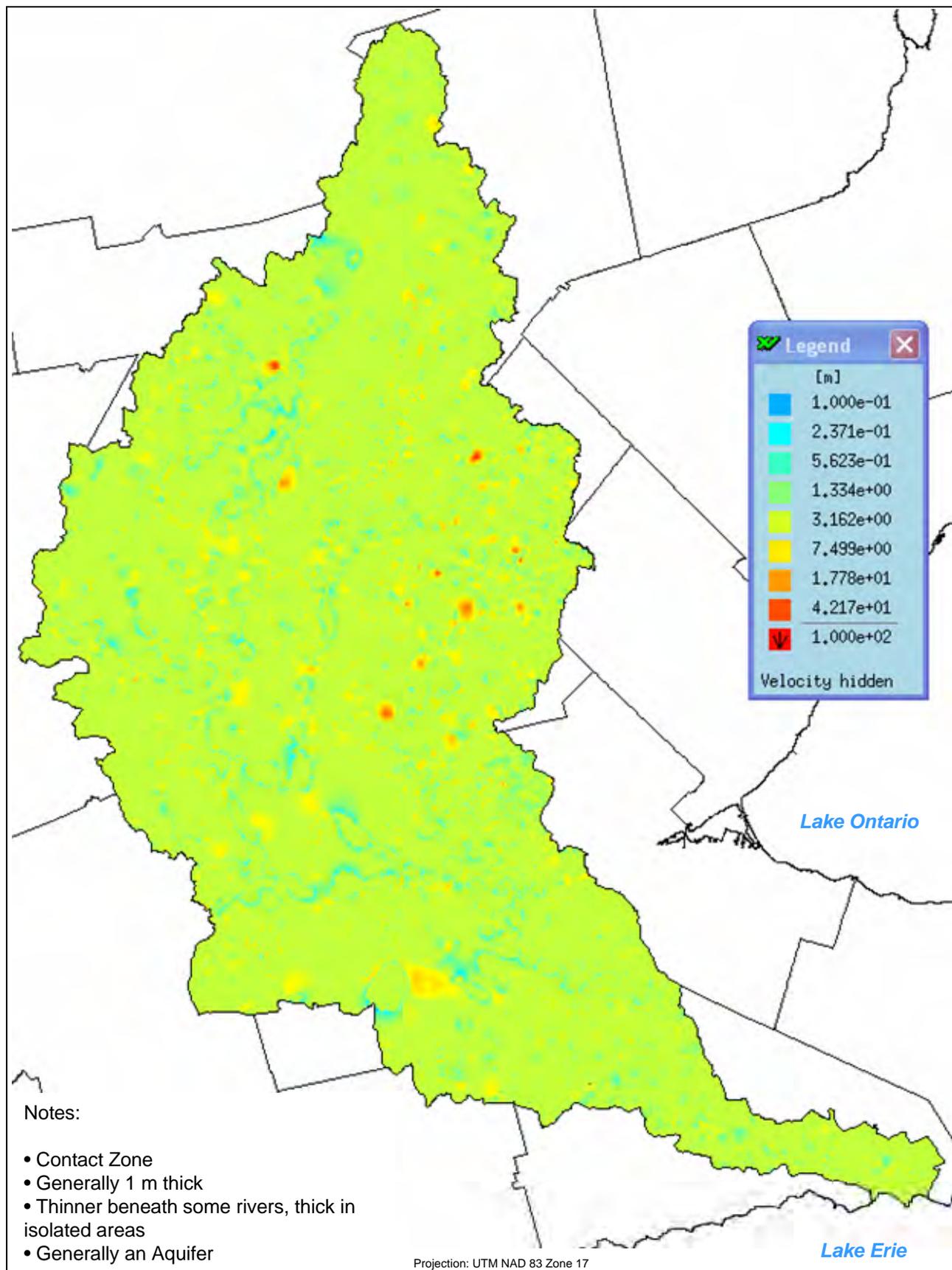
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Figure M22: Thickness of Layer 6

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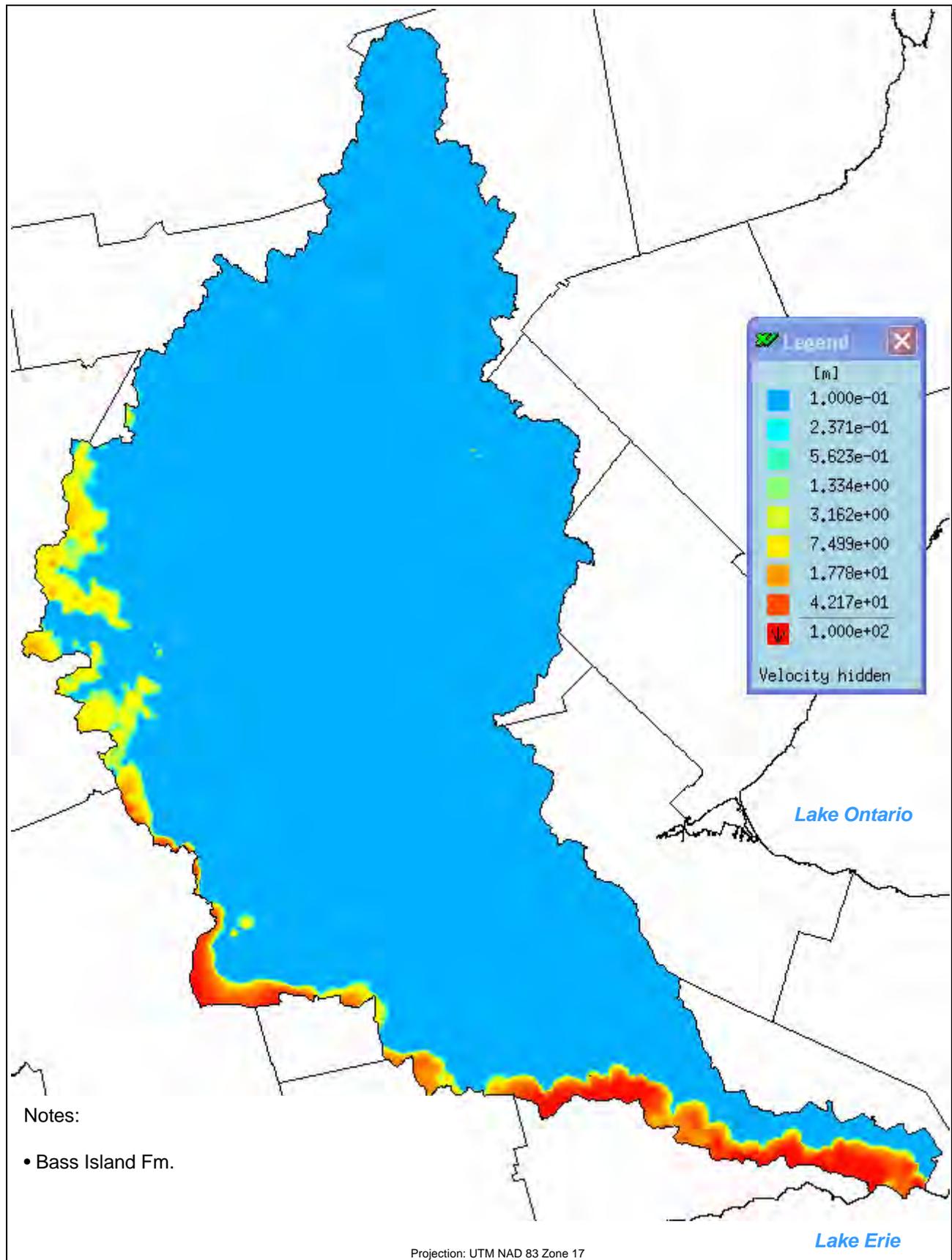


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Figure M23: Thickness of Layer 7



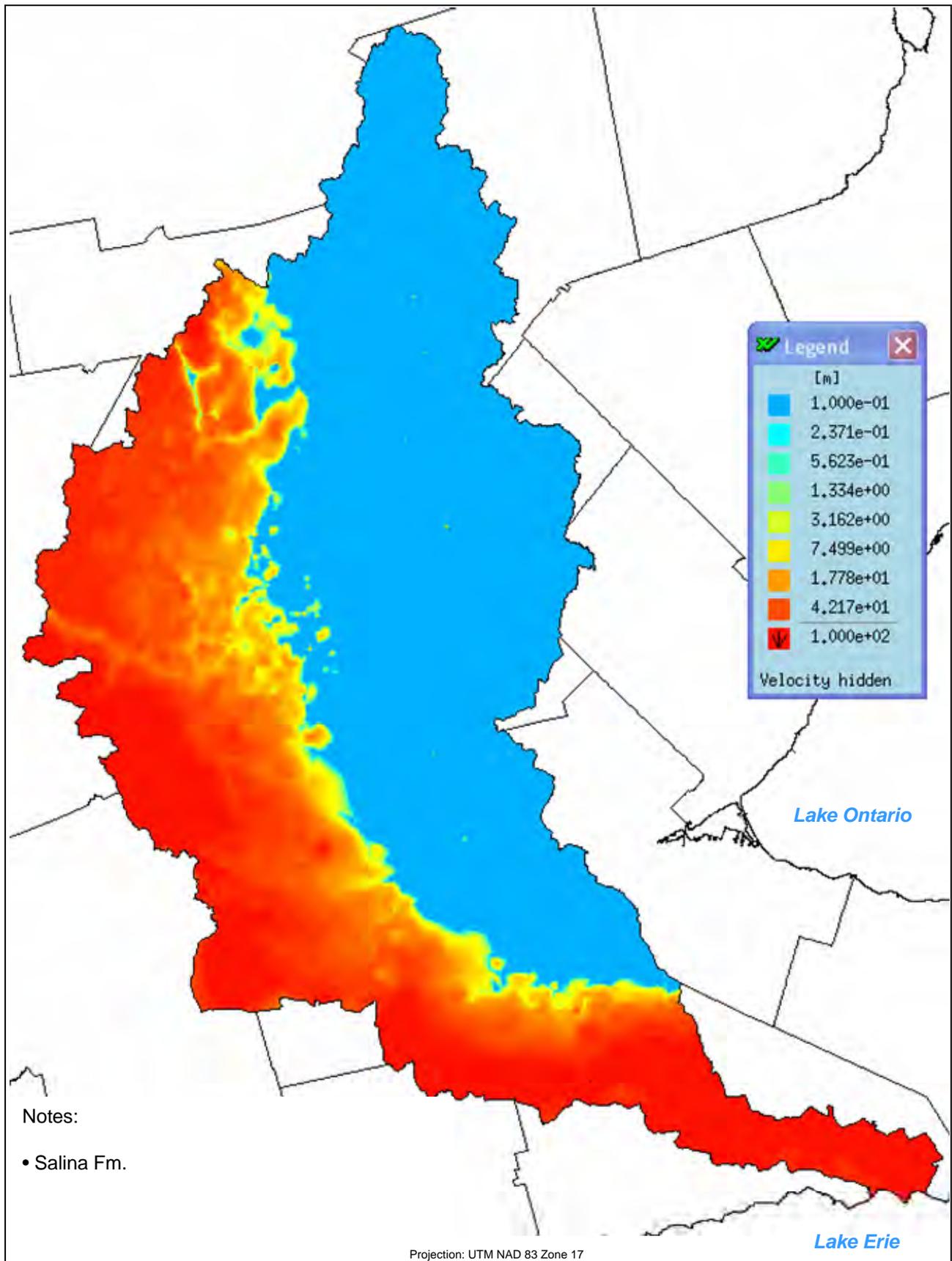
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Figure M24: Thickness of Layer 8

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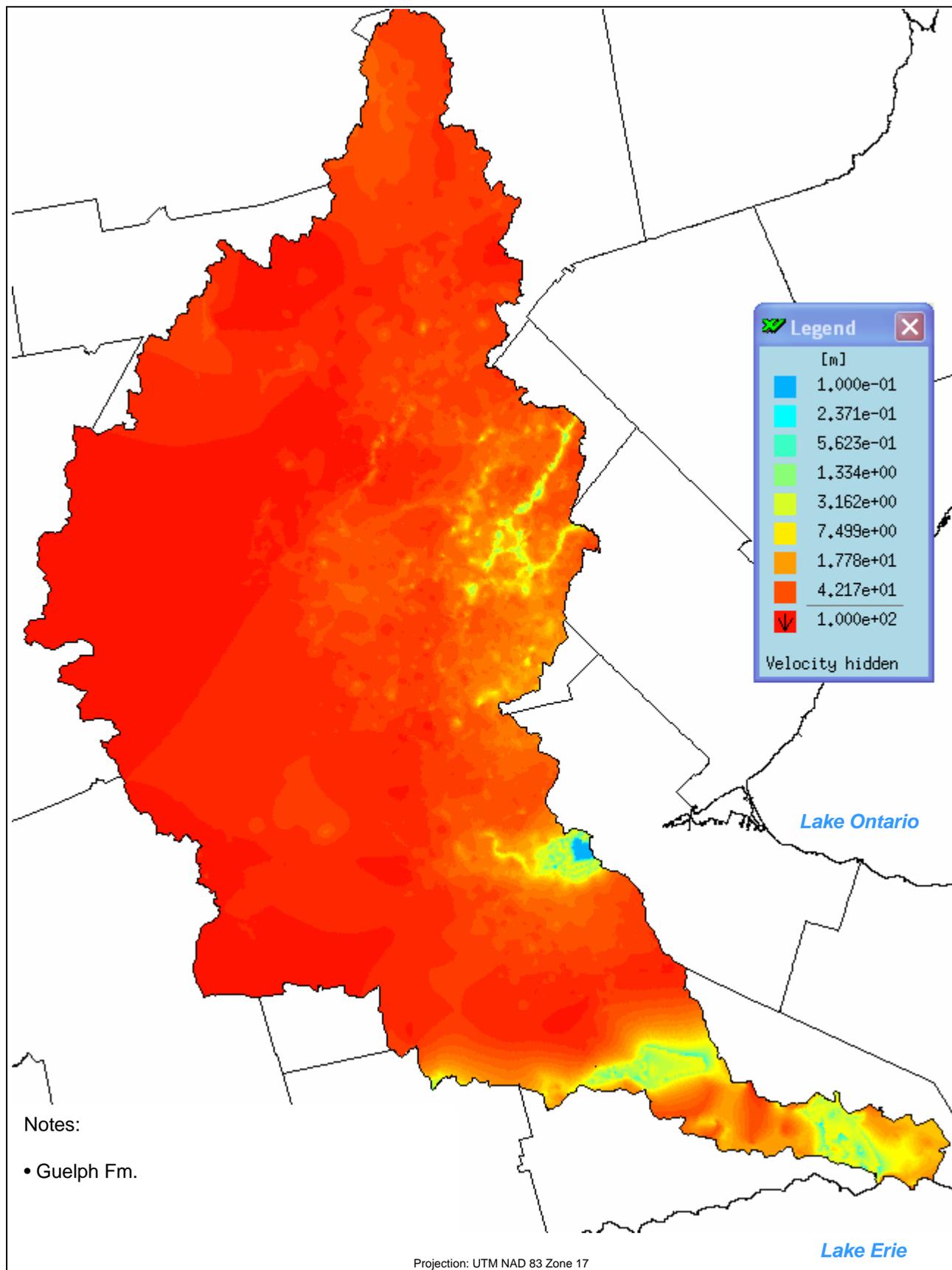


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Figure M25: Thickness of Layer 9

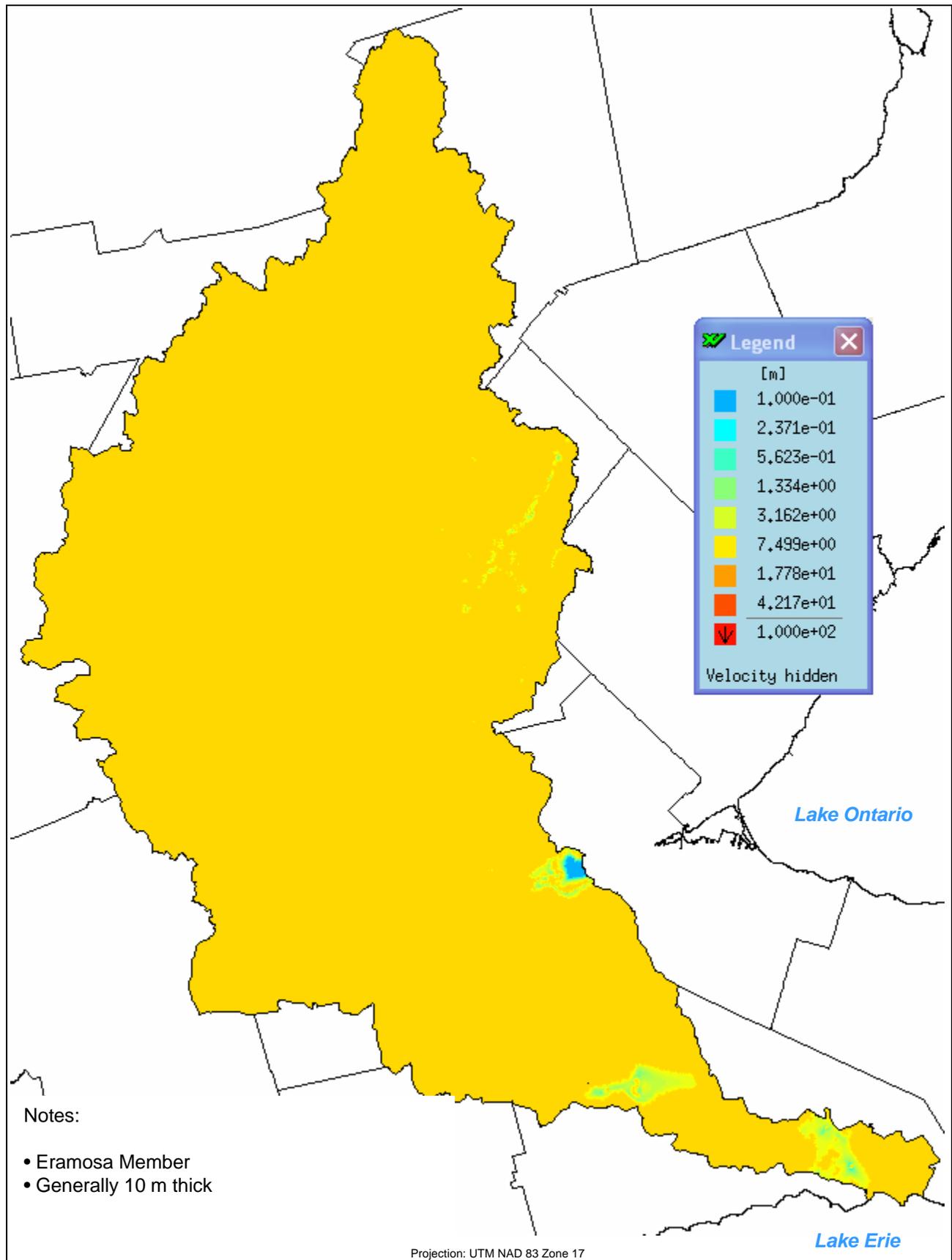


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Figure M26: Thickness of Layer 10

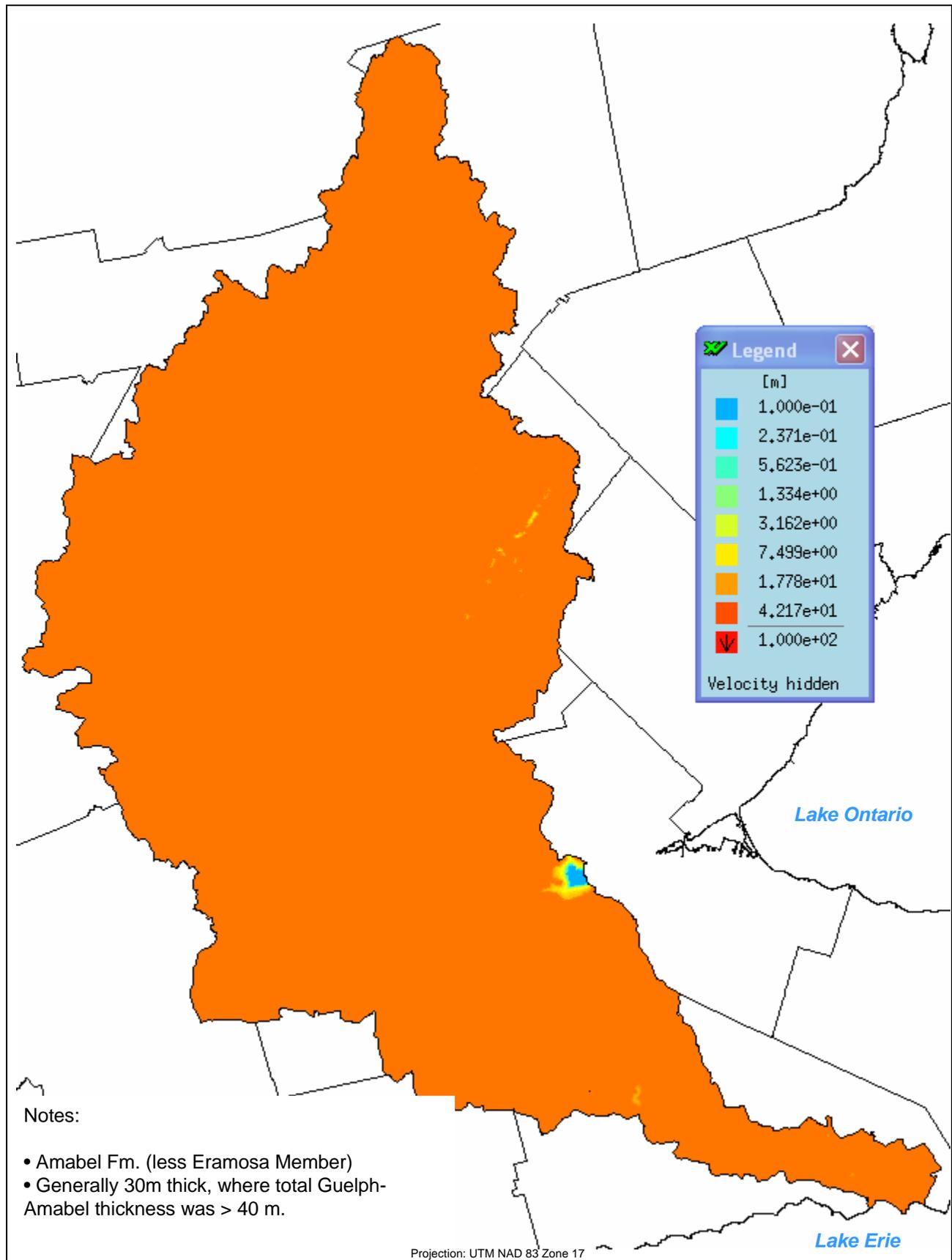


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Figure M27: Thickness of Layer 11



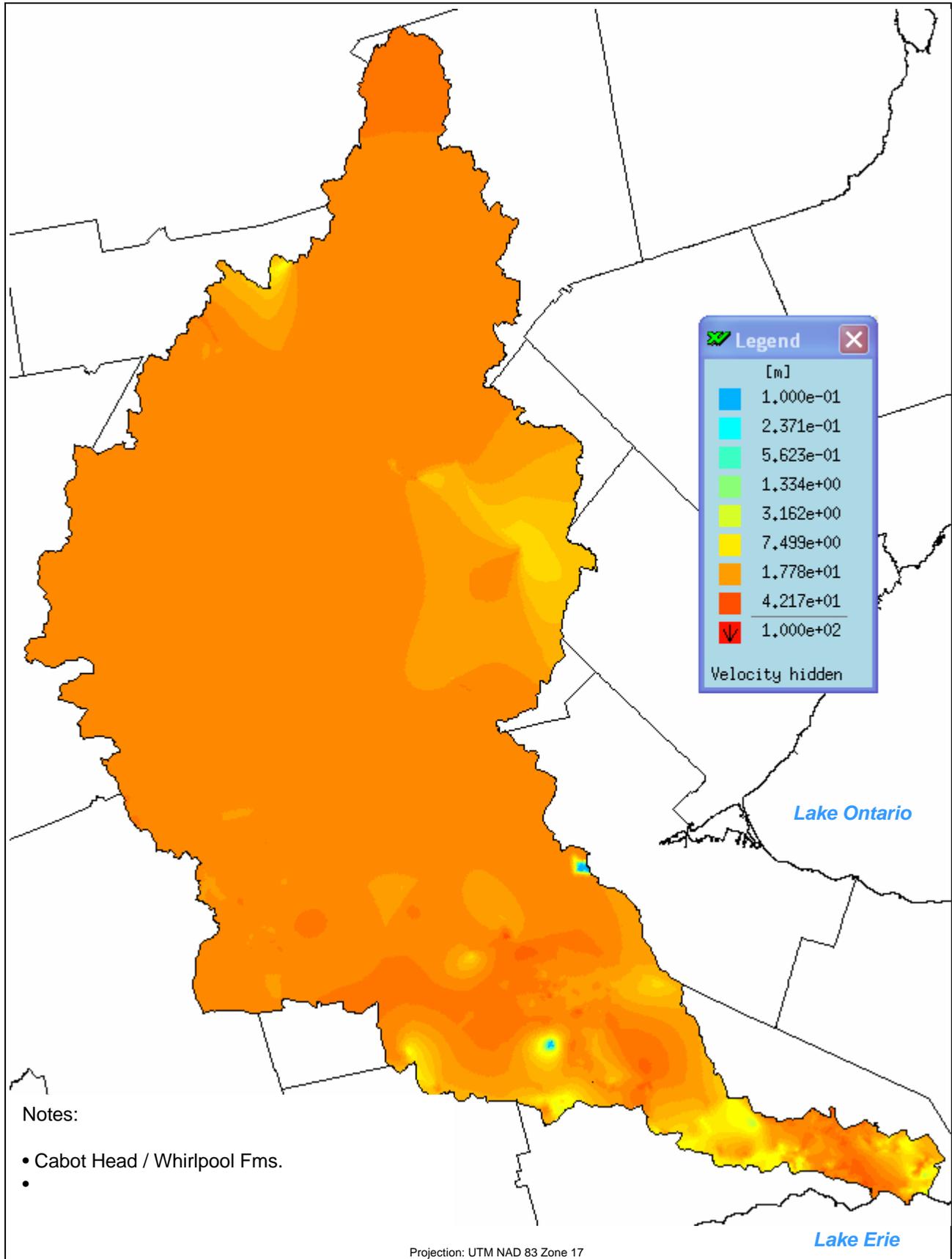
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Figure M28: Thickness of Layer 12

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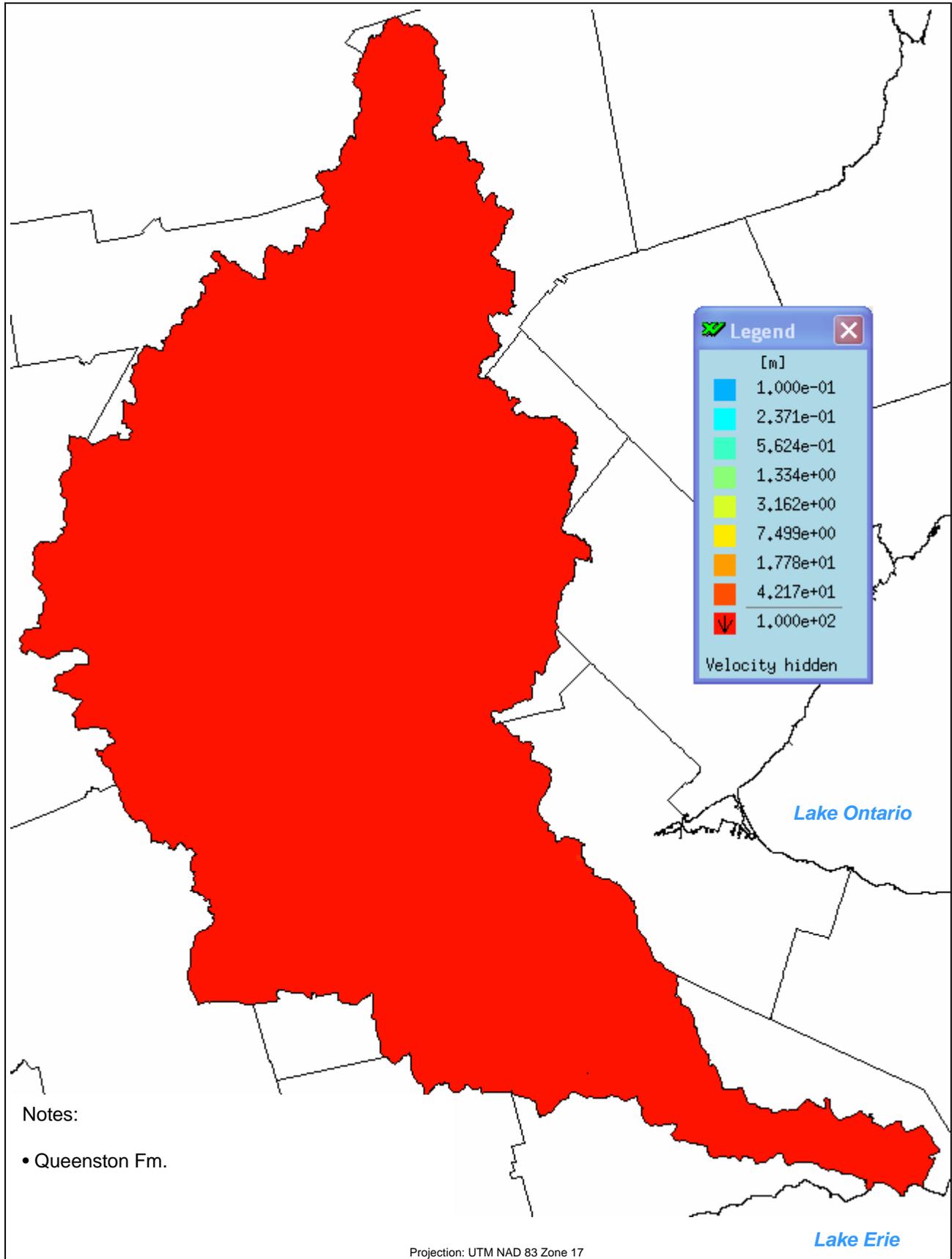


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Figure M29: Thickness of Layer 13

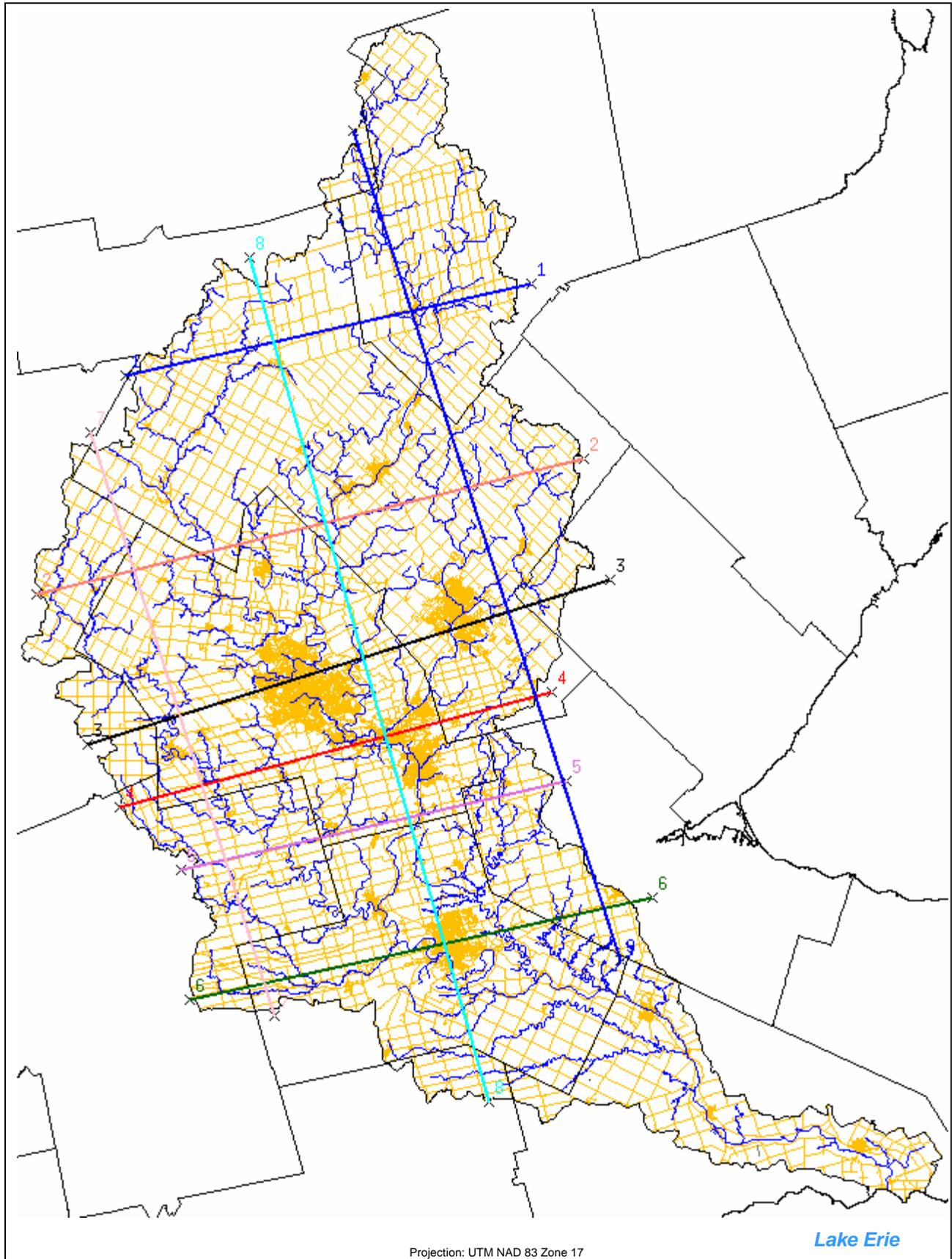


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Figure M30: Thickness of Layer 14



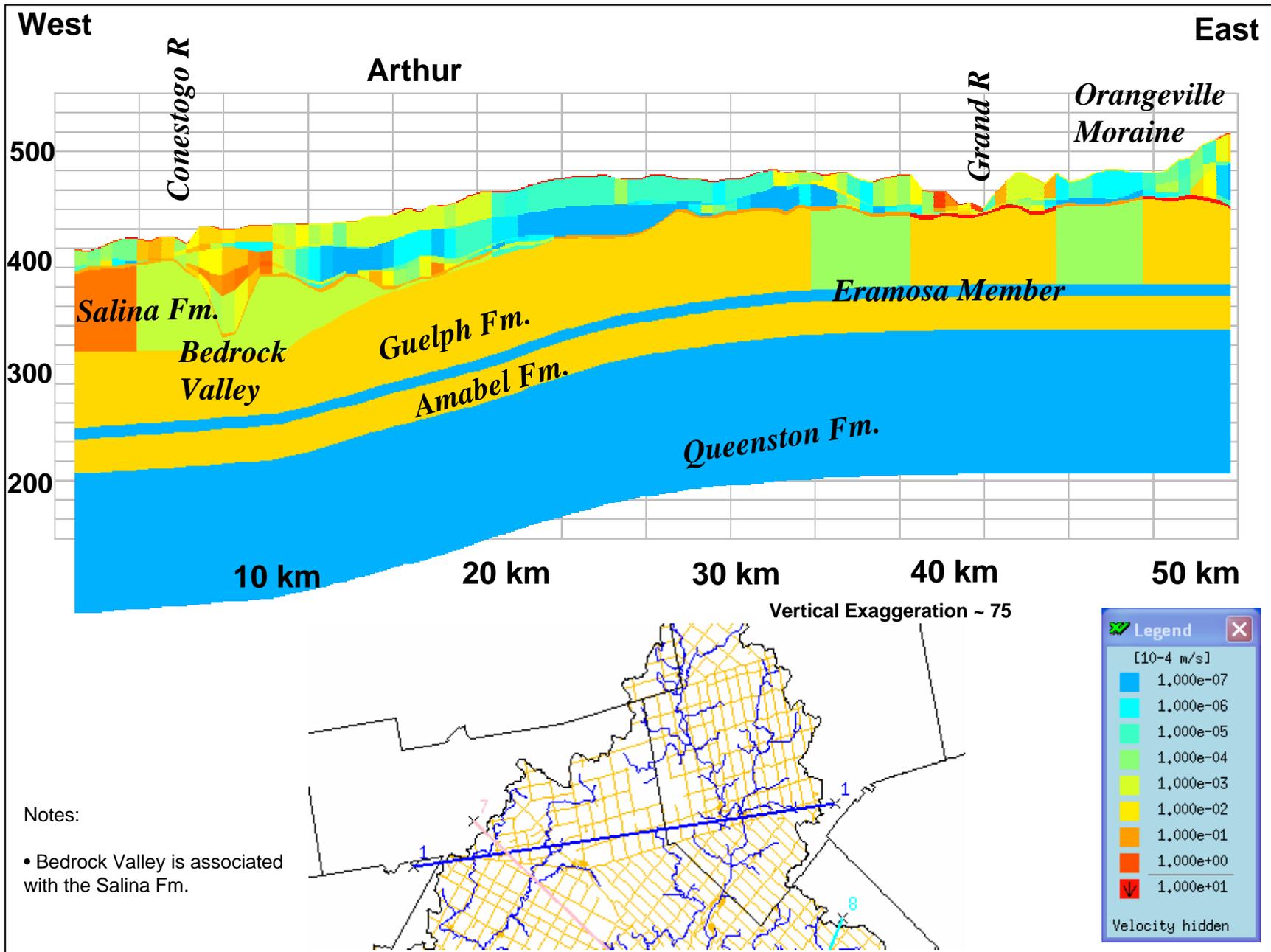
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Figure M31: Cross-Section Locations

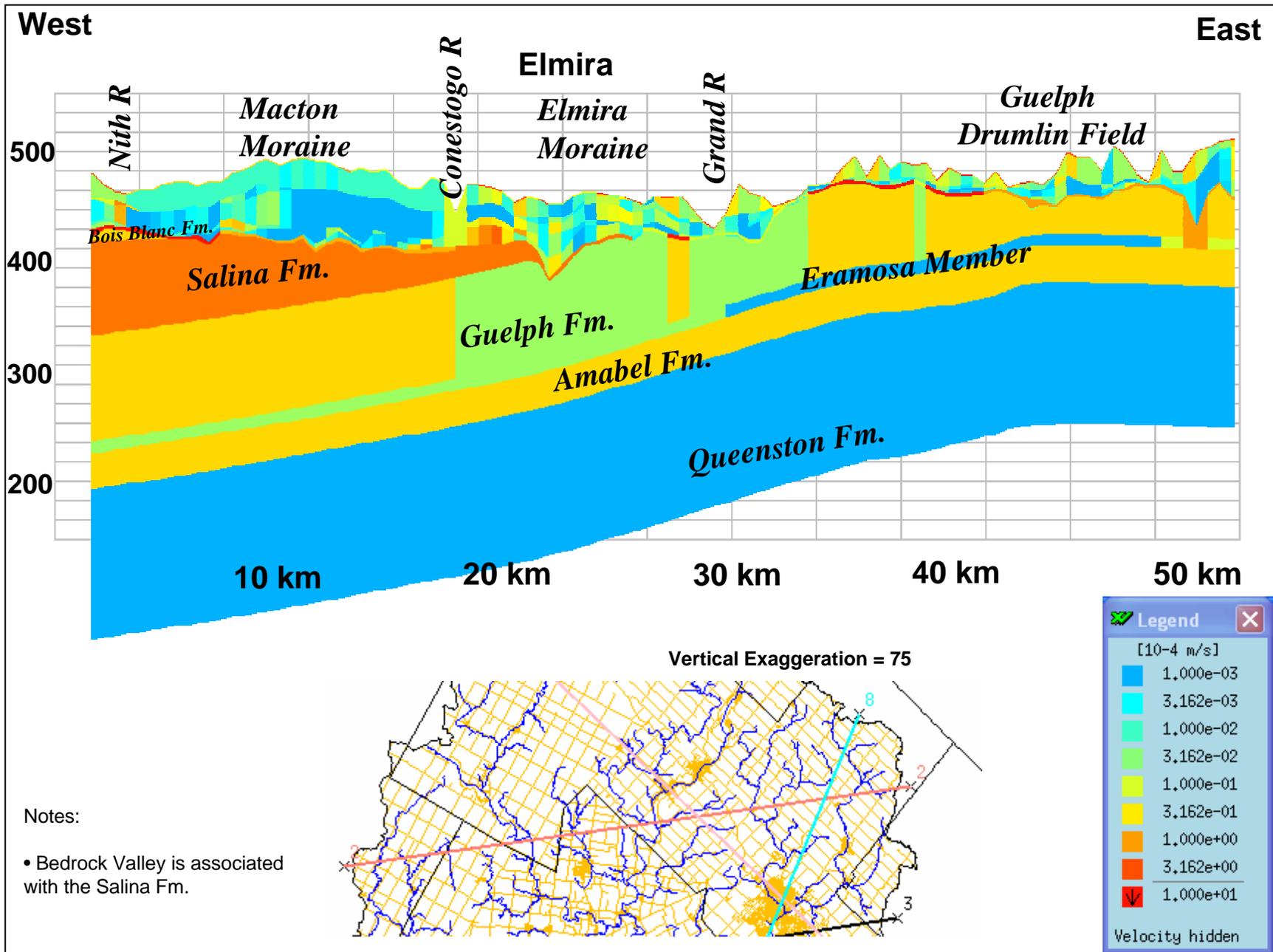
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Figure M32: Cross-Section 1
Orangeville Moraine - Arthur Area

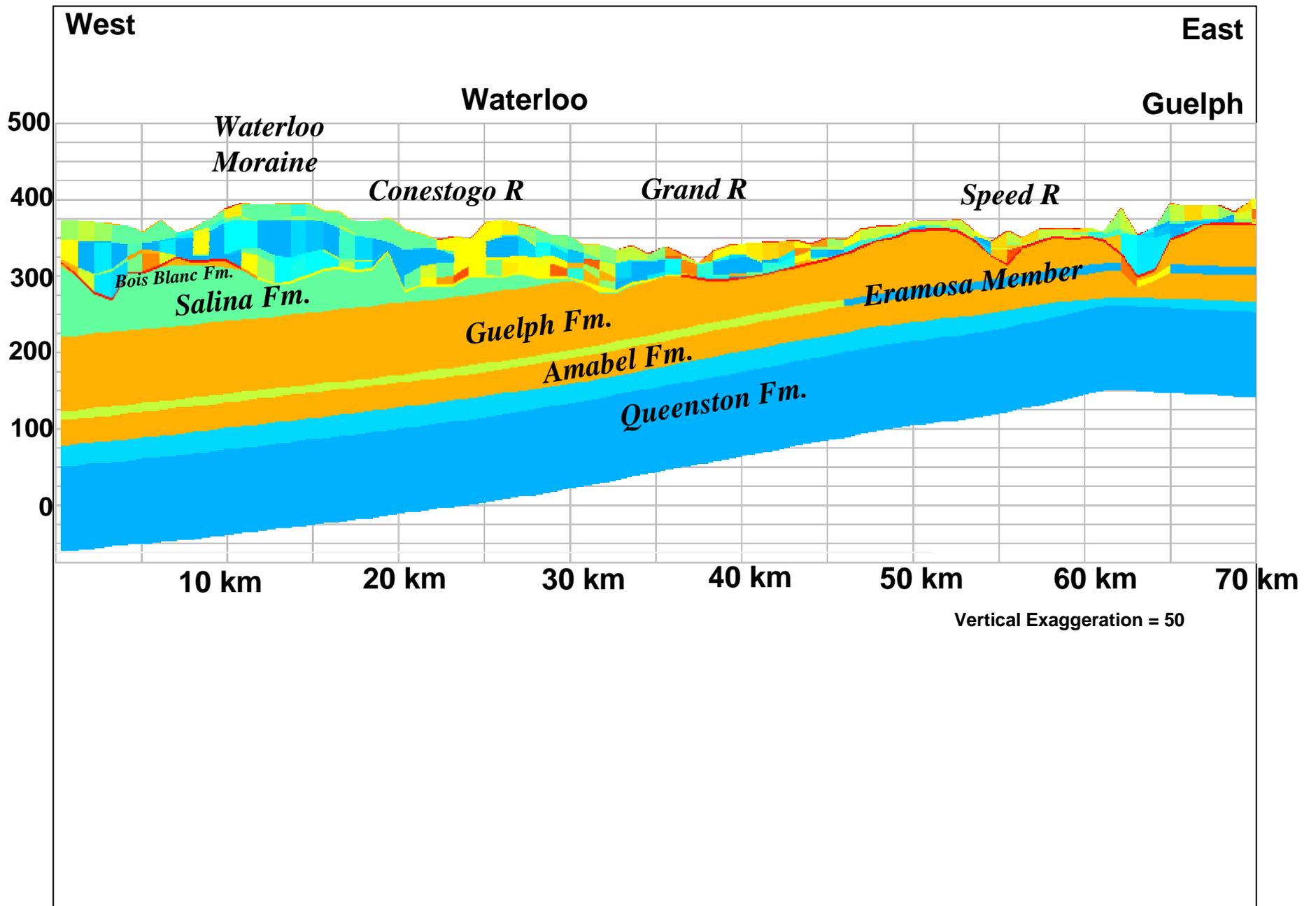
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Figure M33: Cross-Section 2
Elmira Moraine – Guelph Drumlin Field

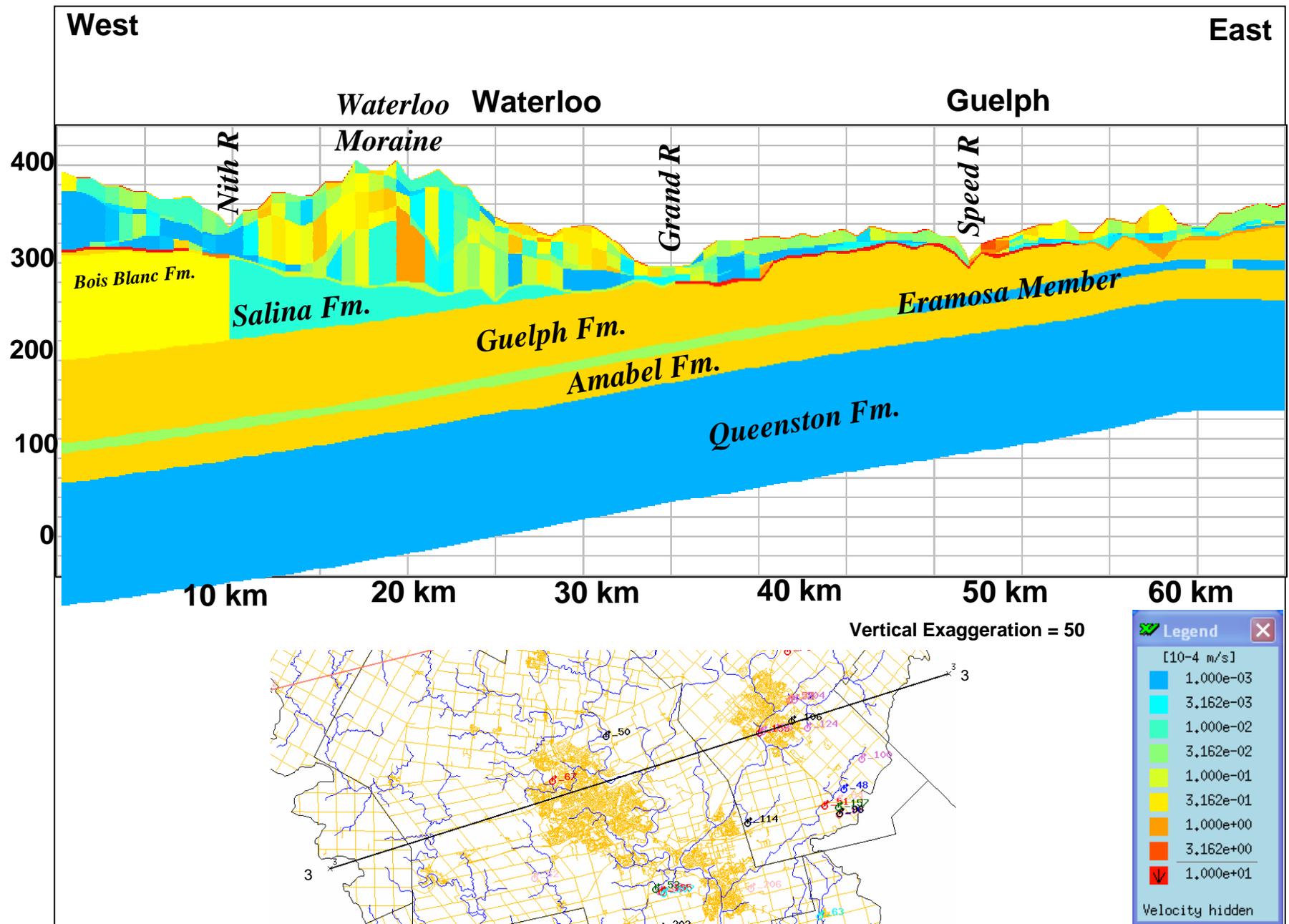
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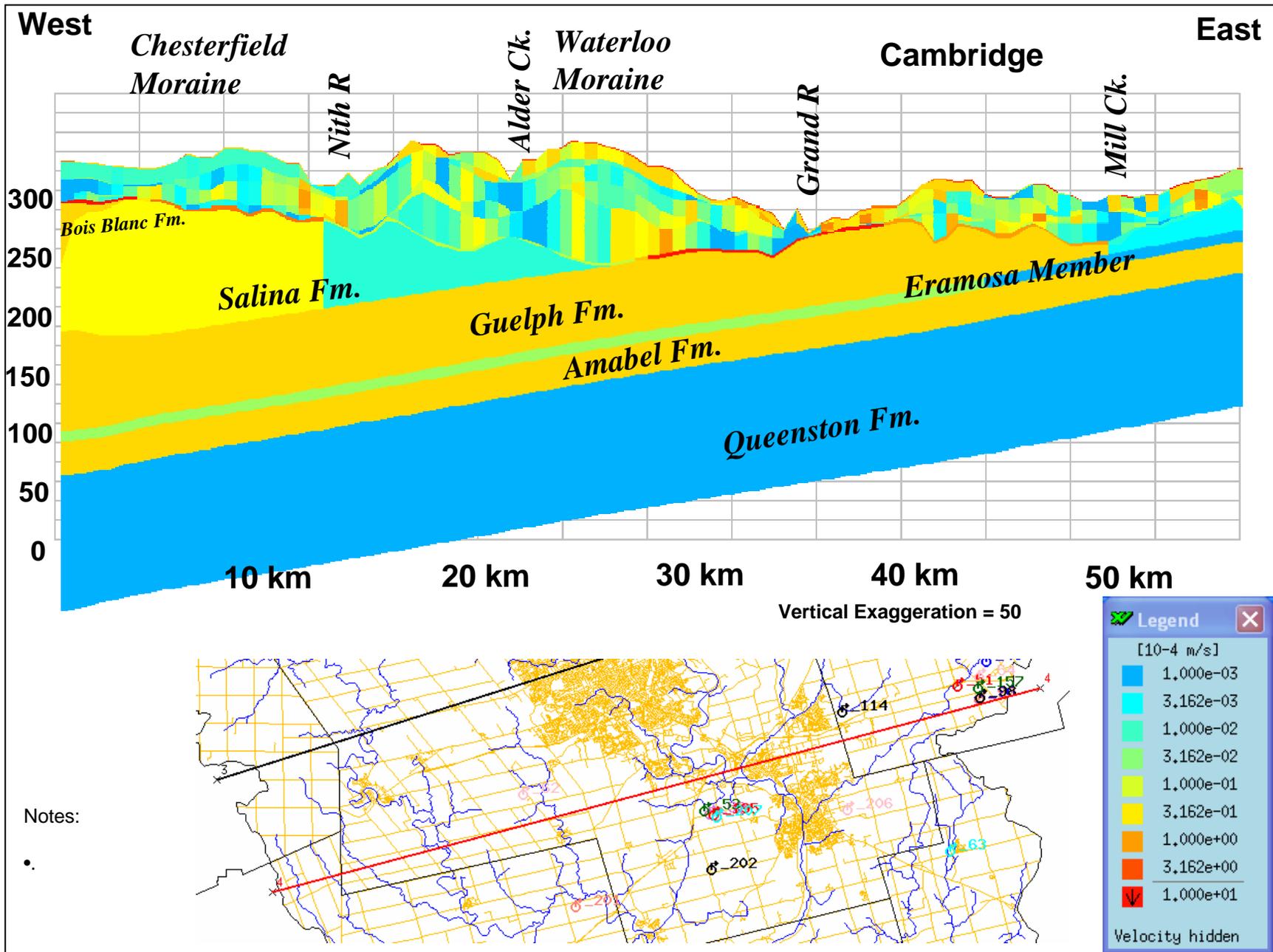
Figure M34a: Cross-Section 3a
Waterloo Moraine – Guelph

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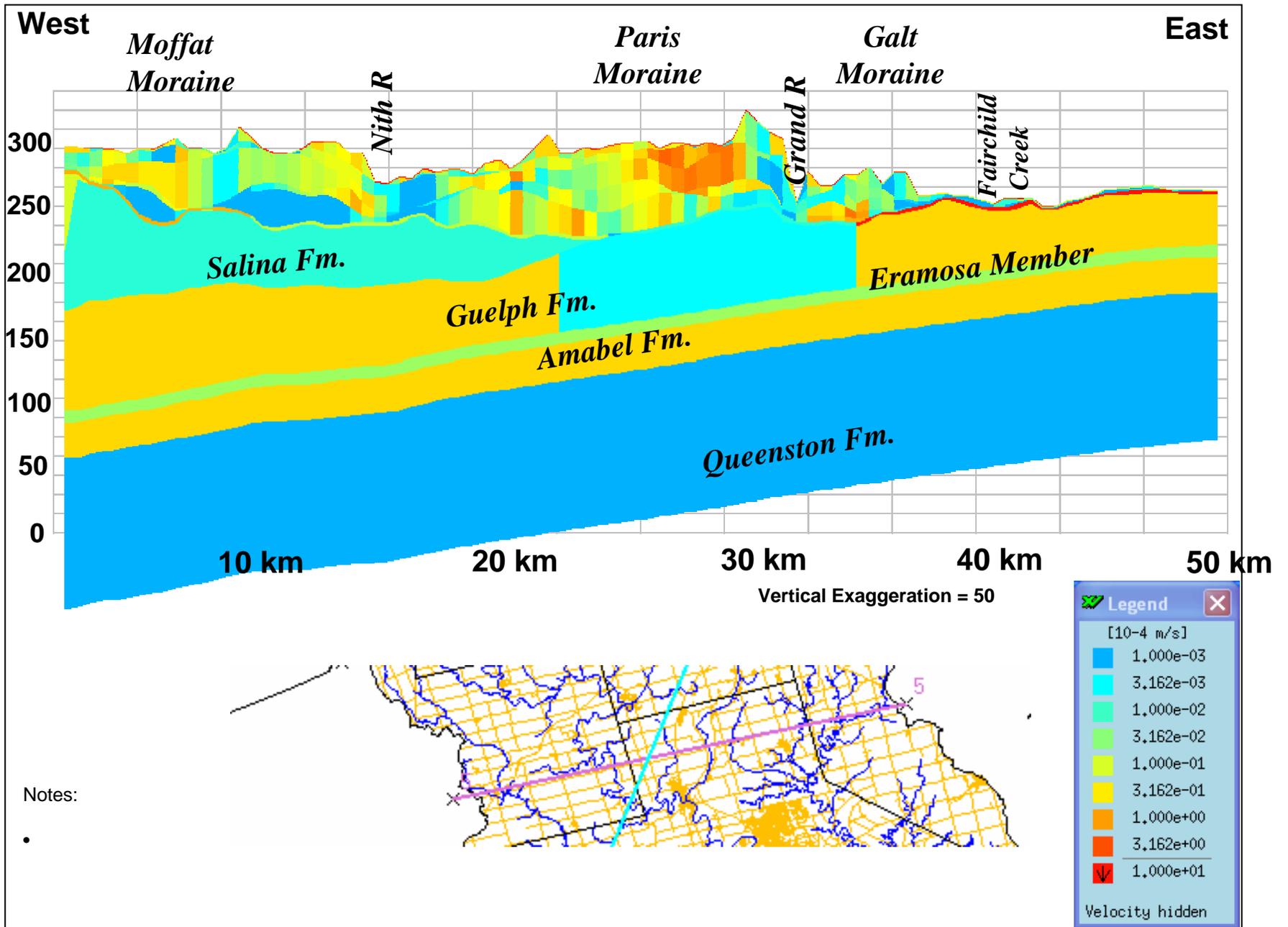
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**Figure M34b: Cross-Section 3
 Waterloo Moraine – Guelph**
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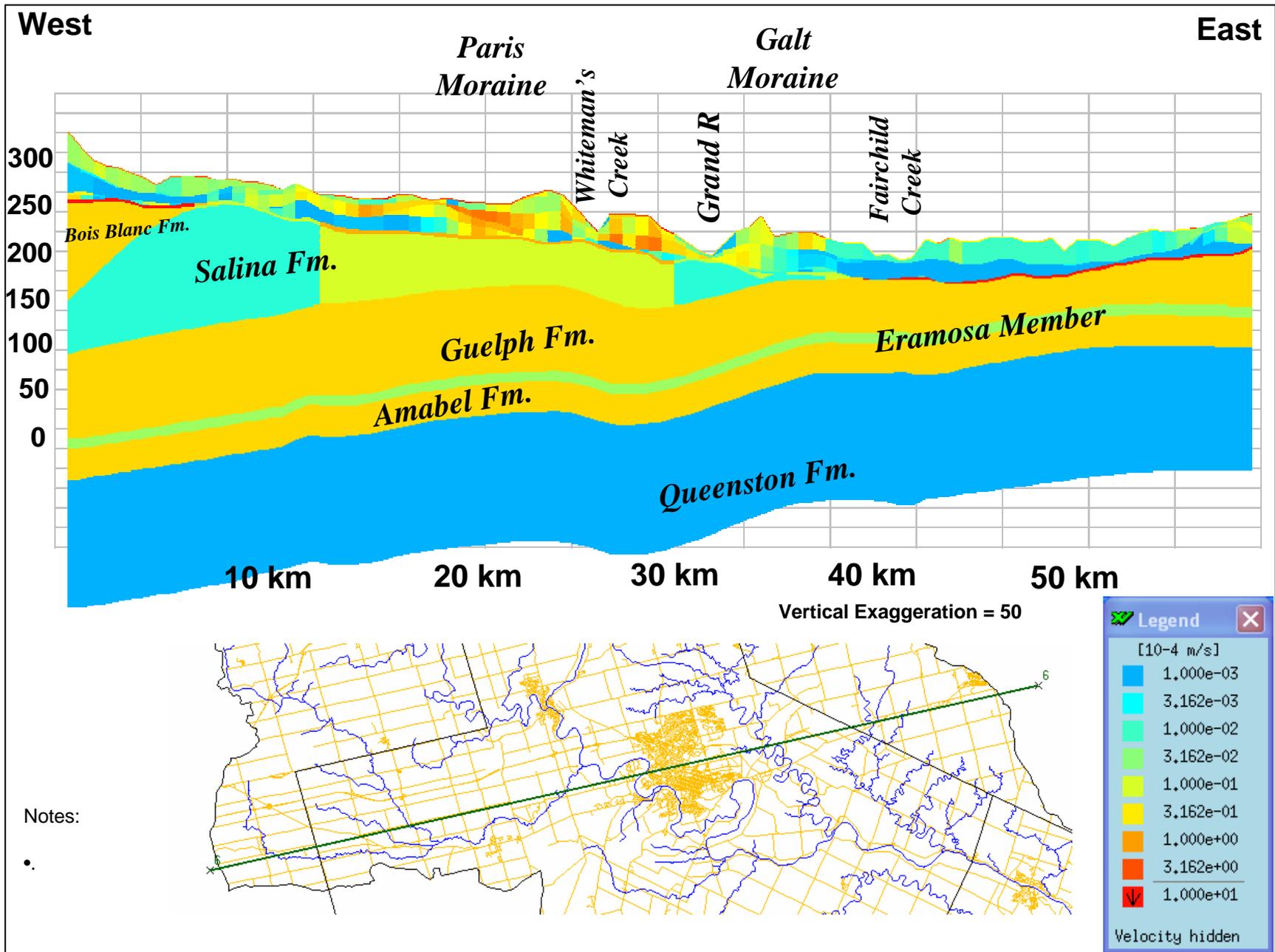
Figure M35: Cross-Section 4
South Waterloo Moraine – Cambridge
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Figure M36: Cross-Section 5
Paris- St. George Area

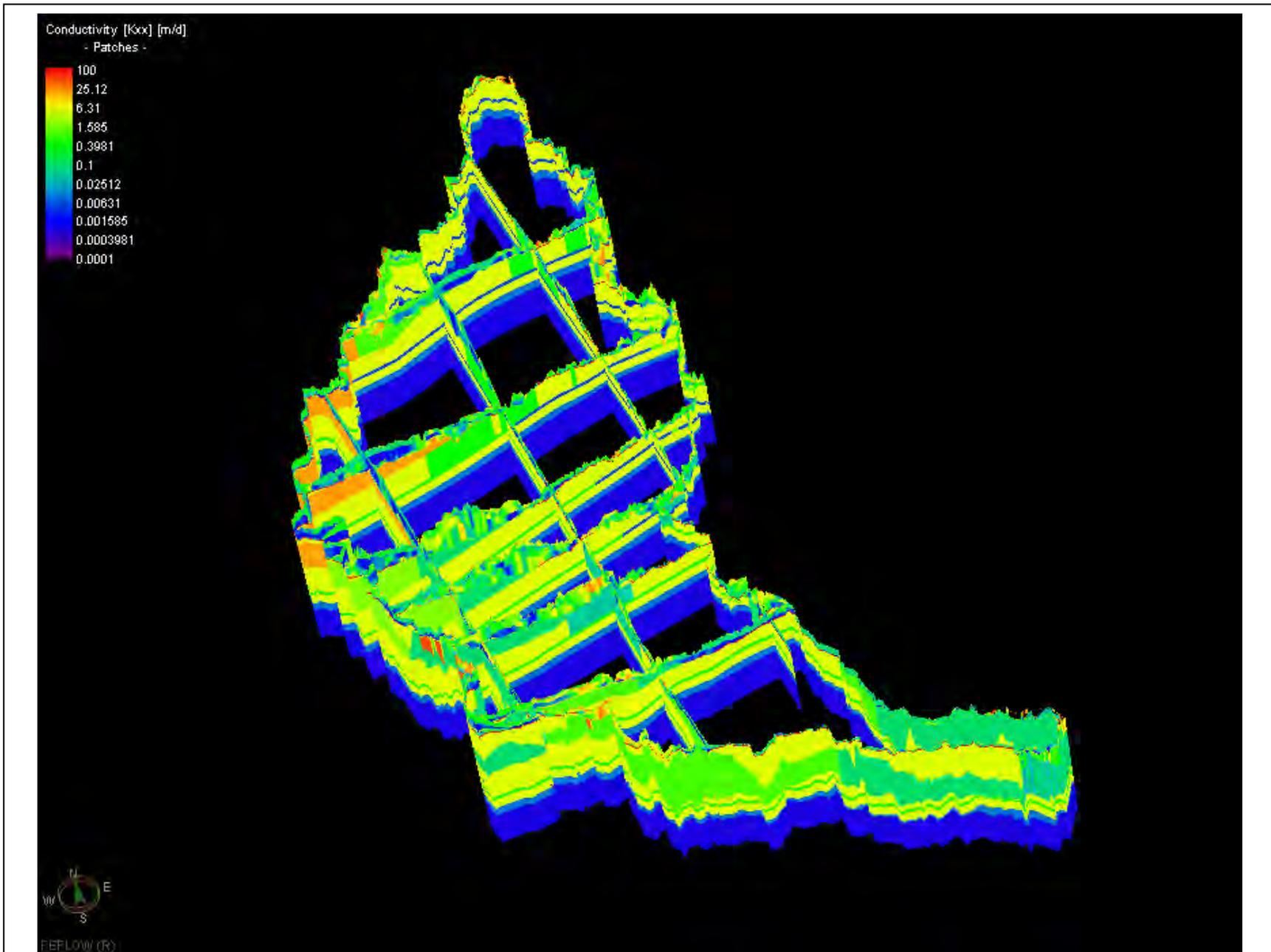
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**Figure M36: Cross-Section 6
 Burford - Brantford**

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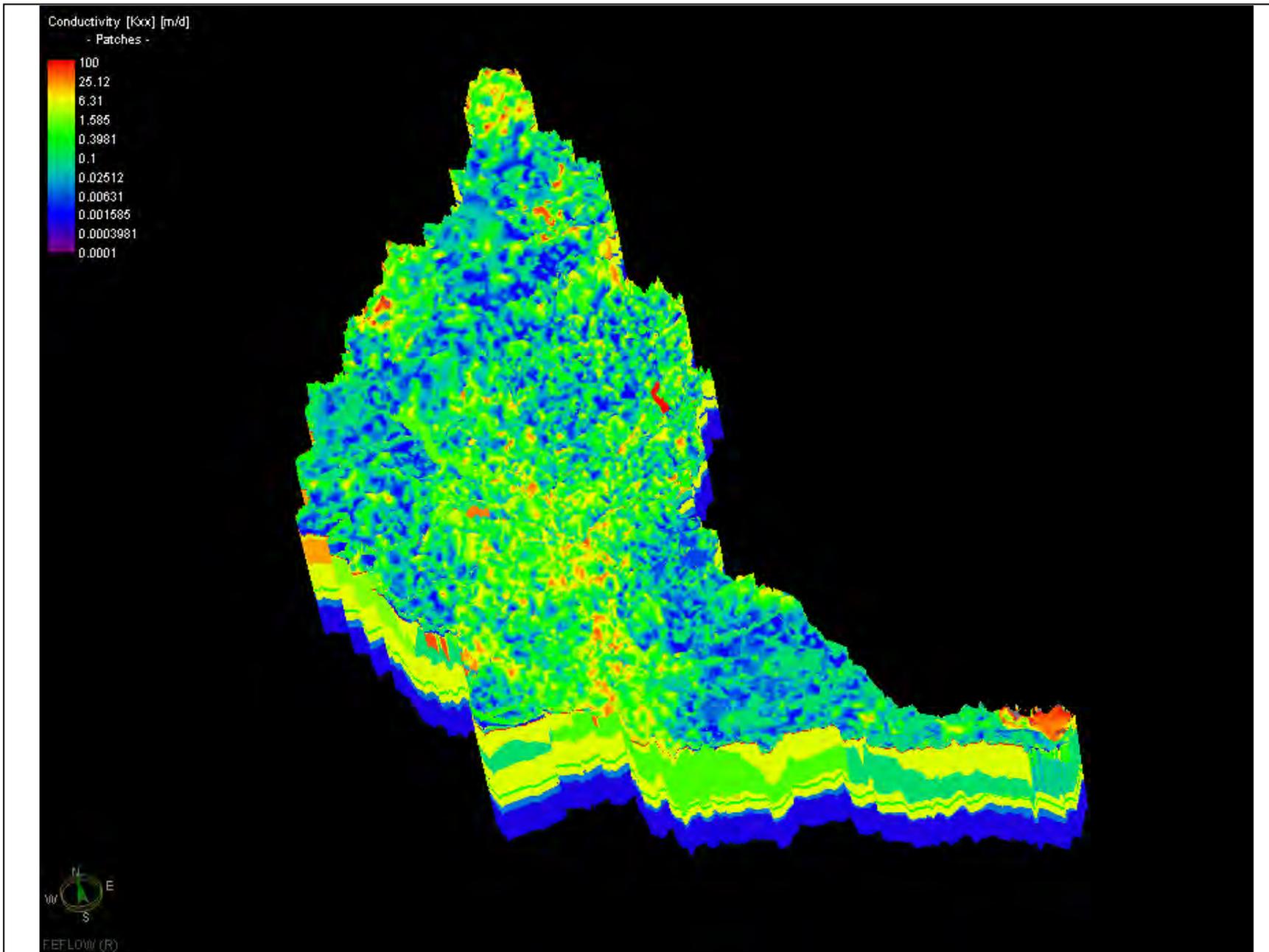


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Figure M37: Fence Diagram

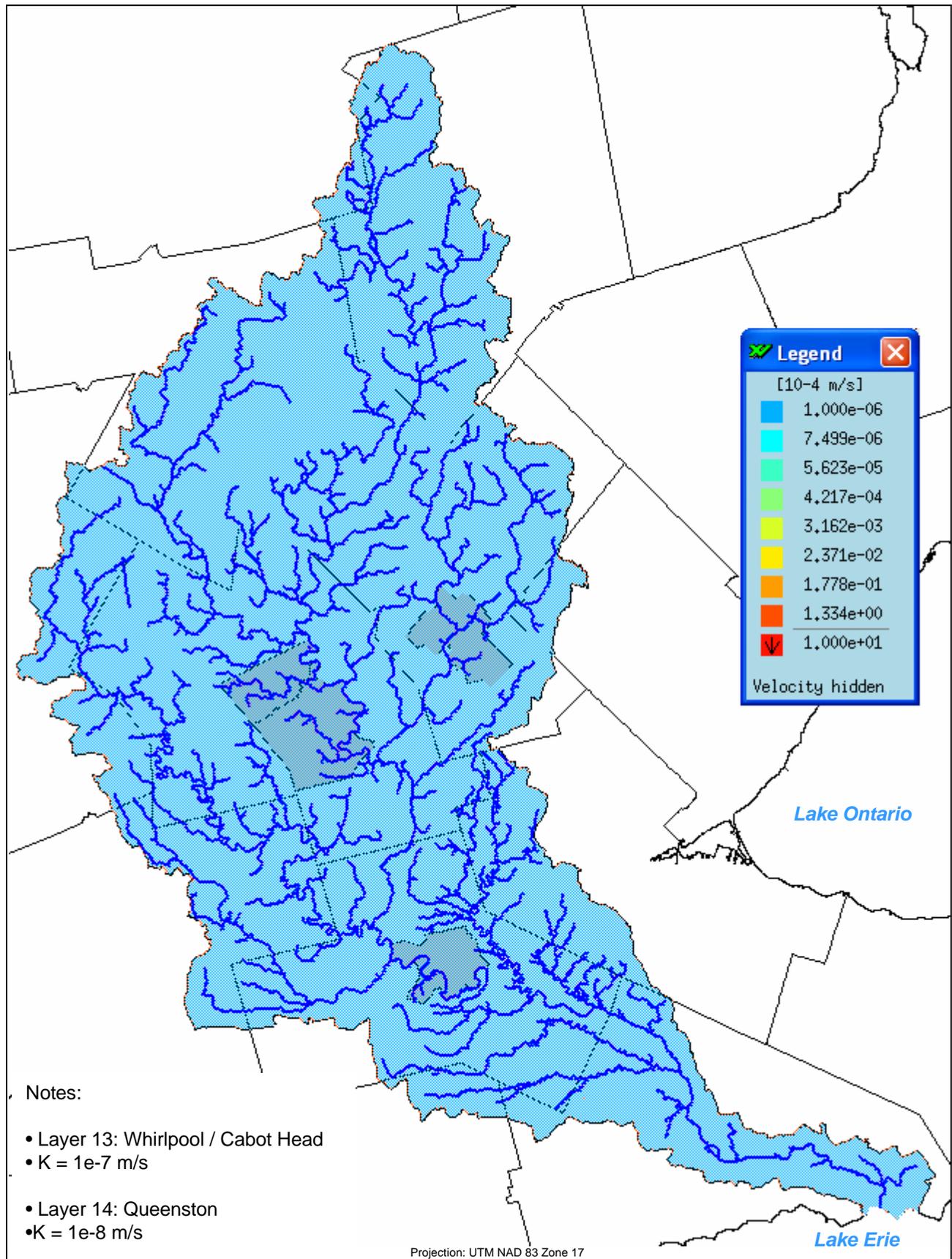
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Figure M38: 3D Block Diagram

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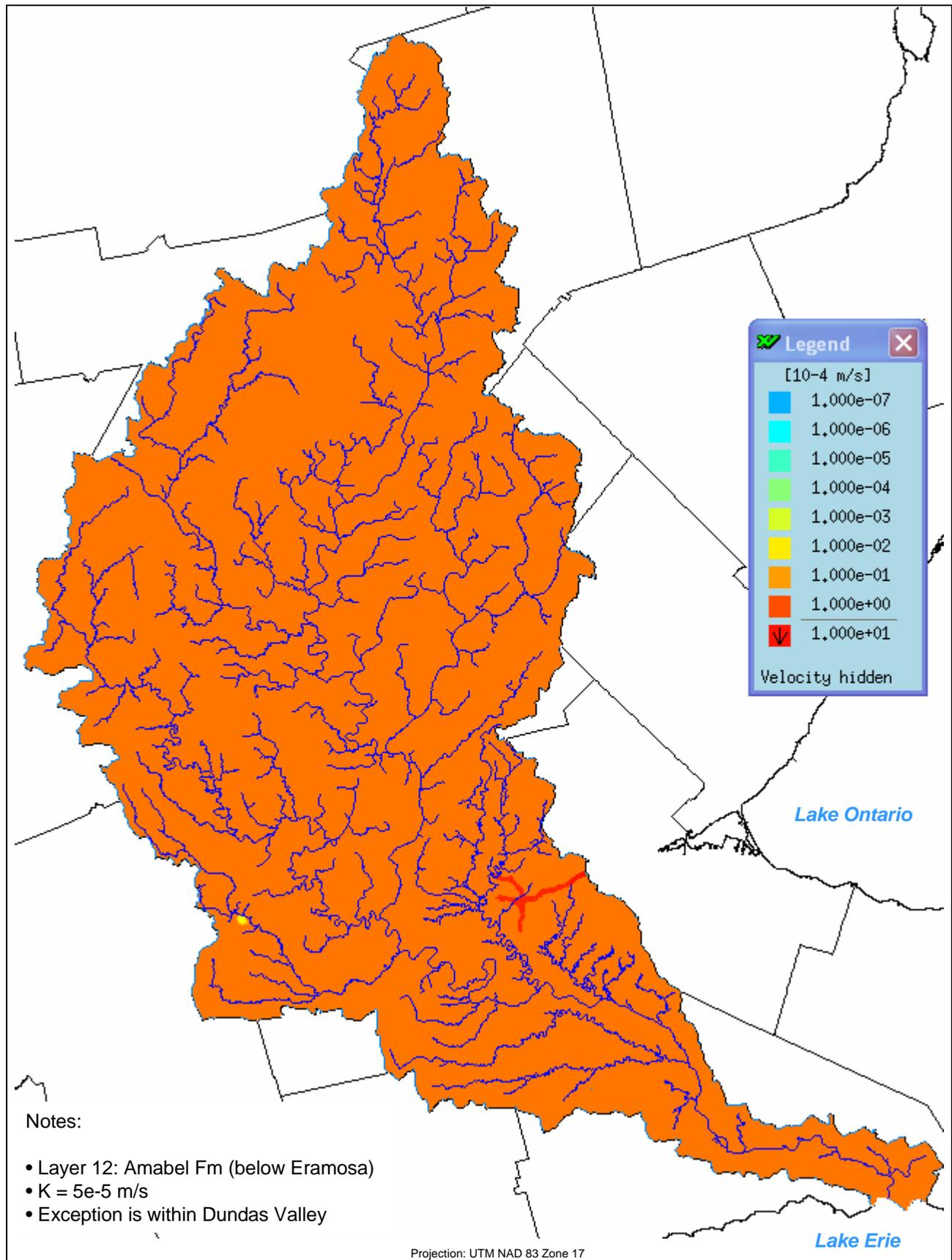
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Figure M39: Hydraulic Conductivity Layers 13-14

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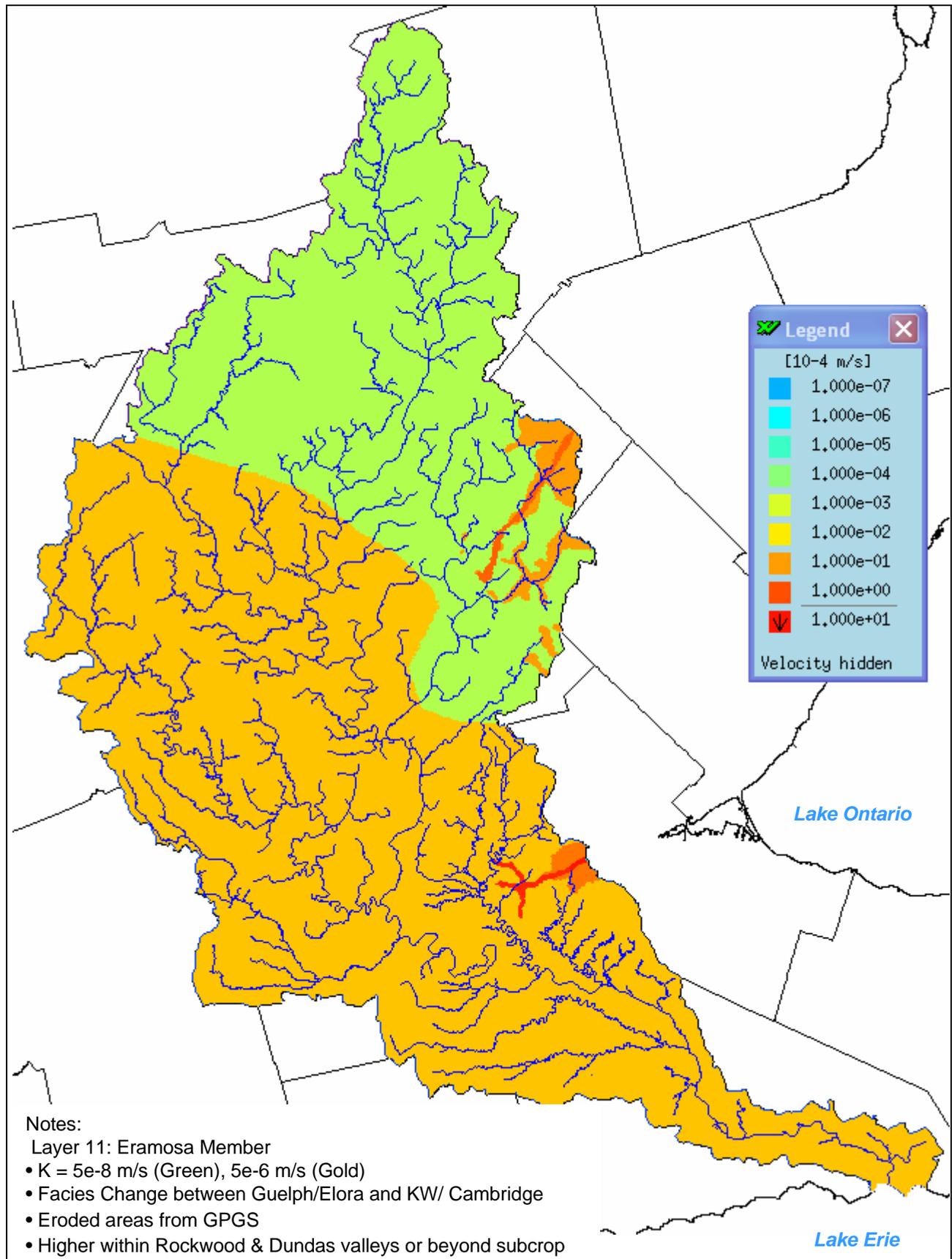
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Figure M40: Hydraulic Conductivity Layer 12

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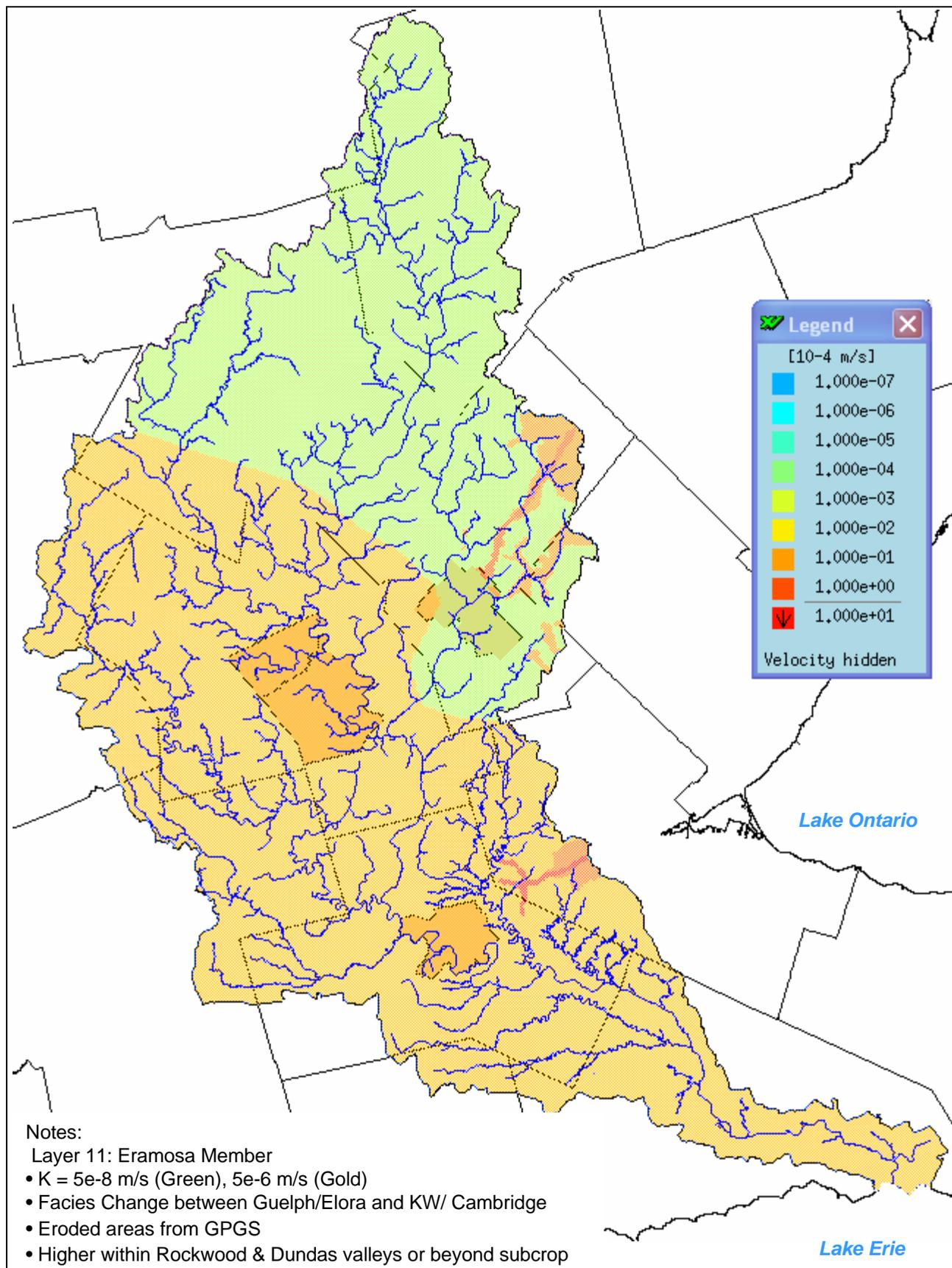
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Figure M41: Hydraulic Conductivity Layer 11

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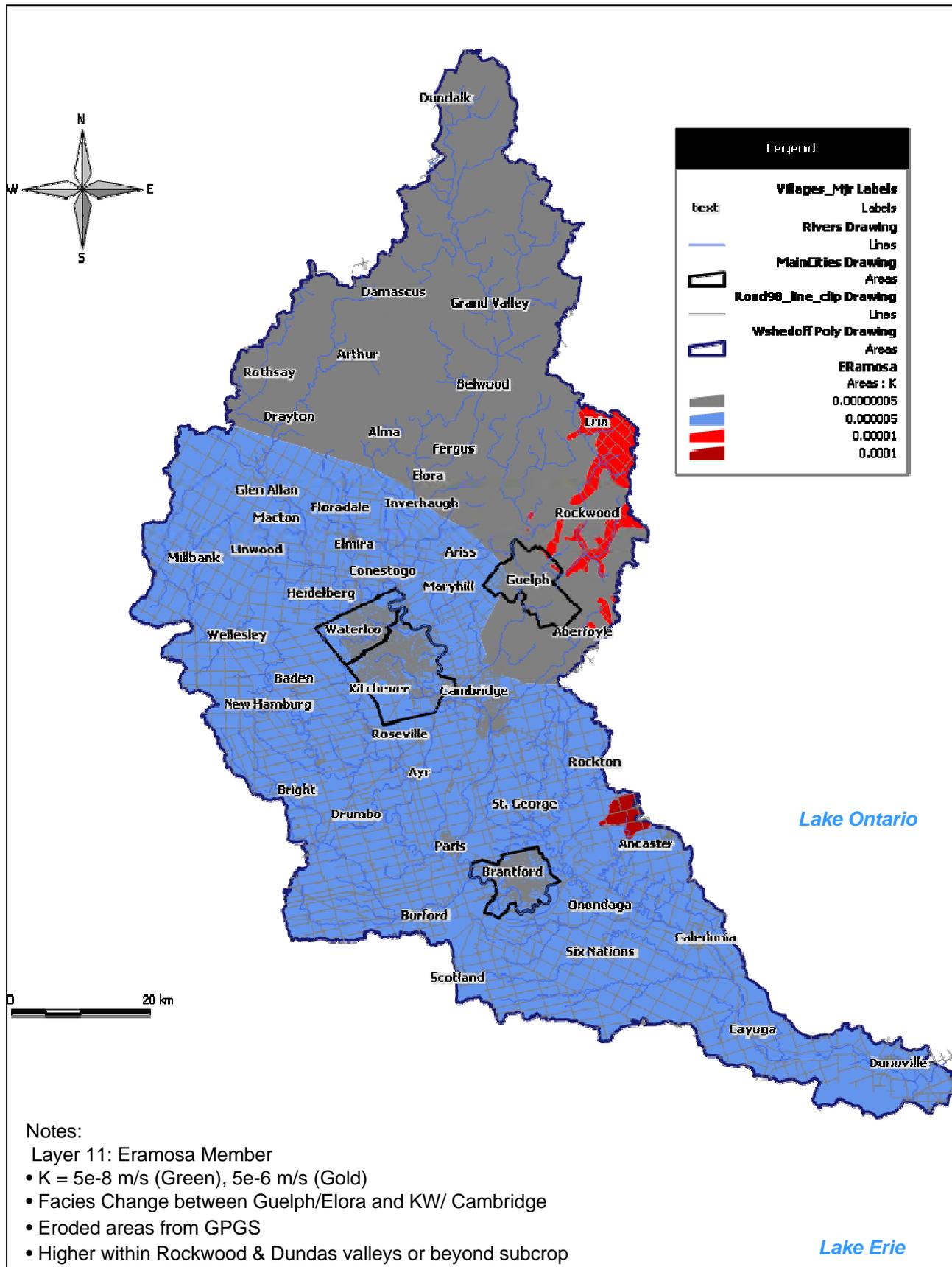
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Figure M41b: Hydraulic Conductivity Layer 11

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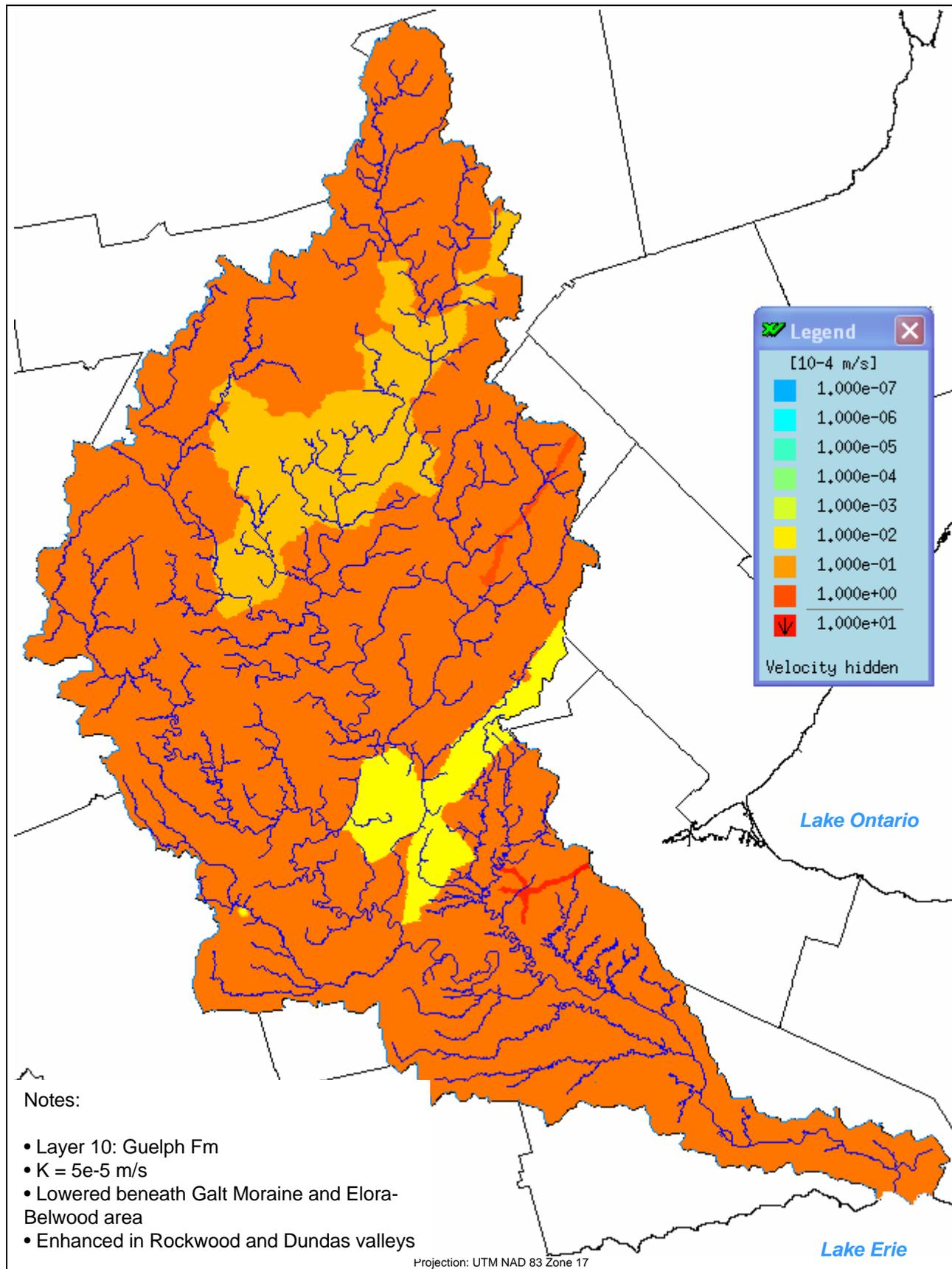
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Figure M41c: Hydraulic Conductivity Layer 11

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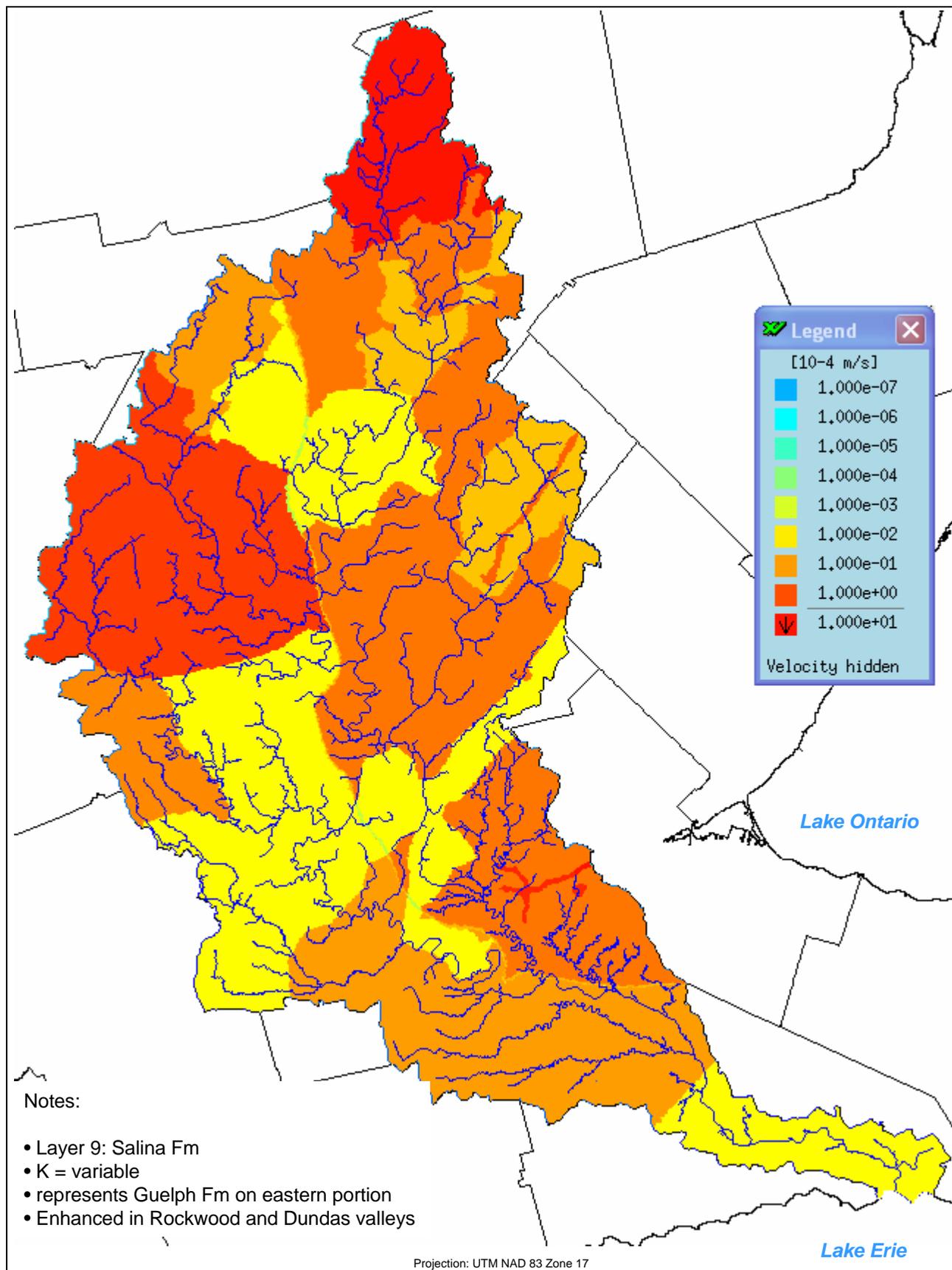
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Figure M42: Hydraulic Conductivity Layer 10

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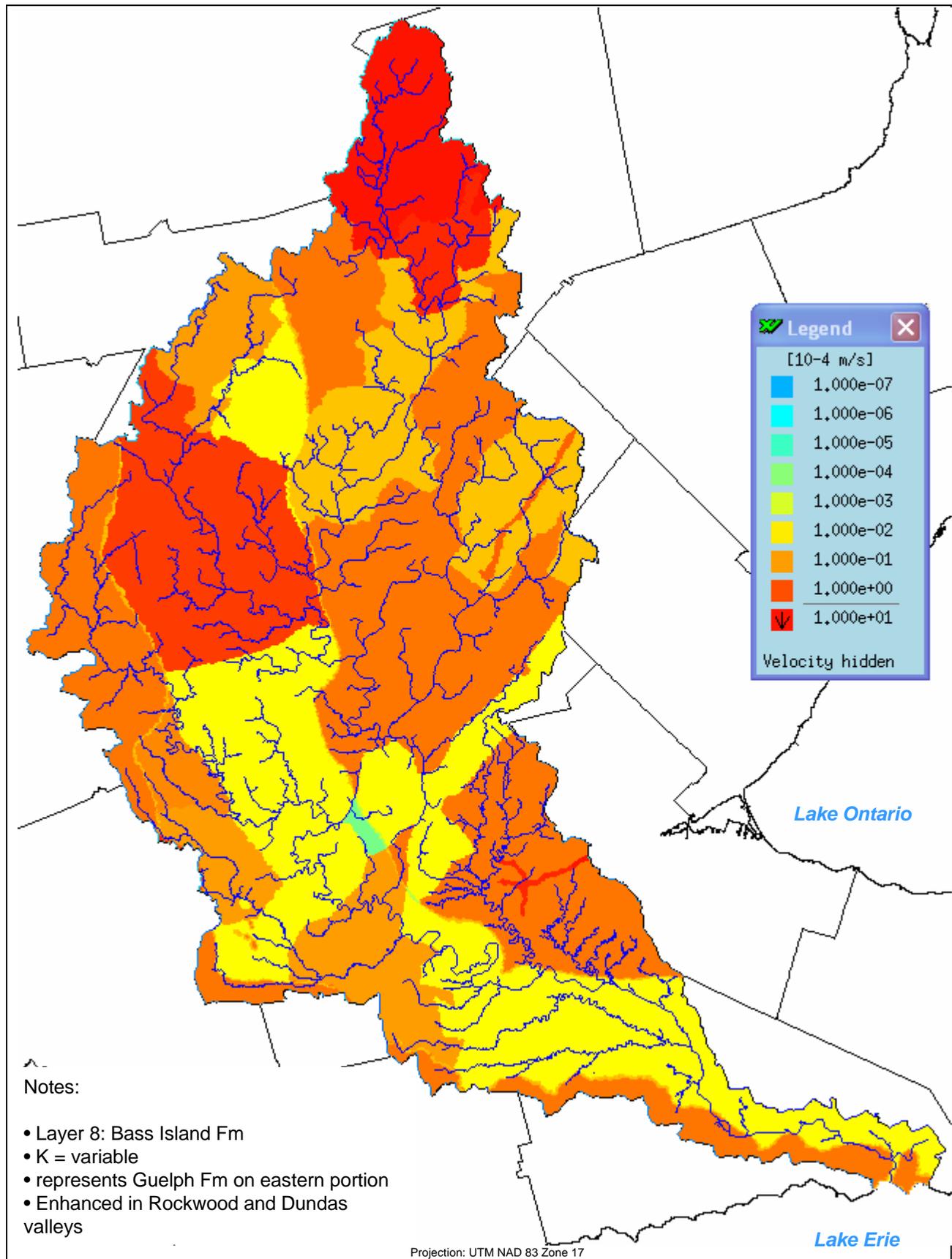
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**Figure M43: Hydraulic Conductivity
Layer 9**

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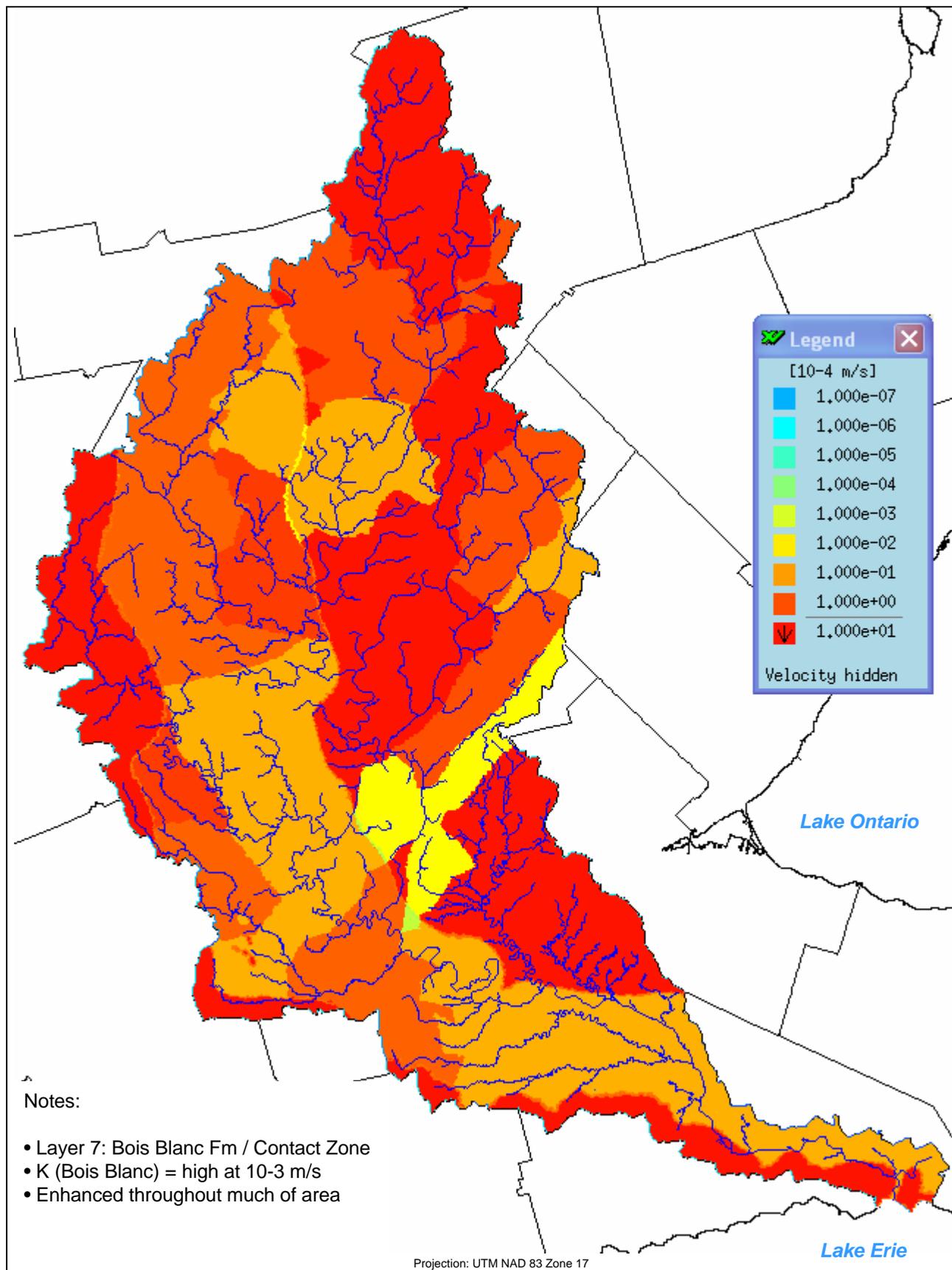
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**Figure M44: Hydraulic Conductivity
Layer 8**

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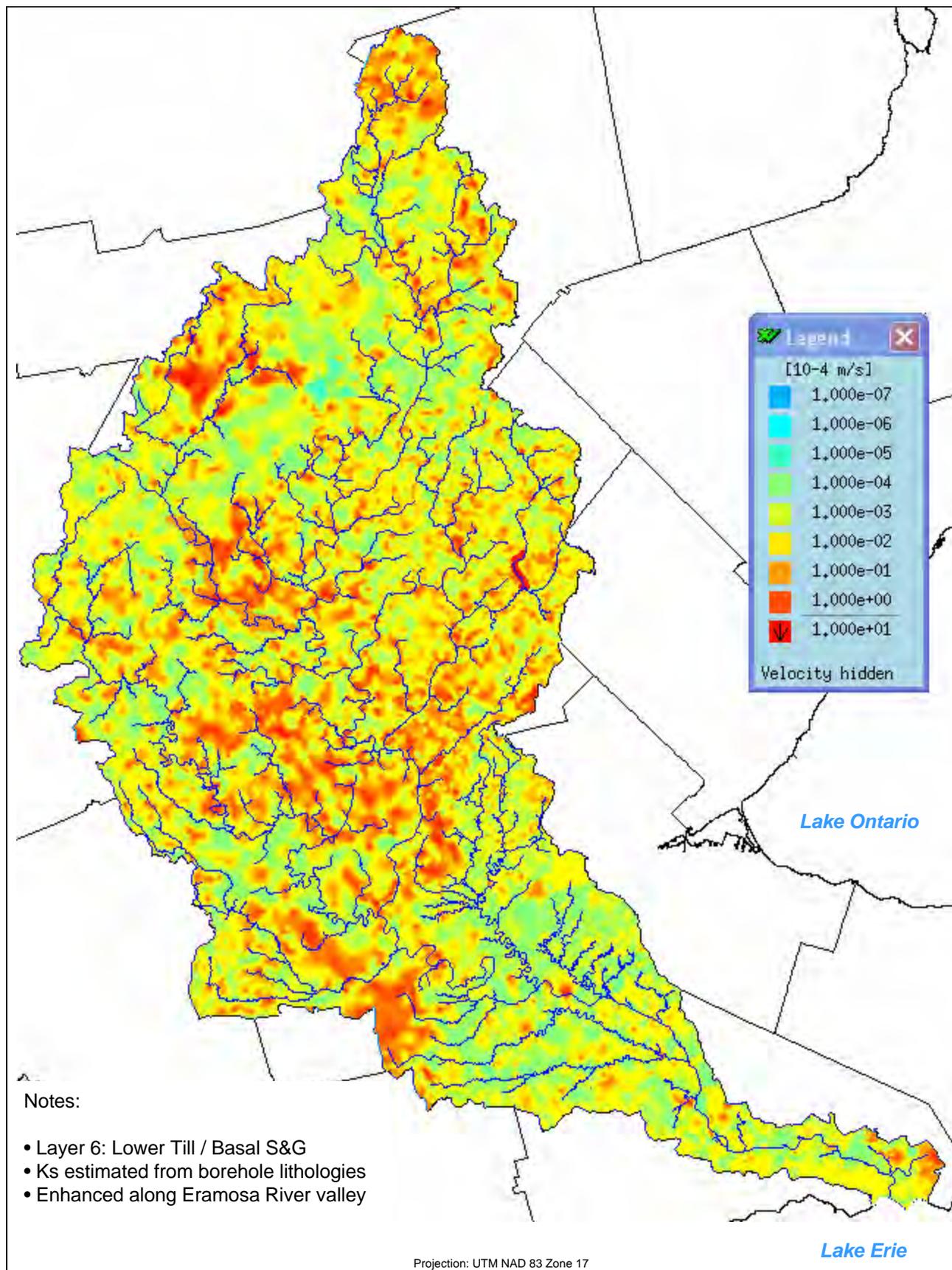
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Figure M45: Hydraulic Conductivity Layer 7

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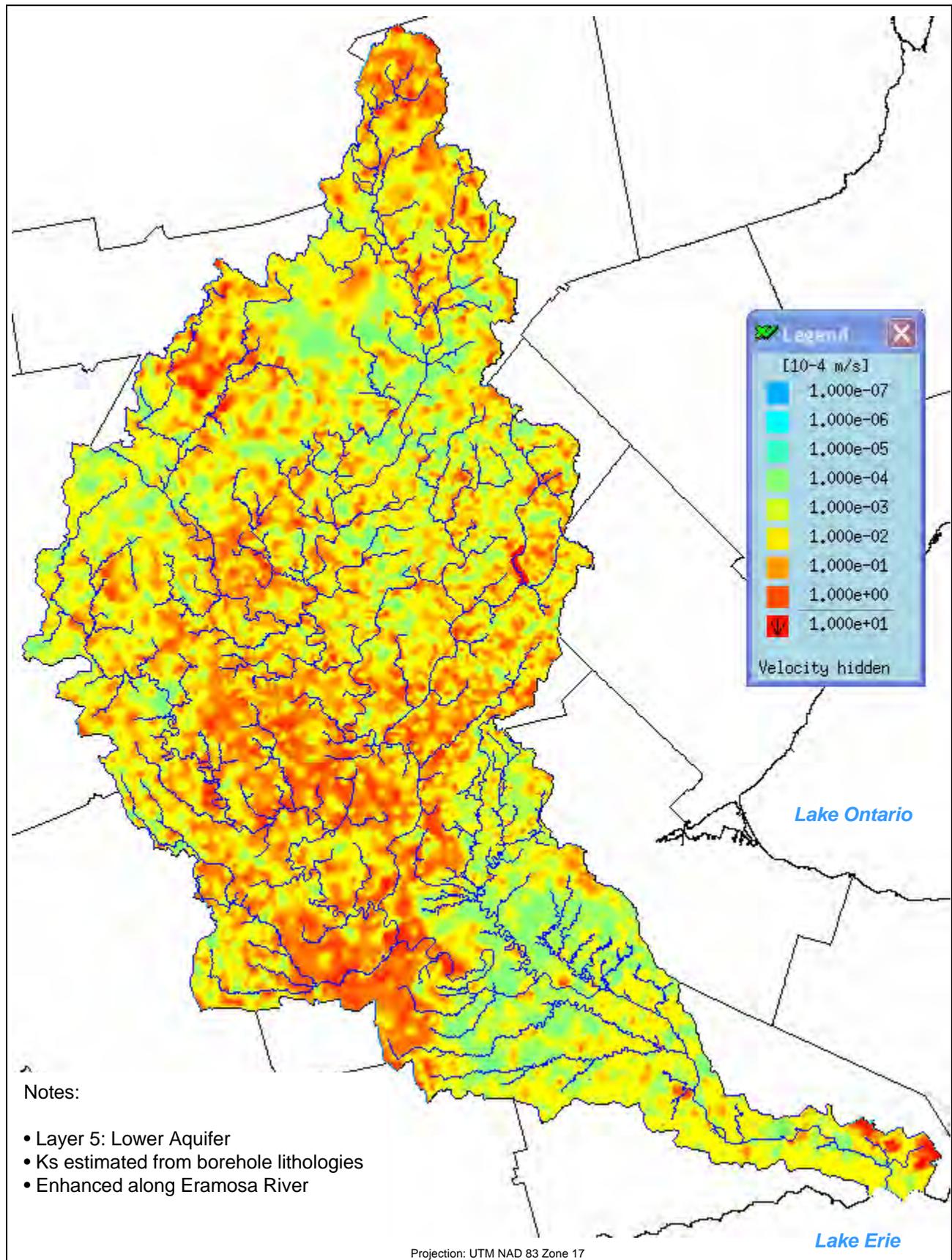
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Figure M46: Hydraulic Conductivity Layer 6

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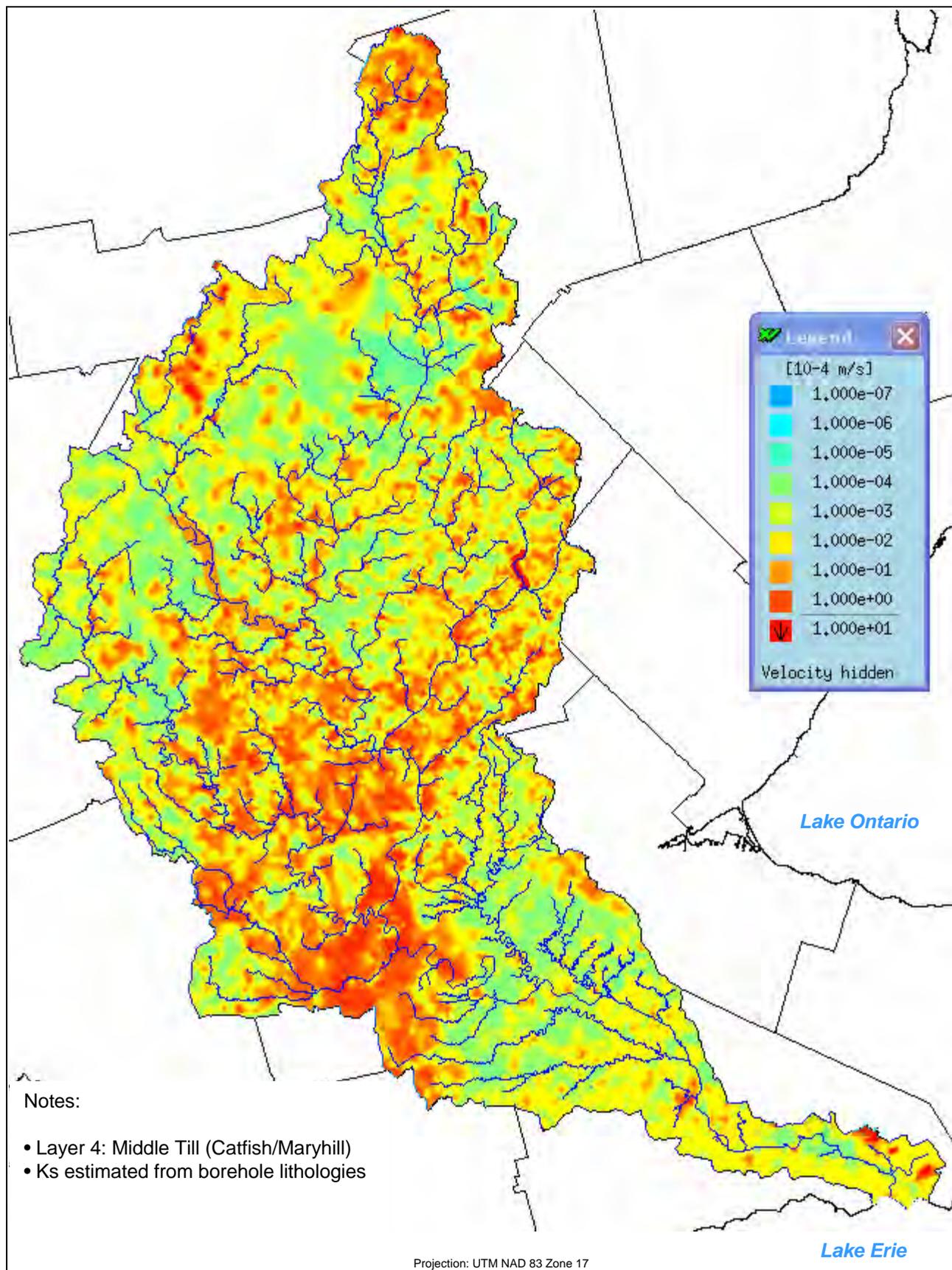
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Figure M47: Hydraulic Conductivity Layer 5

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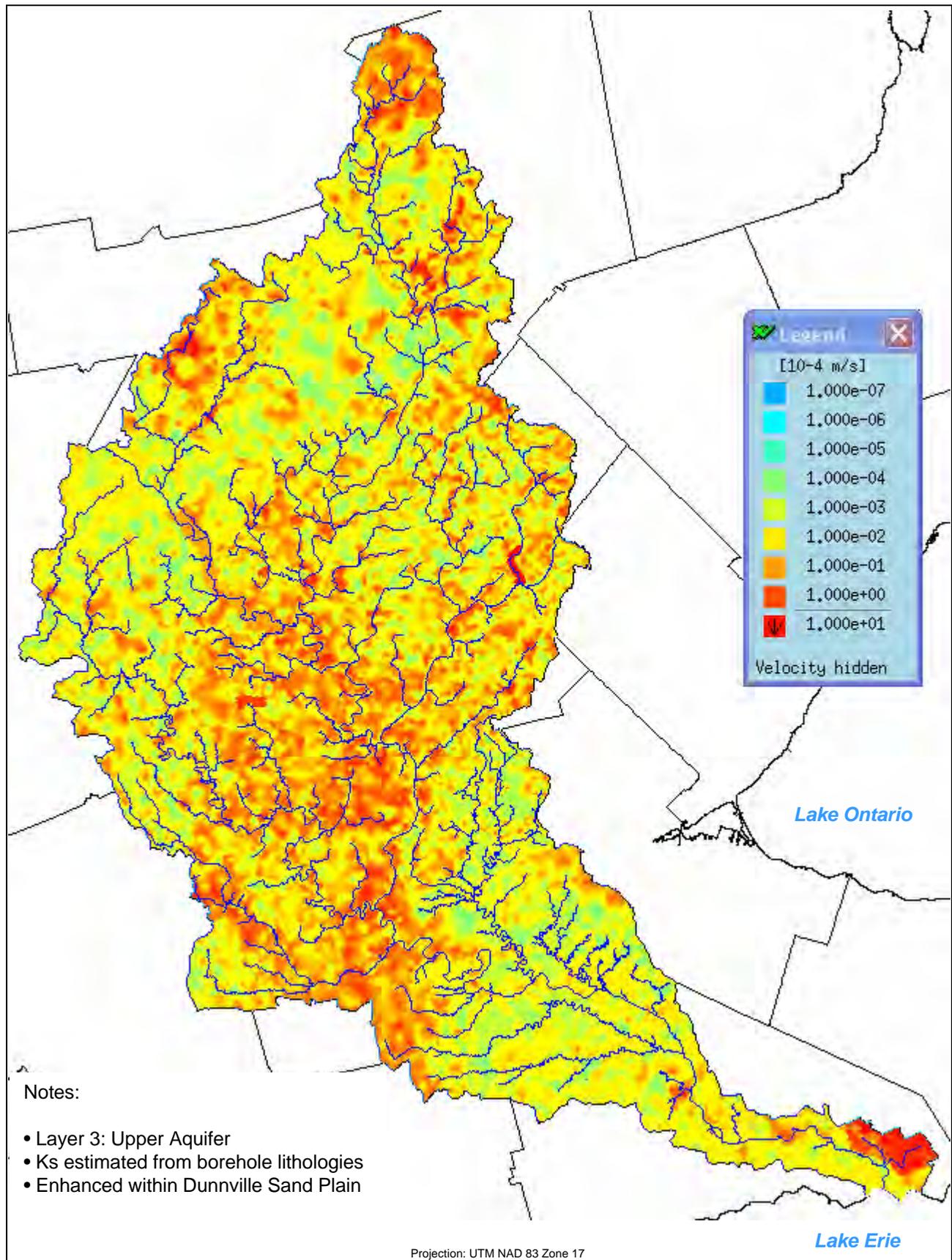
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**Figure M48: Hydraulic Conductivity
Layer 4**

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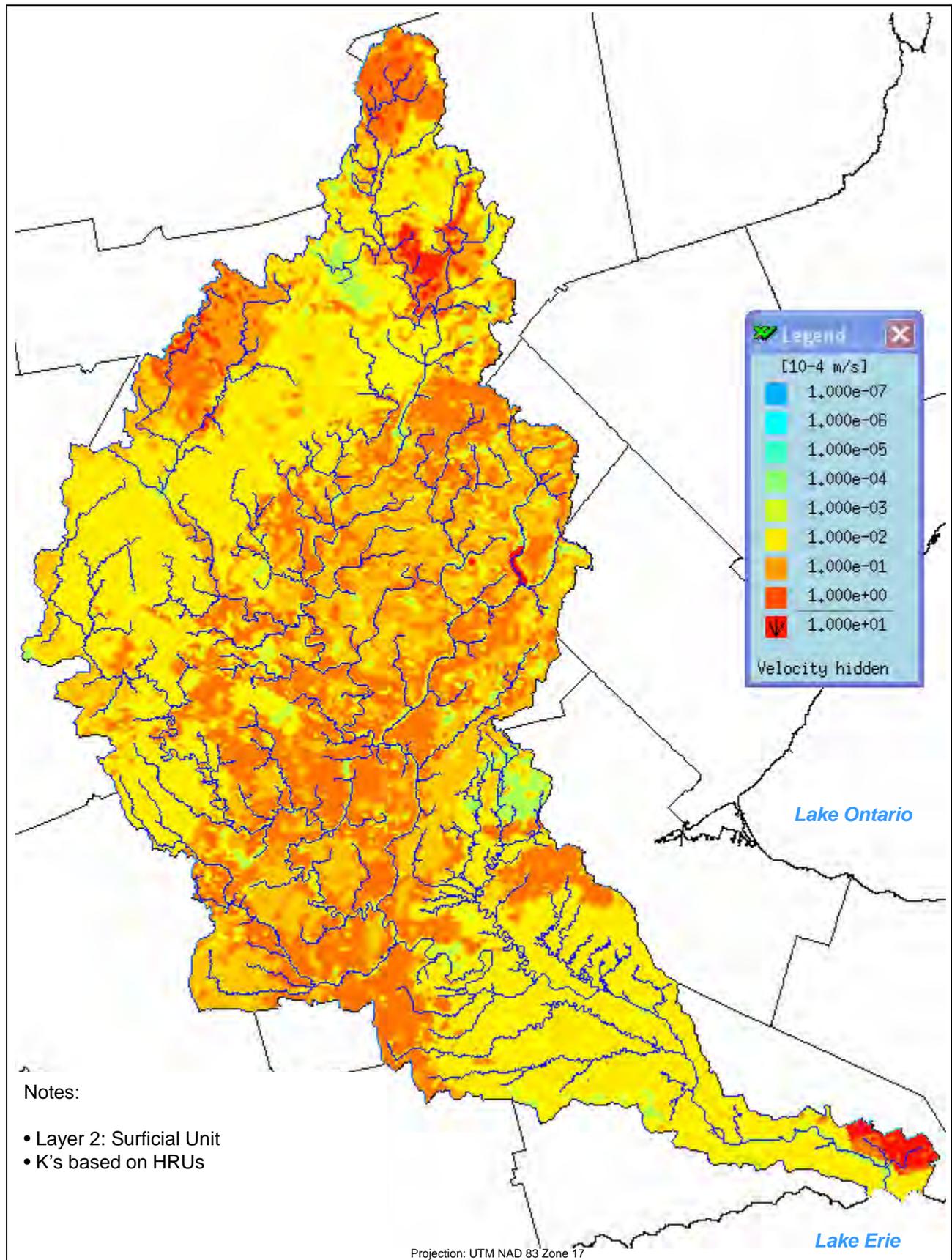
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Figure M49: Hydraulic Conductivity Layer 3

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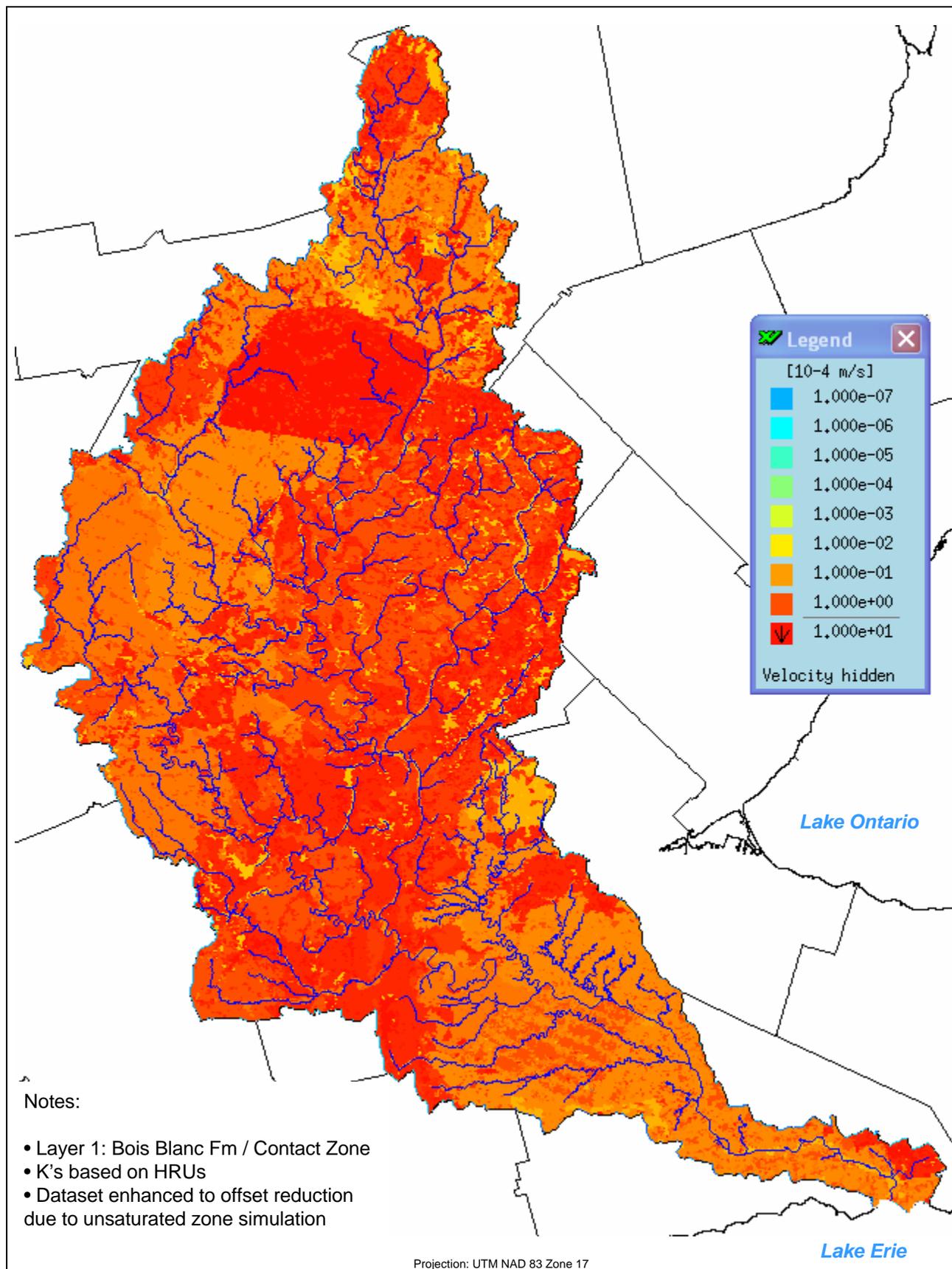
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Figure M50: Hydraulic Conductivity Layer 2

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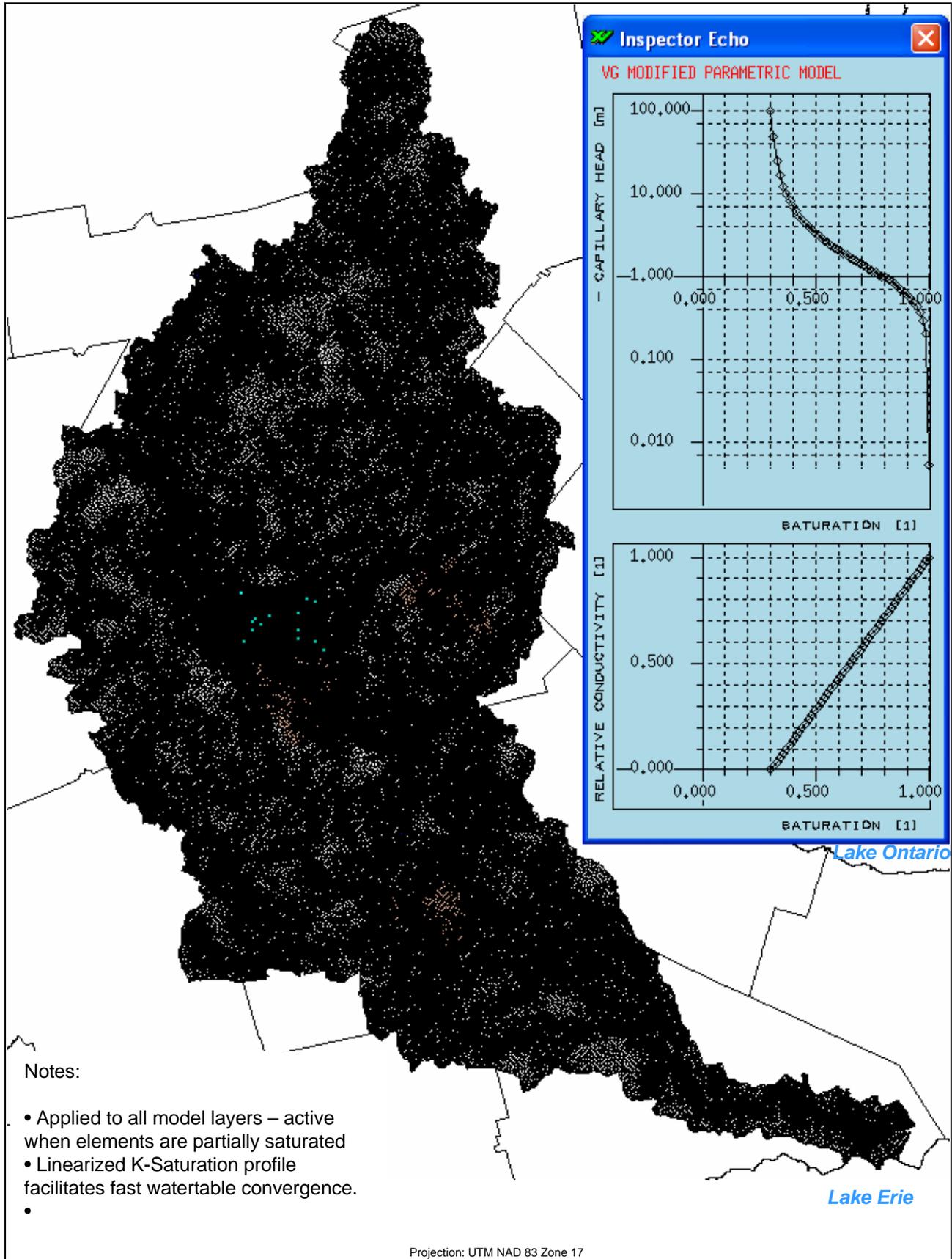
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Figure M51: Hydraulic Conductivity Layer 1

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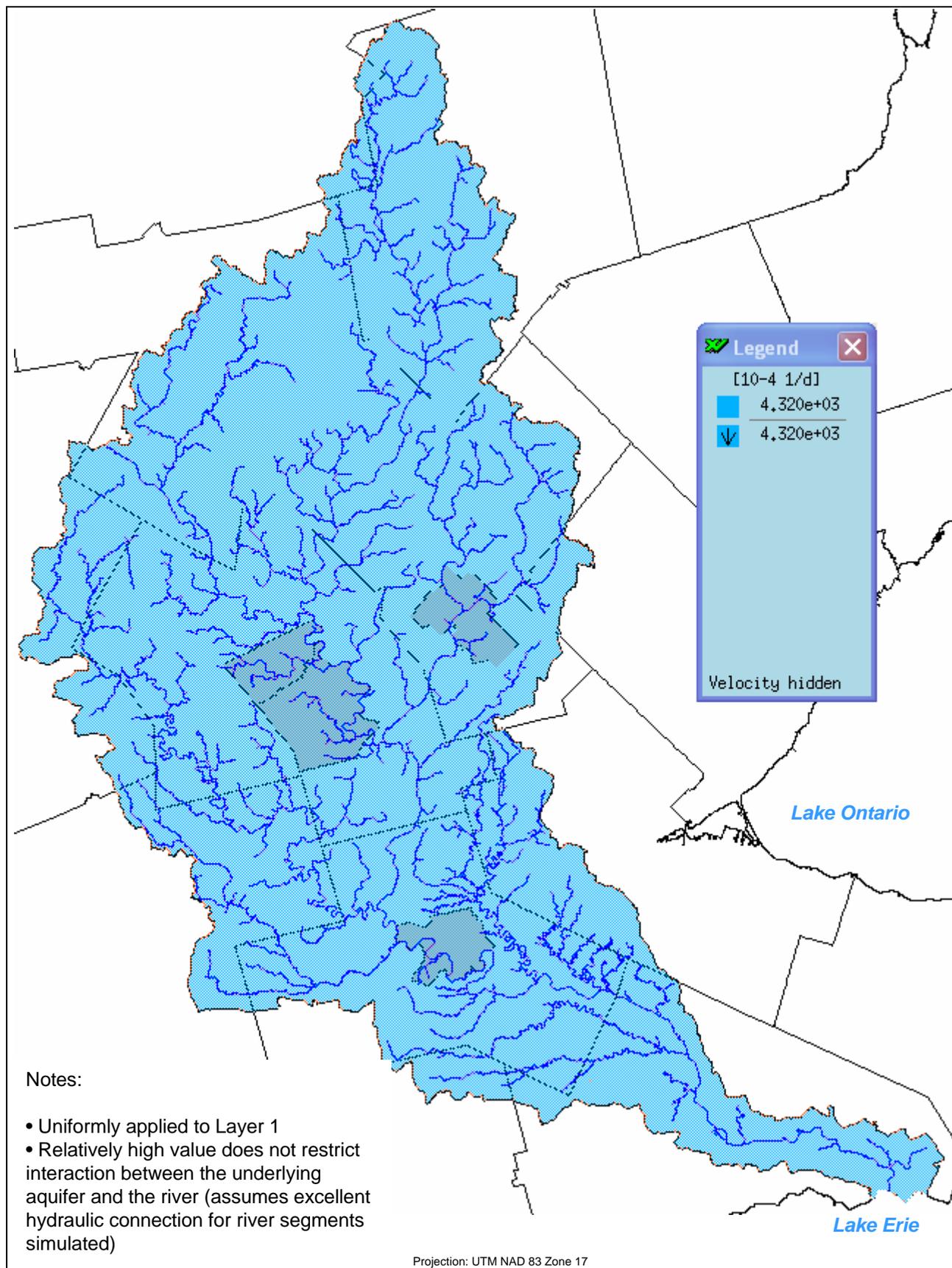
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Figure M52: Unsaturated Zone Parametric Equations

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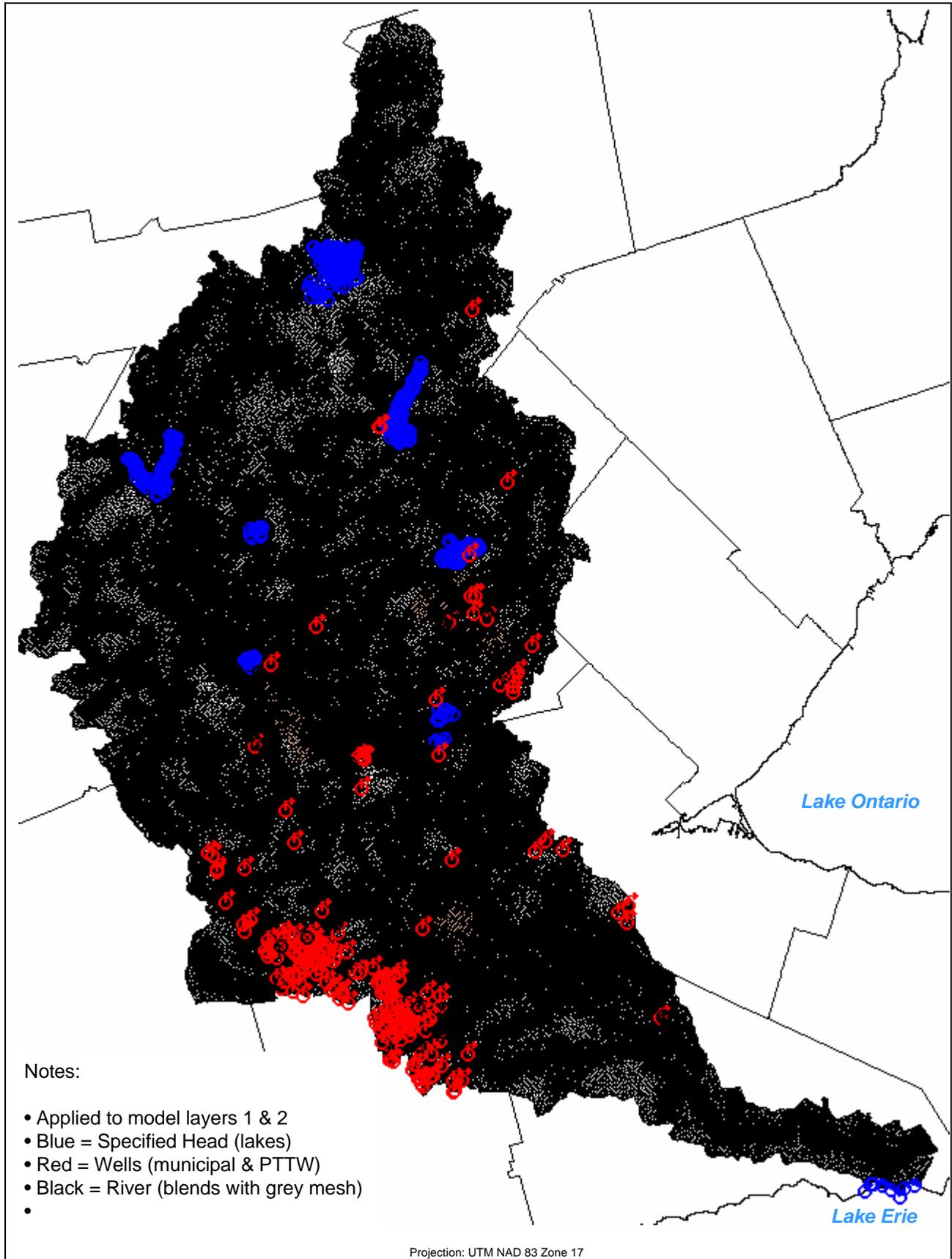
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Figure M53: Transfer Coefficients

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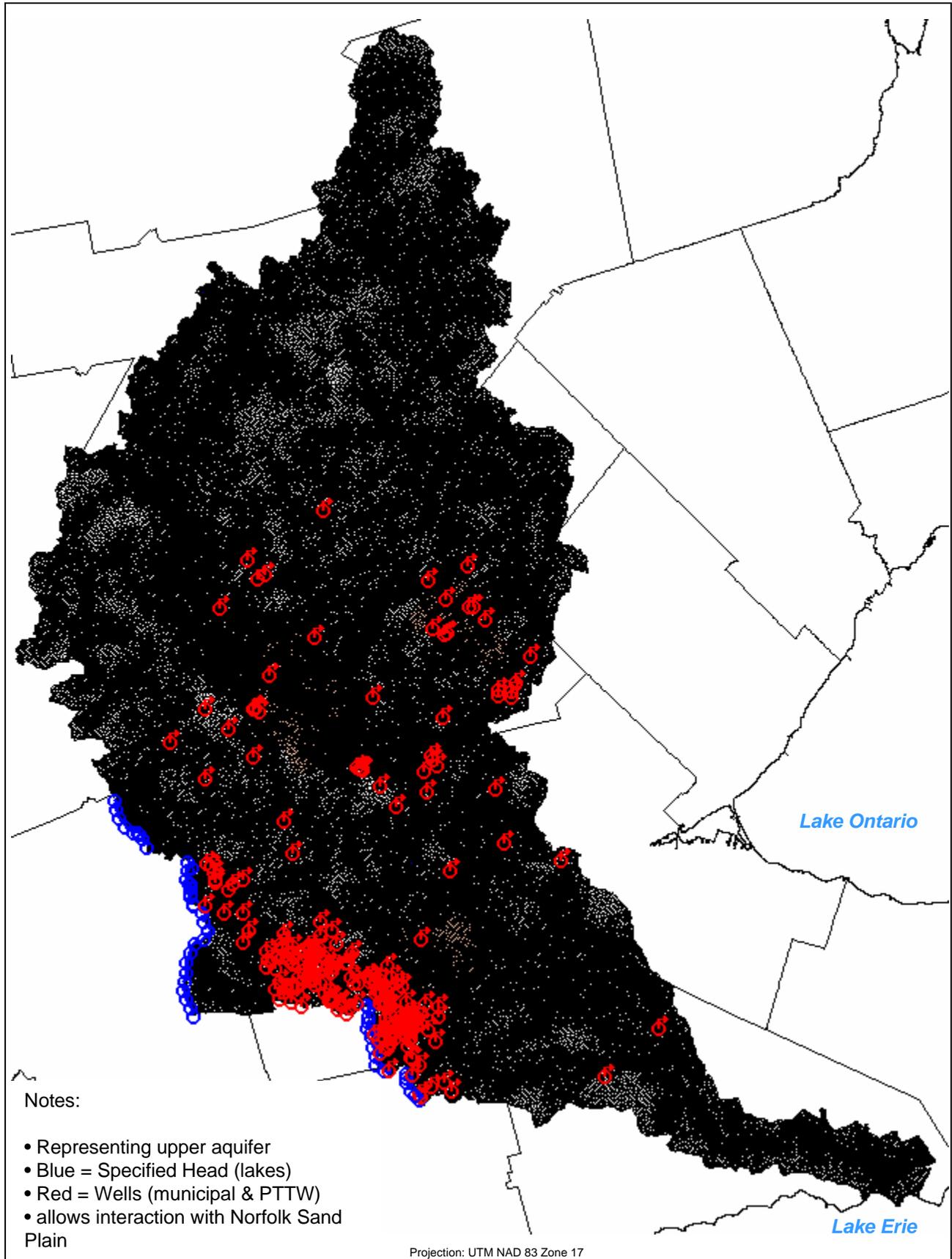
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Figure M54: Boundary Conditions Slices 1 & 2

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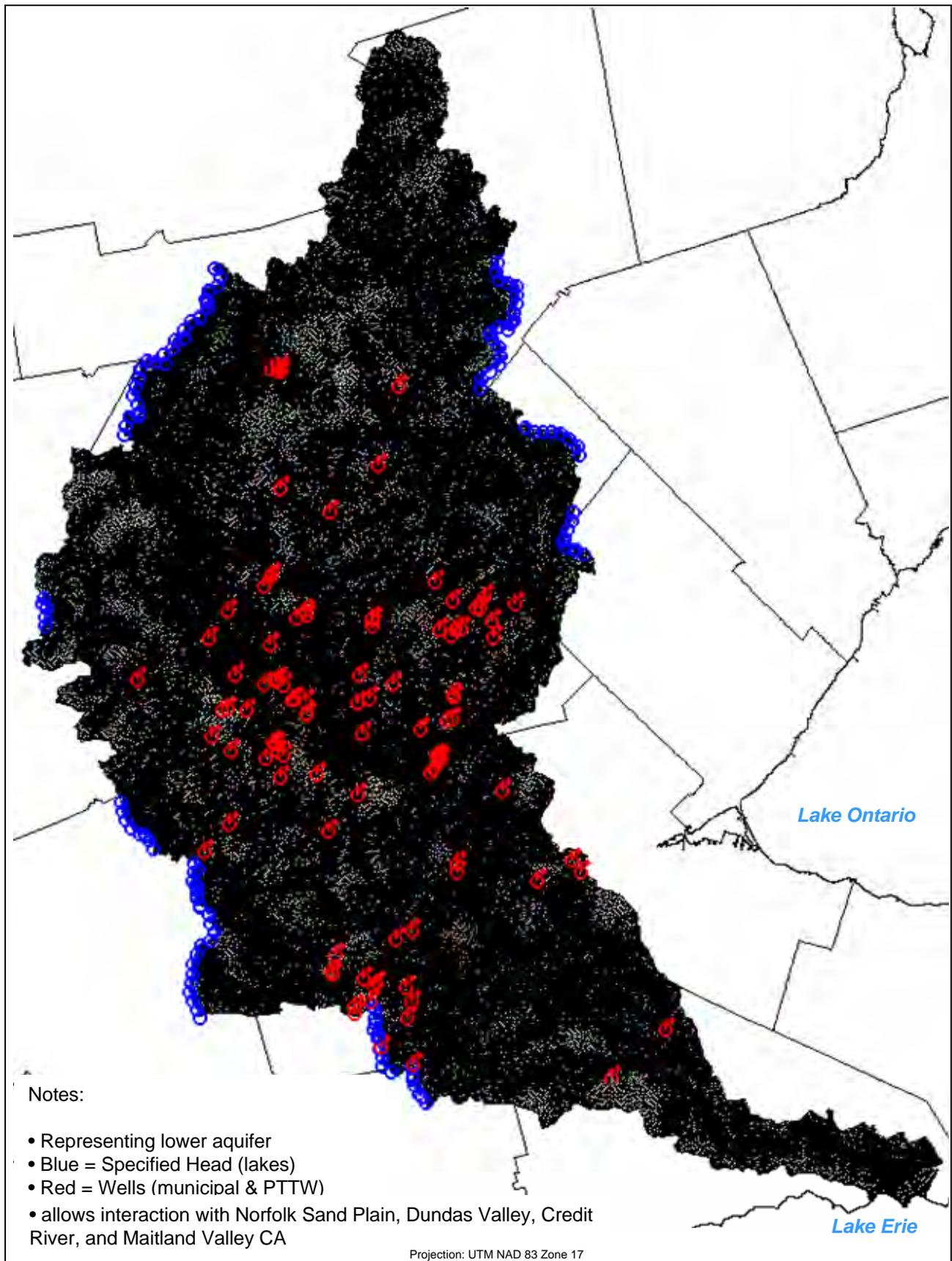
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Figure M55: Boundary Conditions Upper Aquifer - Slice 3

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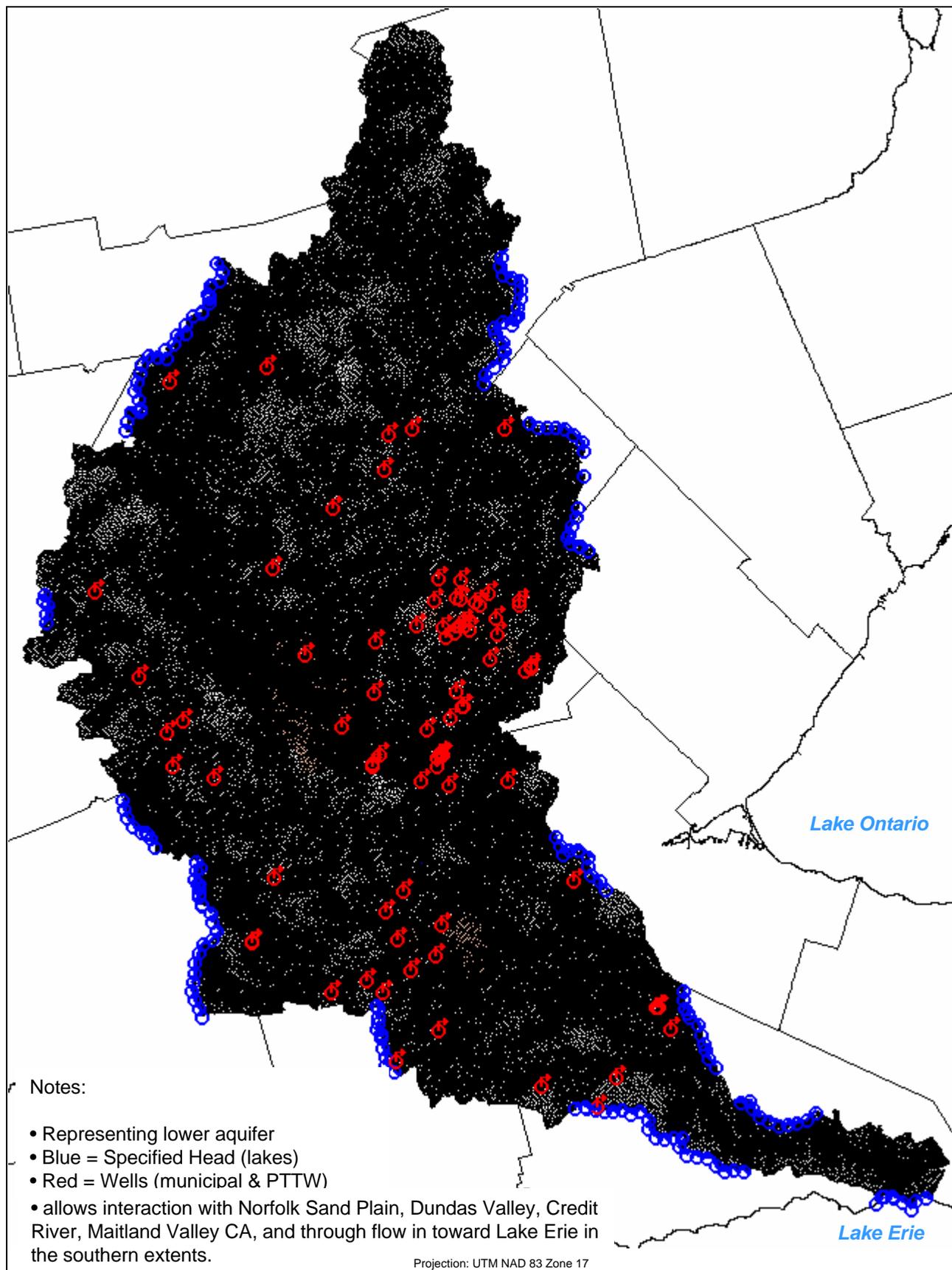
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Figure M56: Boundary Conditions Lower Aquifer - Slice 5

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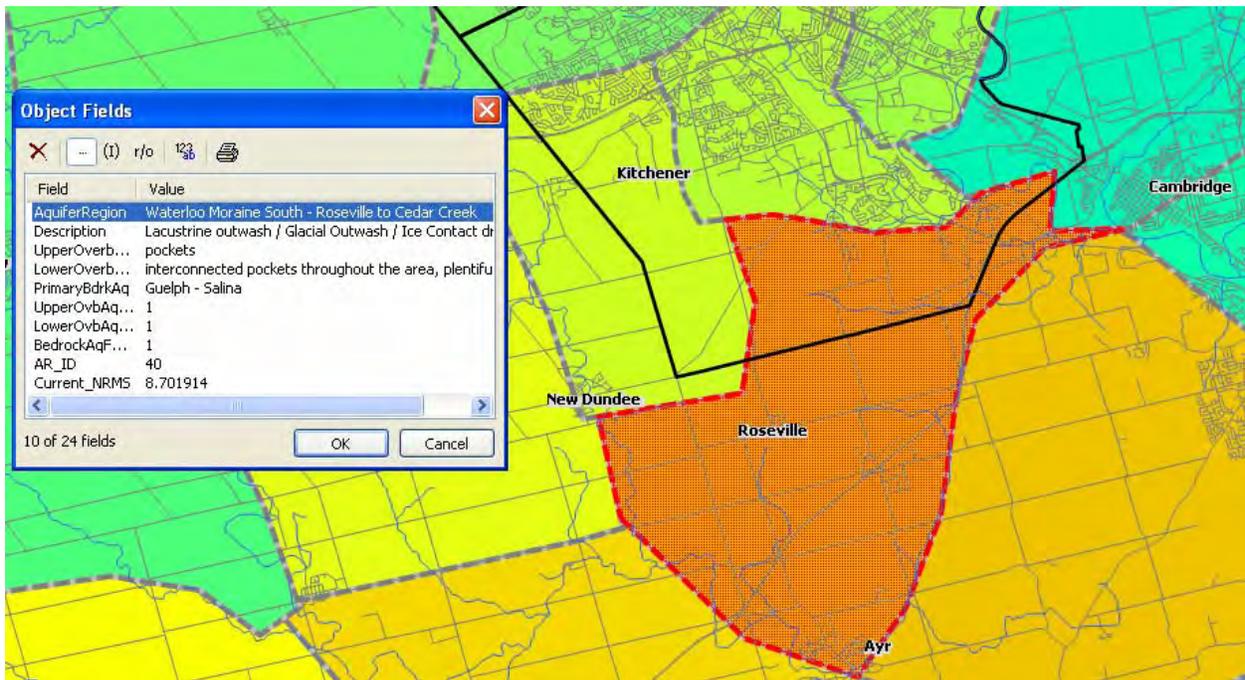
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**Figure M57: Boundary Conditions
Bedrock - Slices 7, 8, 10, 12, & 14**

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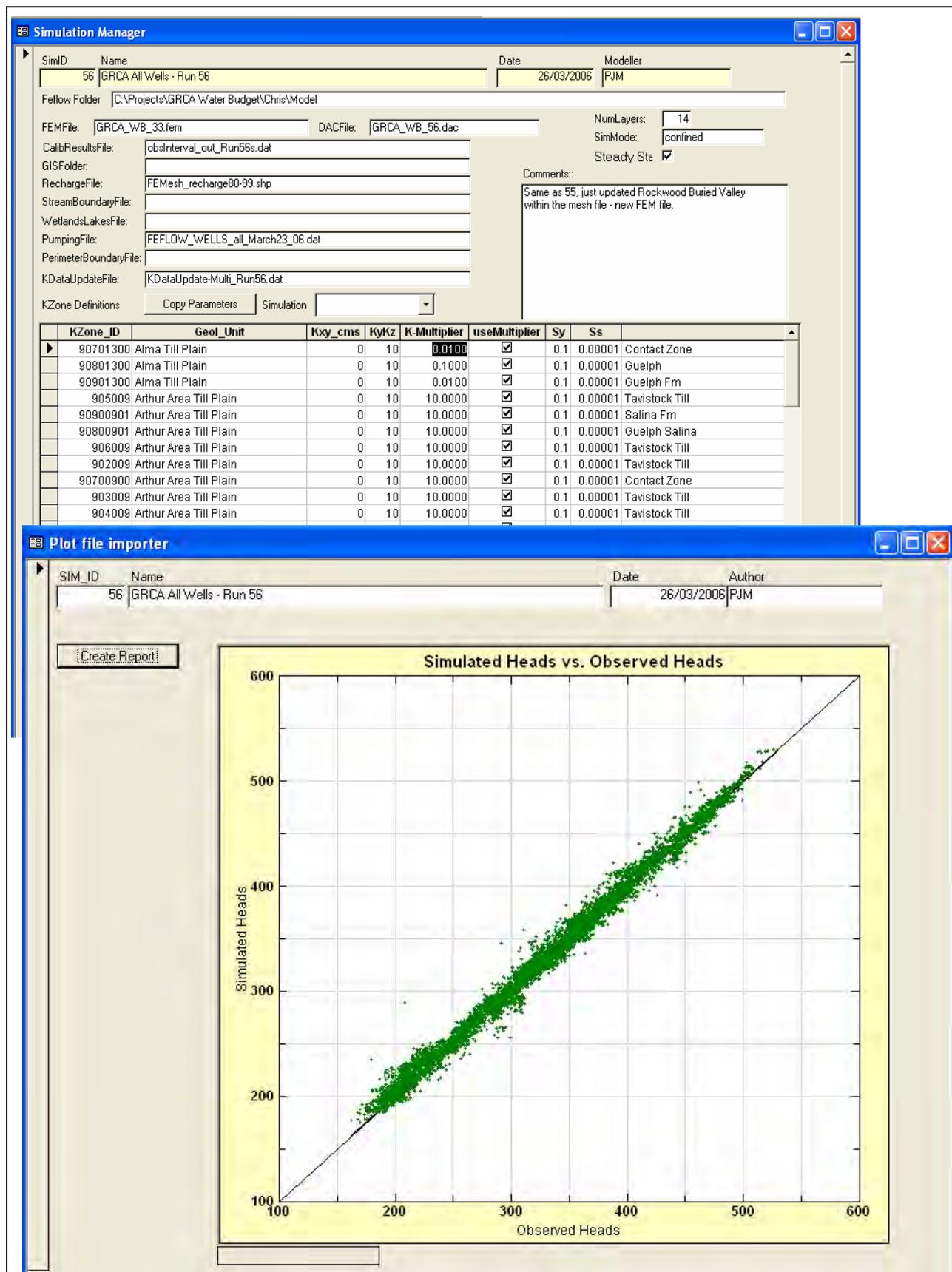
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Figure M59:
Sample Region and Detail

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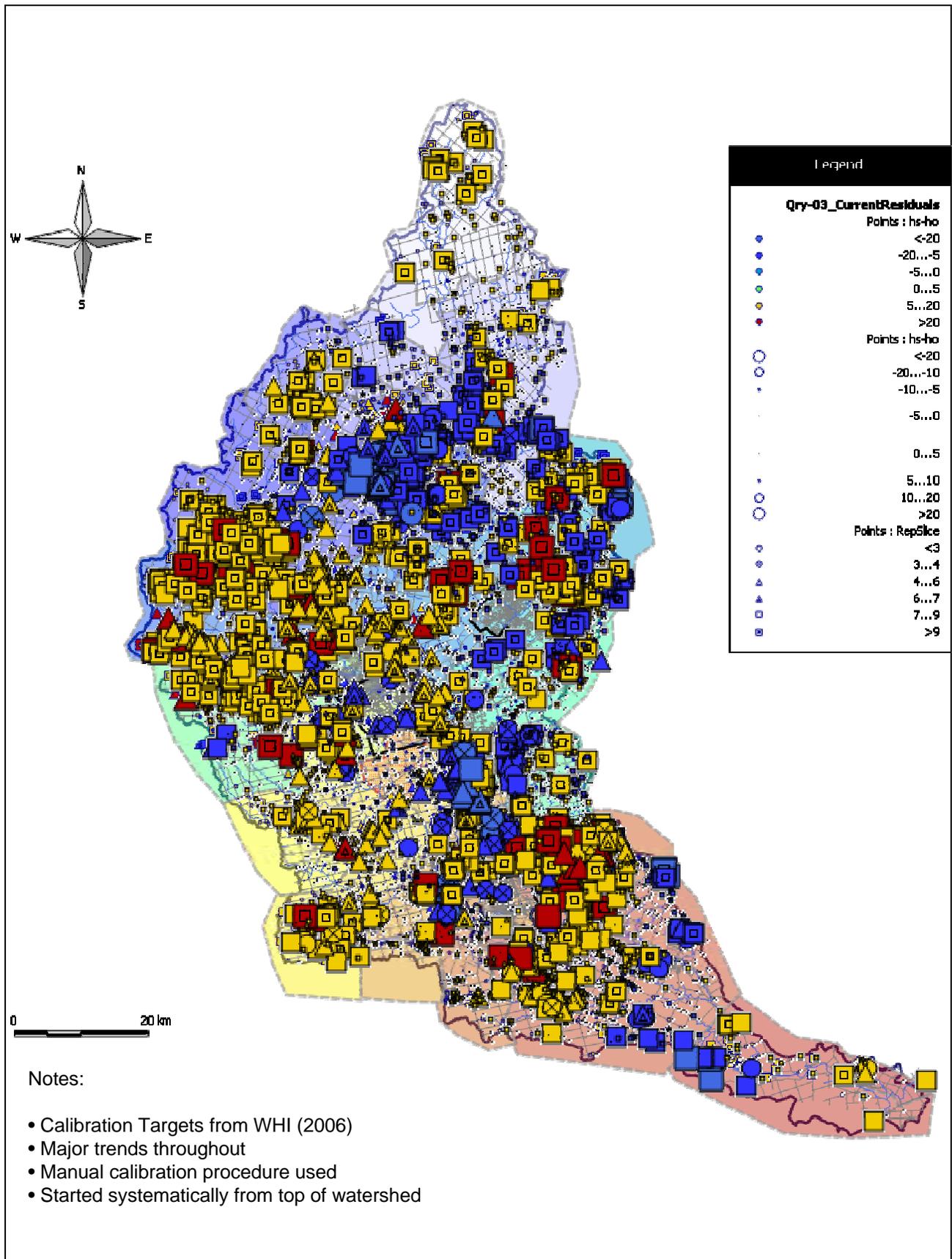
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Figure M60:
Simulation Database

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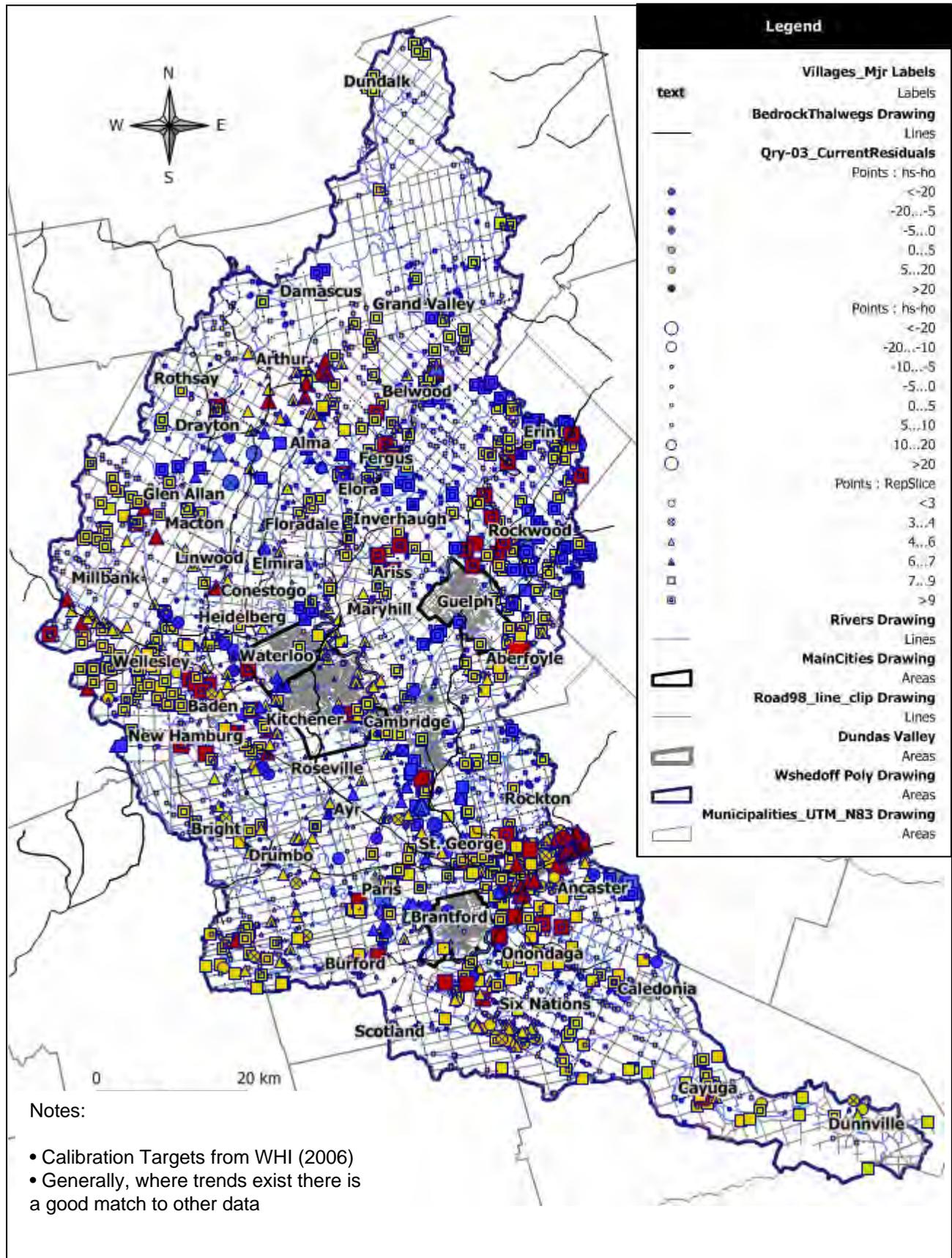
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**Figure M61:
Initial Calibration Residuals – WHI 2006**

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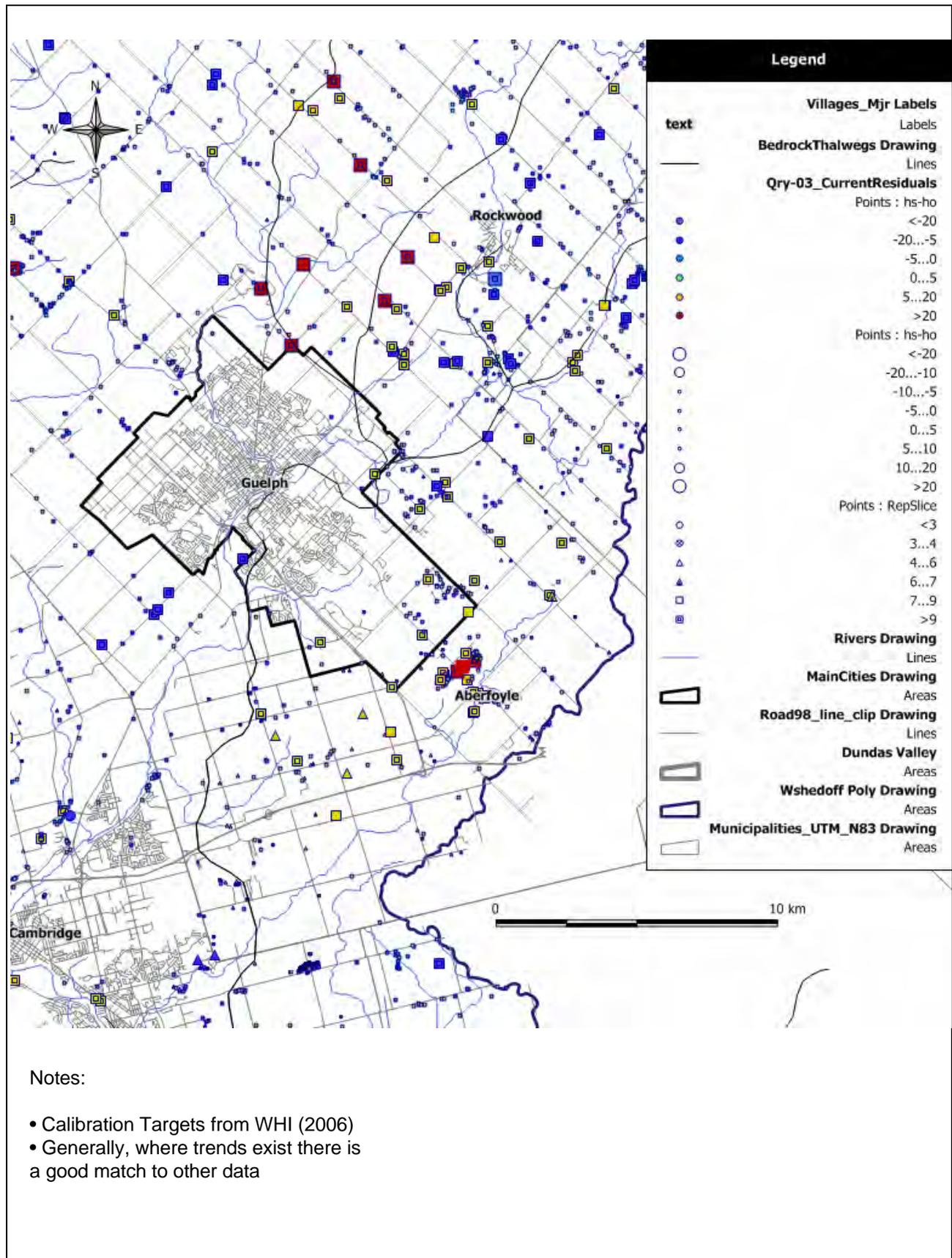
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Figure M62:
Calibrated Spatial Residuals

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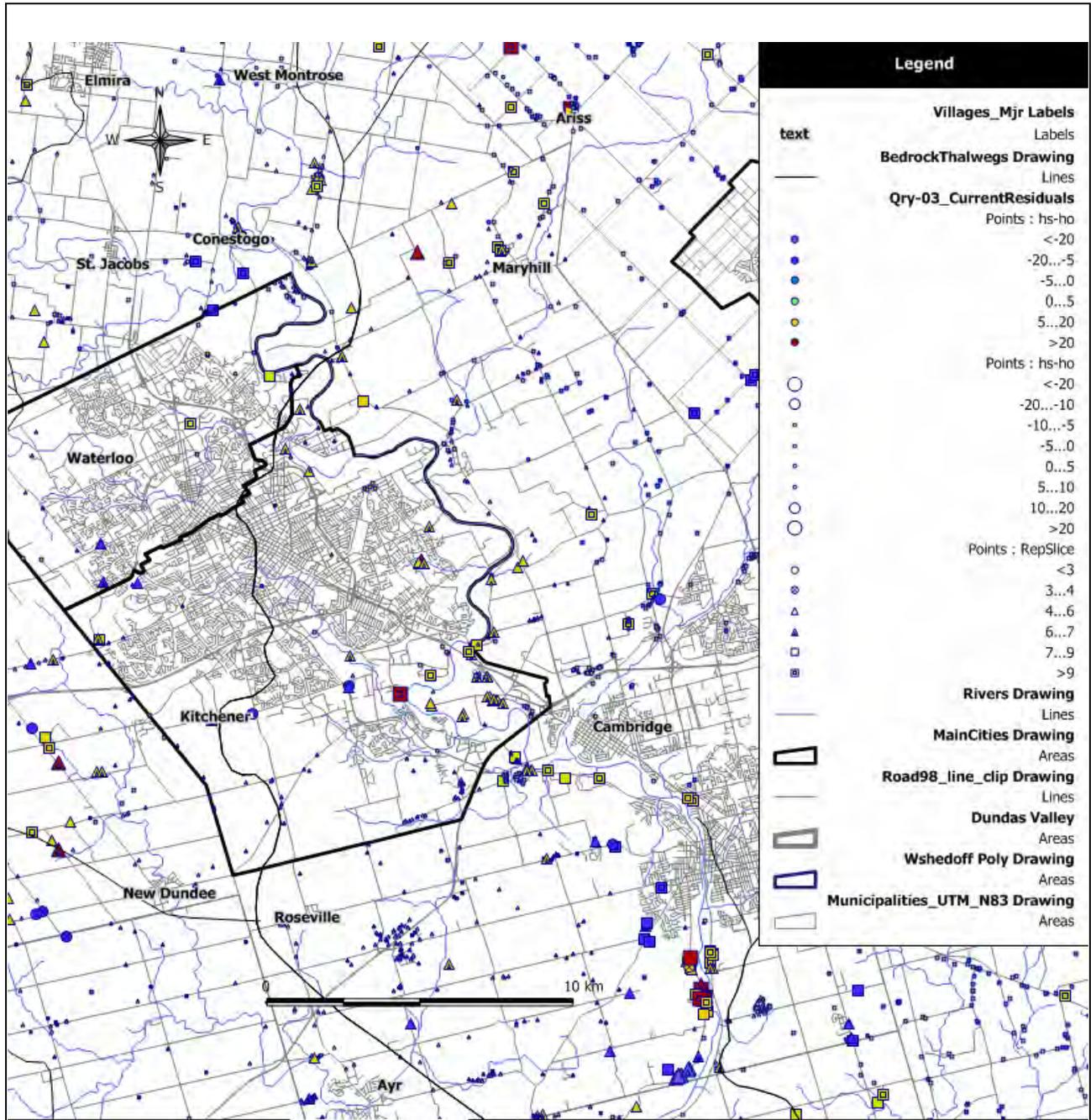
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**Figure M63:
Residuals – Guelph Area**

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Notes:

- Calibration Targets from WHI (2006)
- Generally, where trends exist there is a good match to other data

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Figure M64:
Residuals – Kitchener-Waterloo Area

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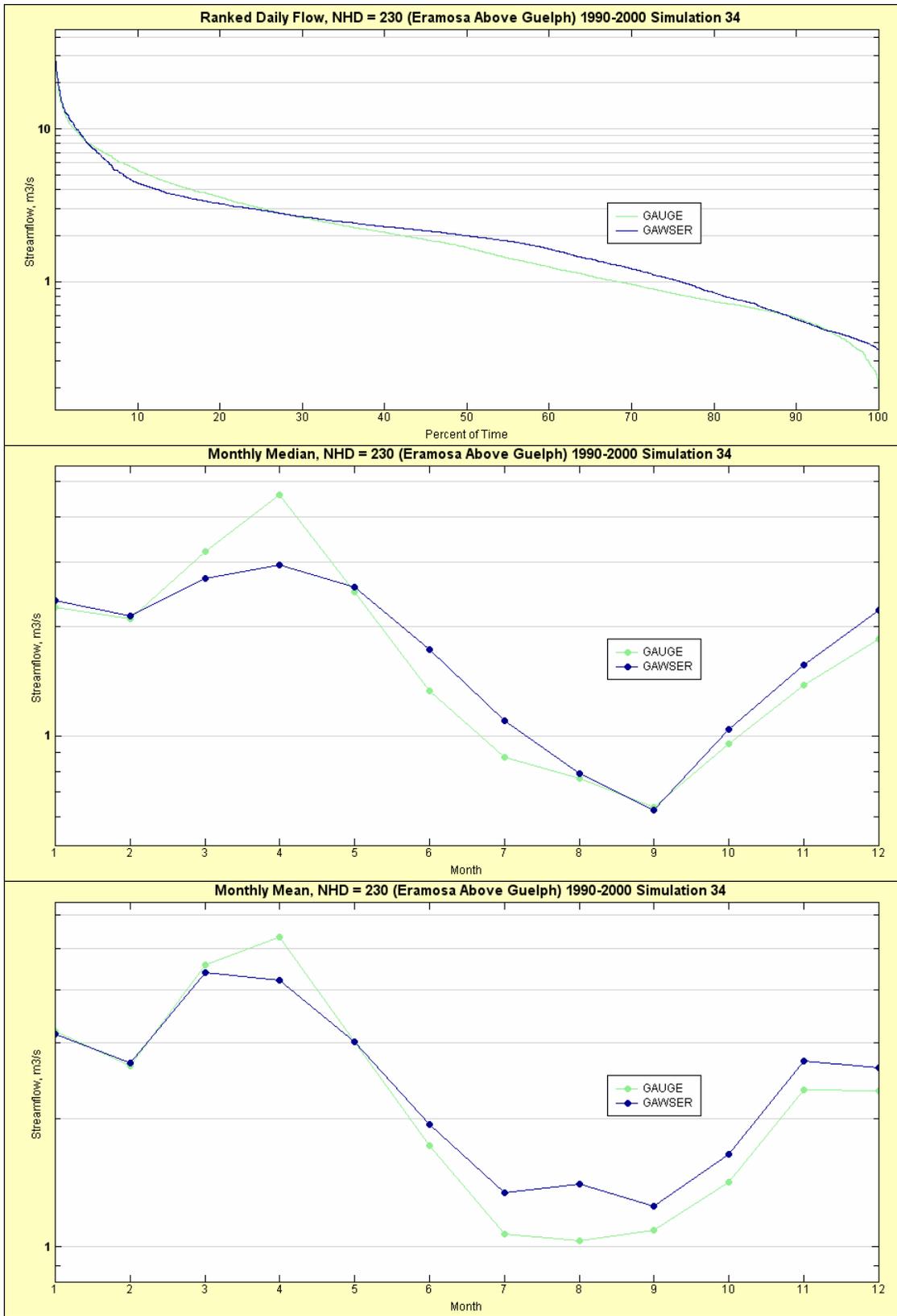


Figure 1 – Eramosa Above Guelph

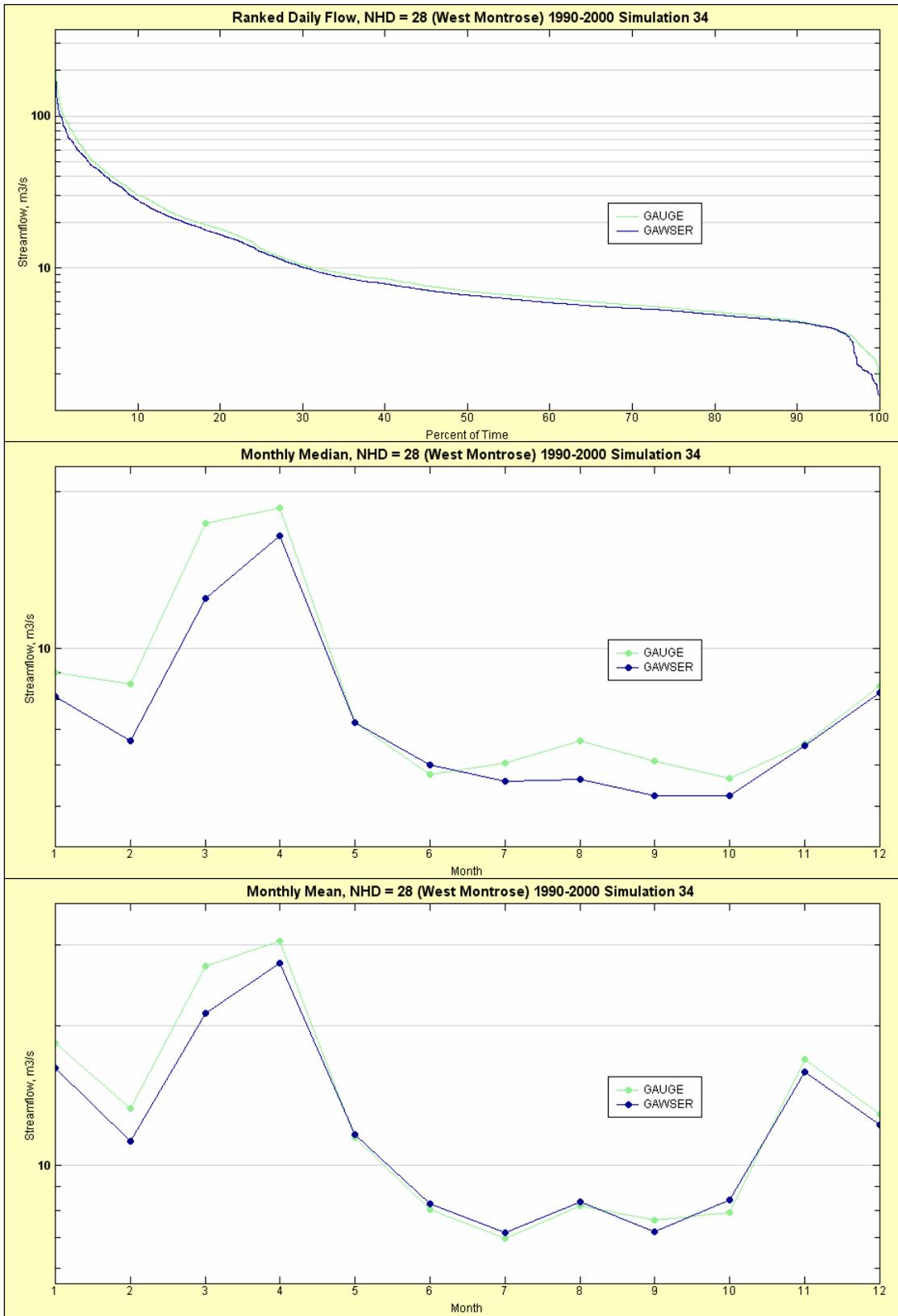


Figure 2 – West Montrose

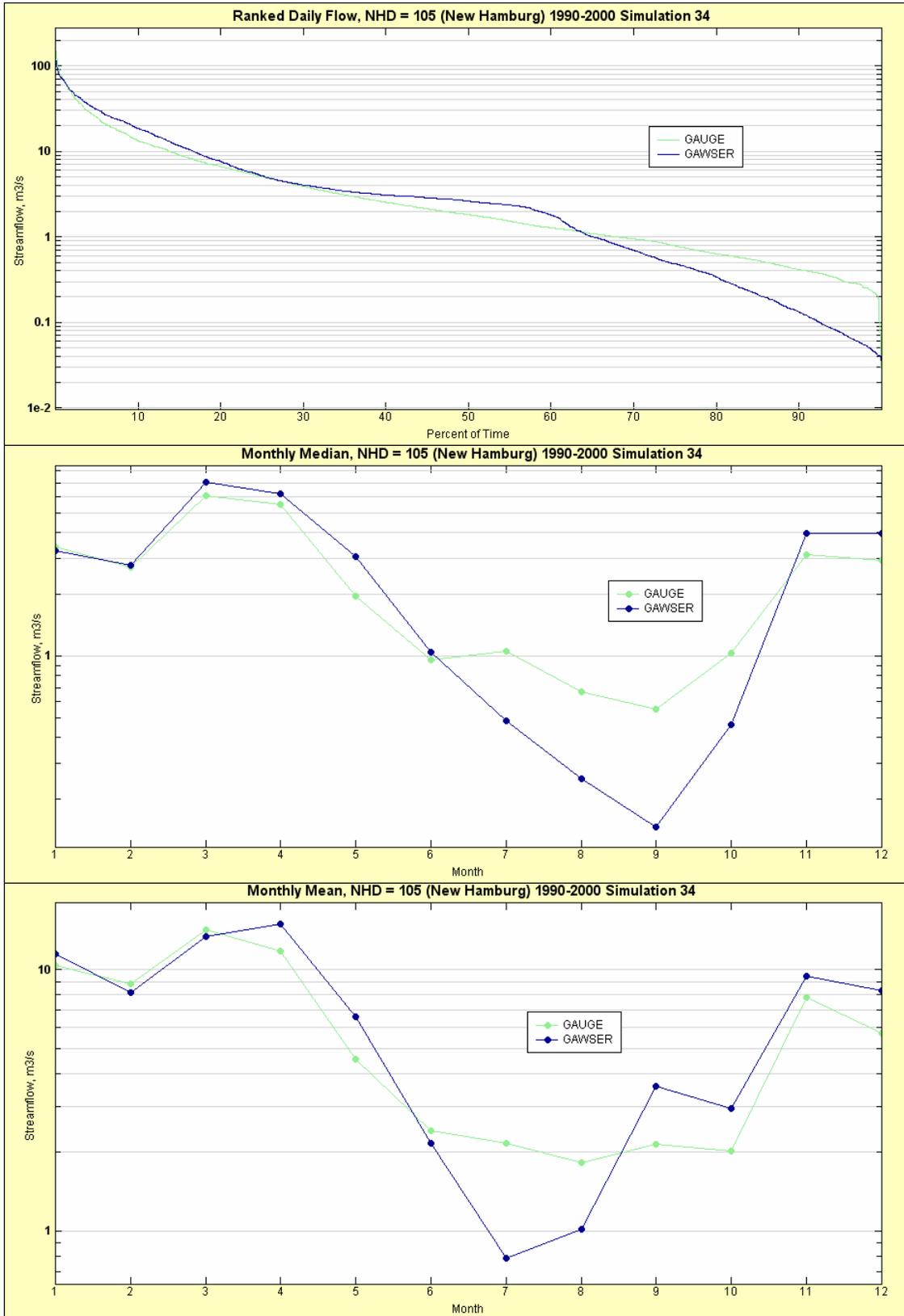


Figure 3 – Nith at New Hamburg

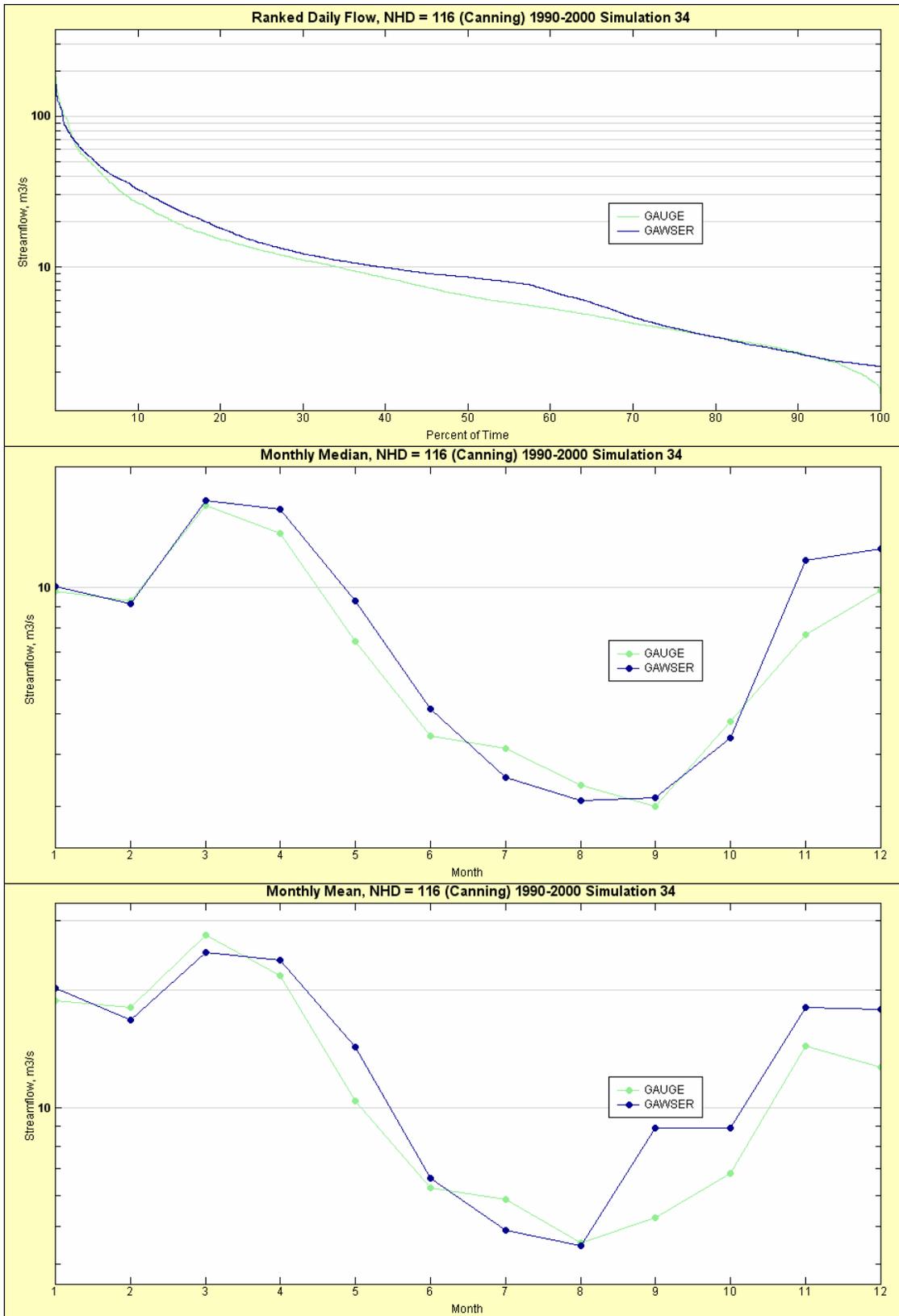


Figure 4 – Nith at Canning

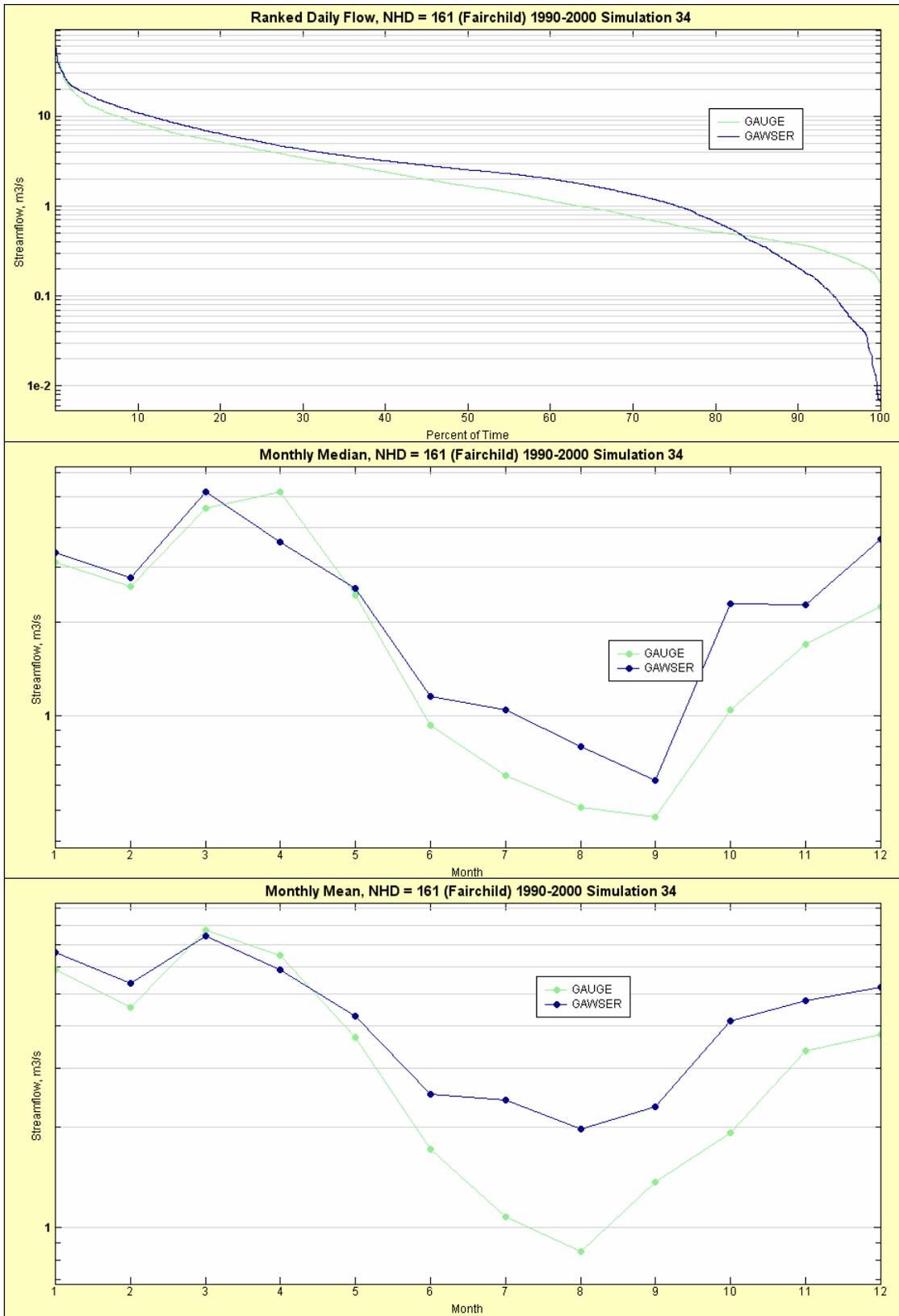


Figure 5 – Fairchild Creek

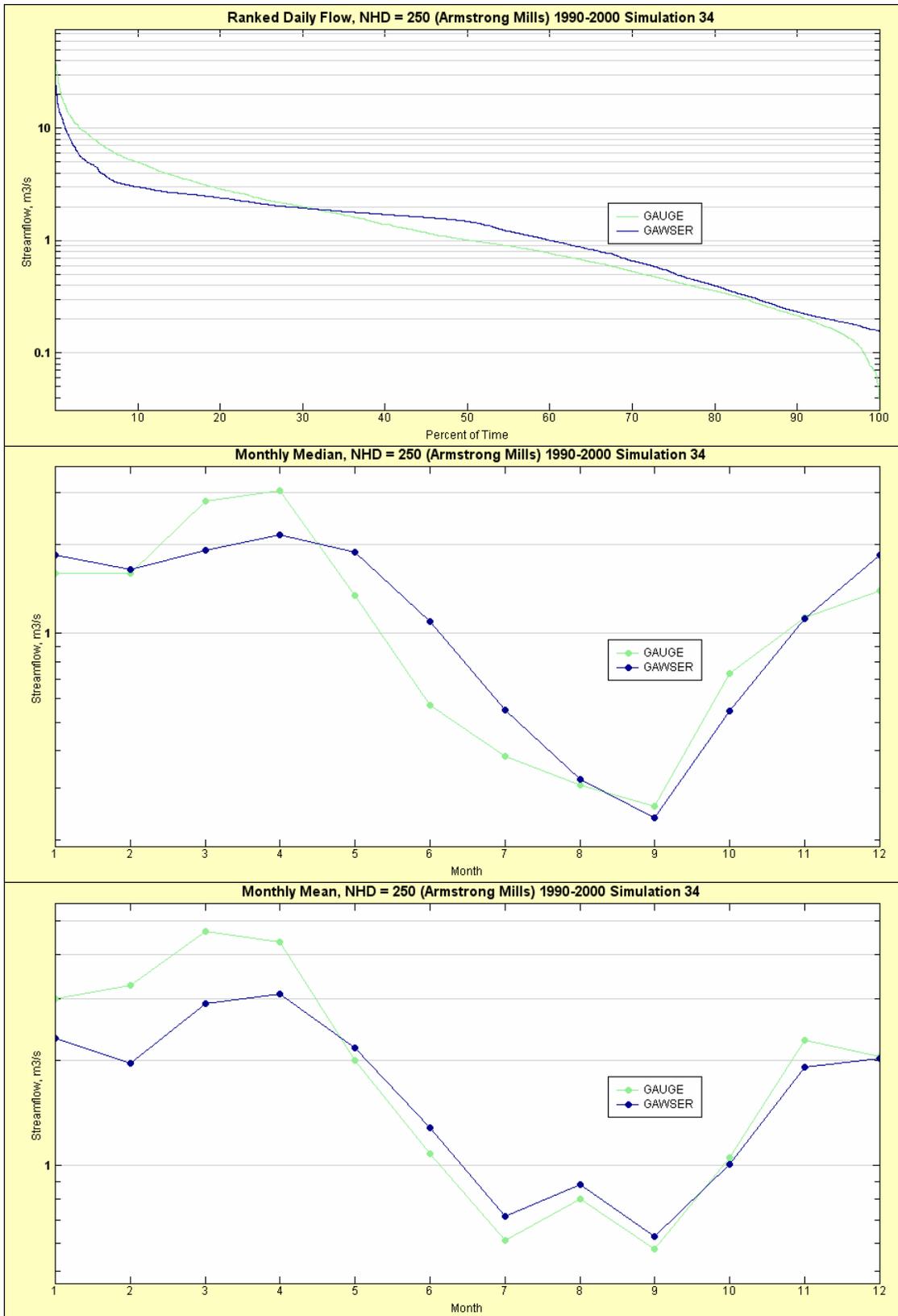


Figure 6 – Speed River at Armstrong Mills

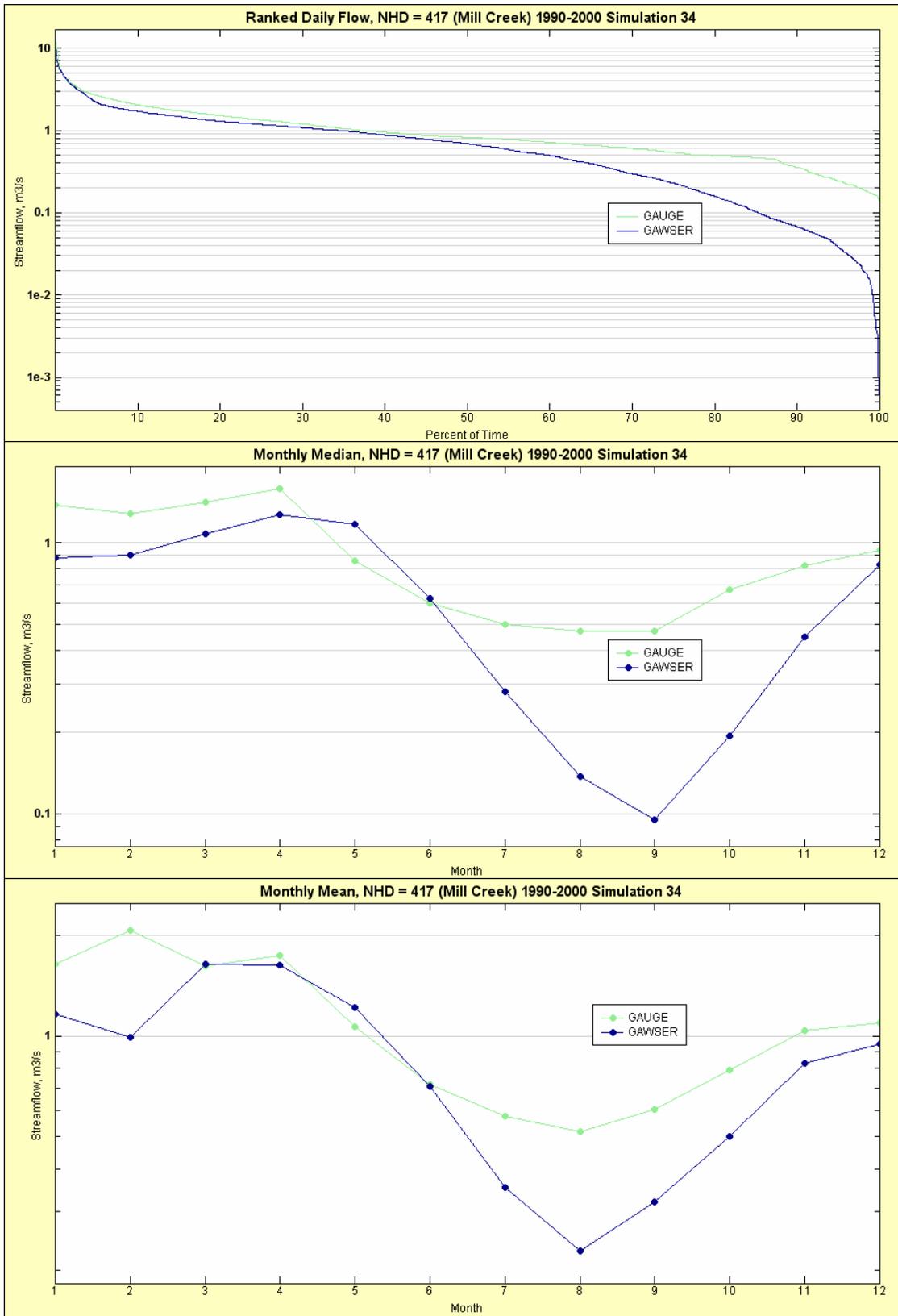


Figure 7 – Mill Creek

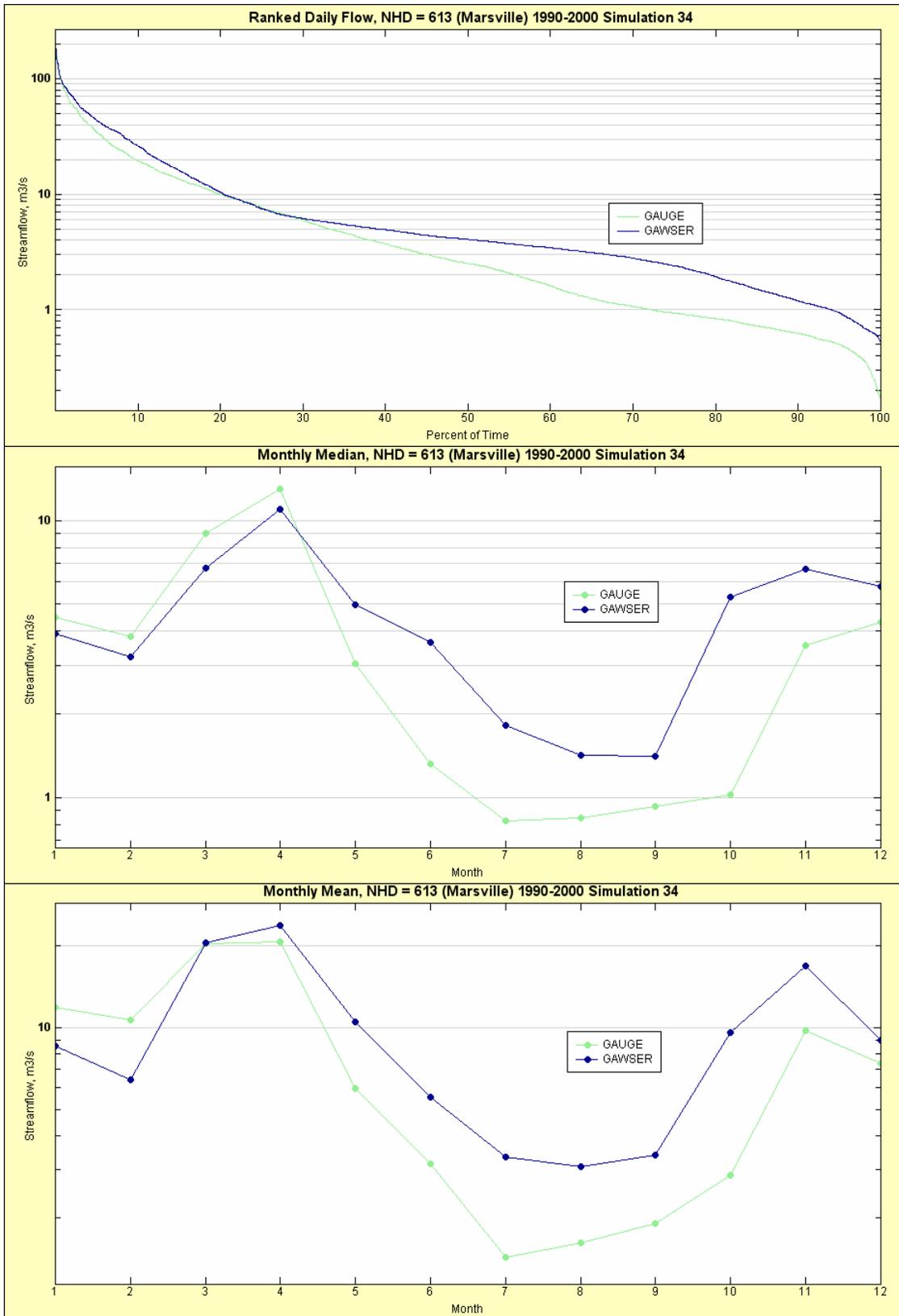


Figure 8 – Marsville

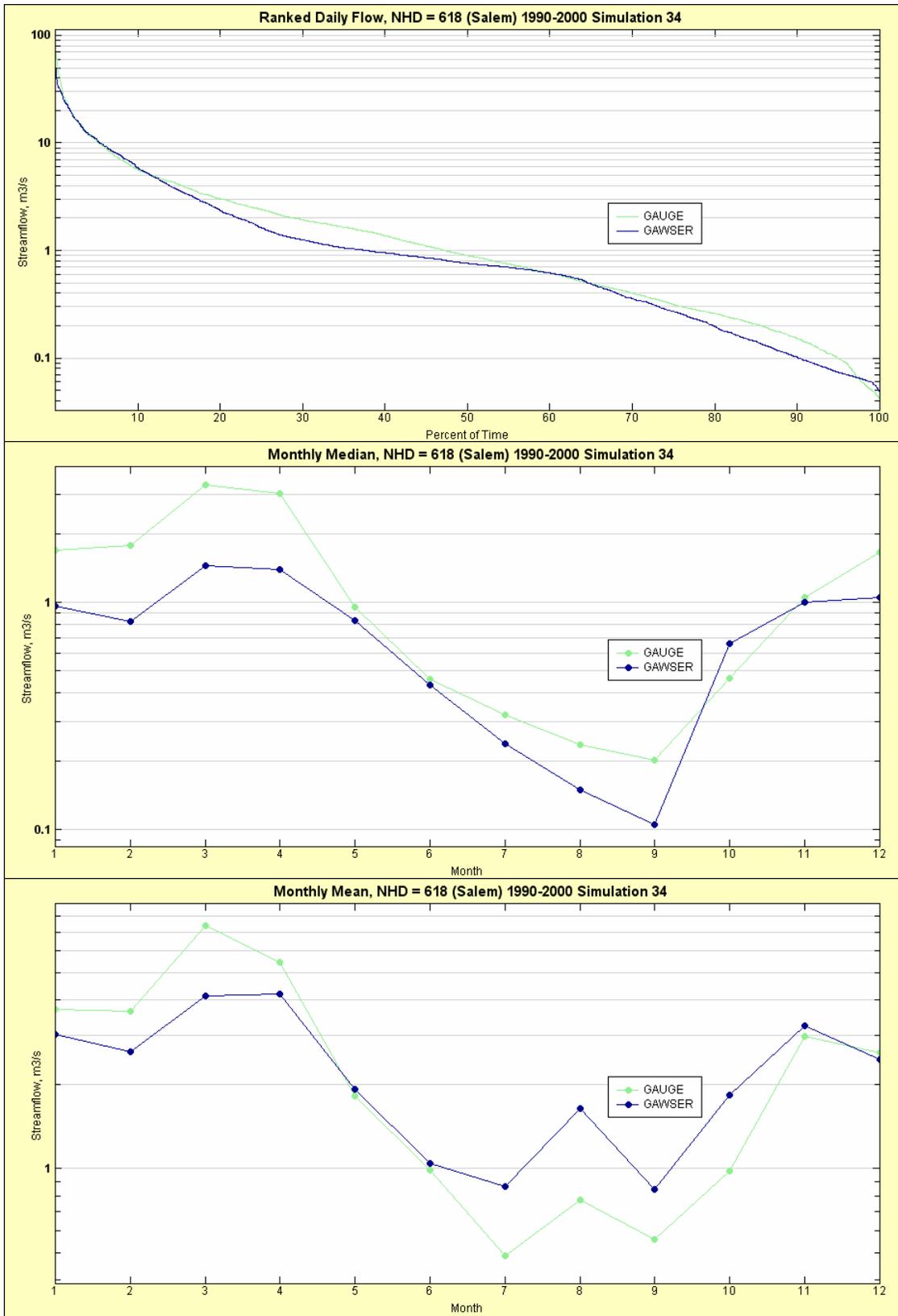


Figure 9 – Irvine River at Salem

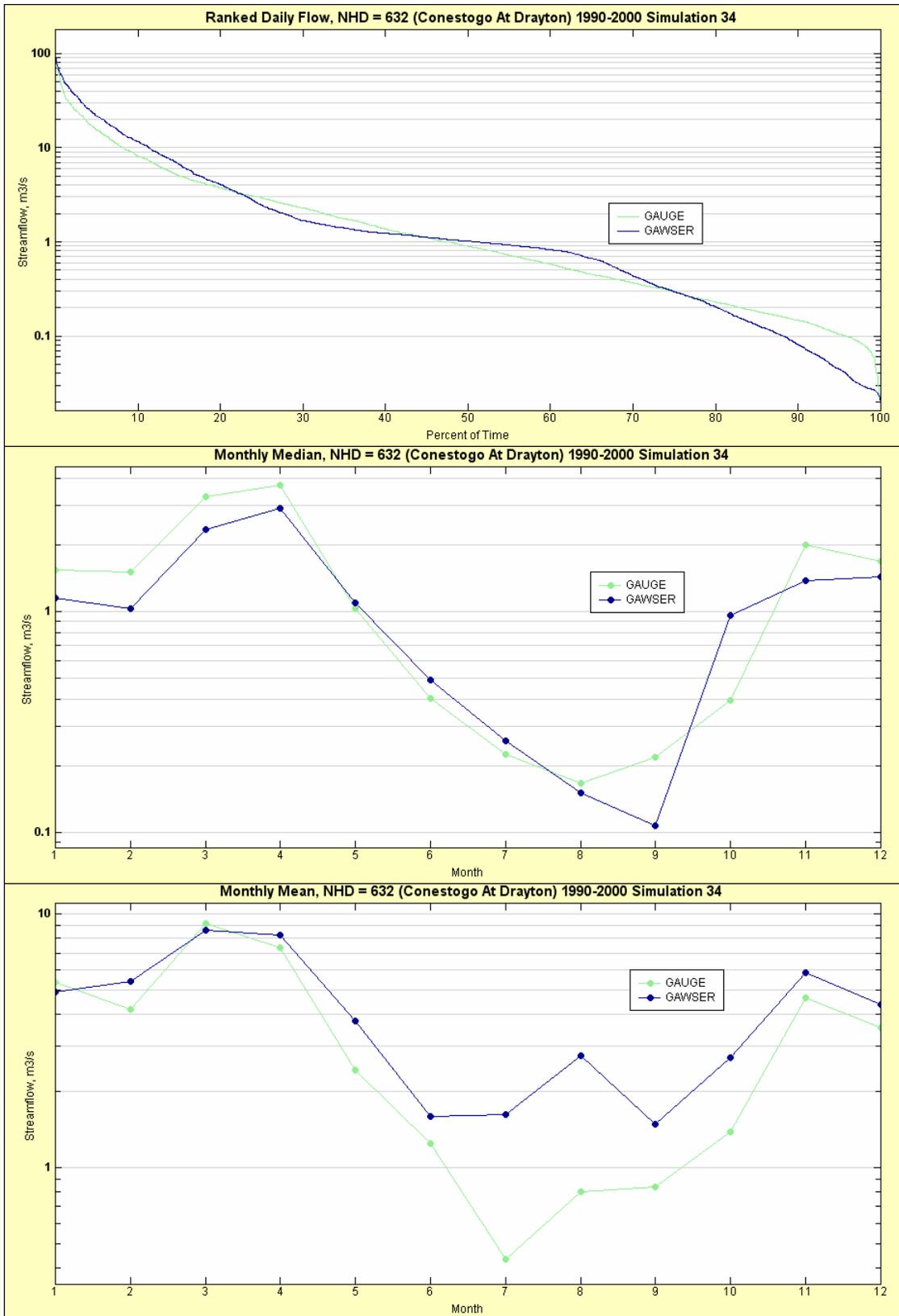


Figure 10 – Conestogo River at Drayton

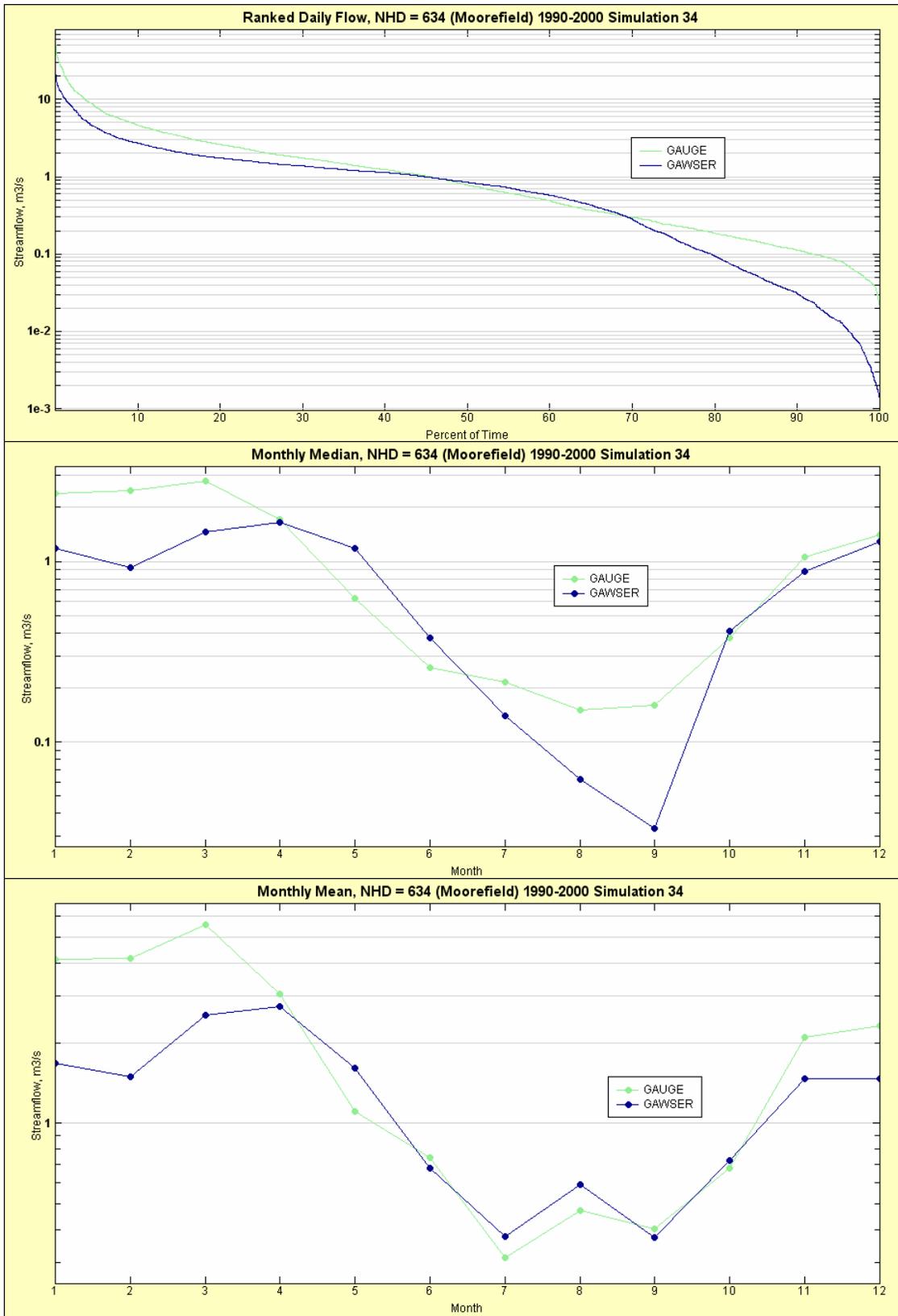


Figure 11 – Moorefield Creek at Moorefield

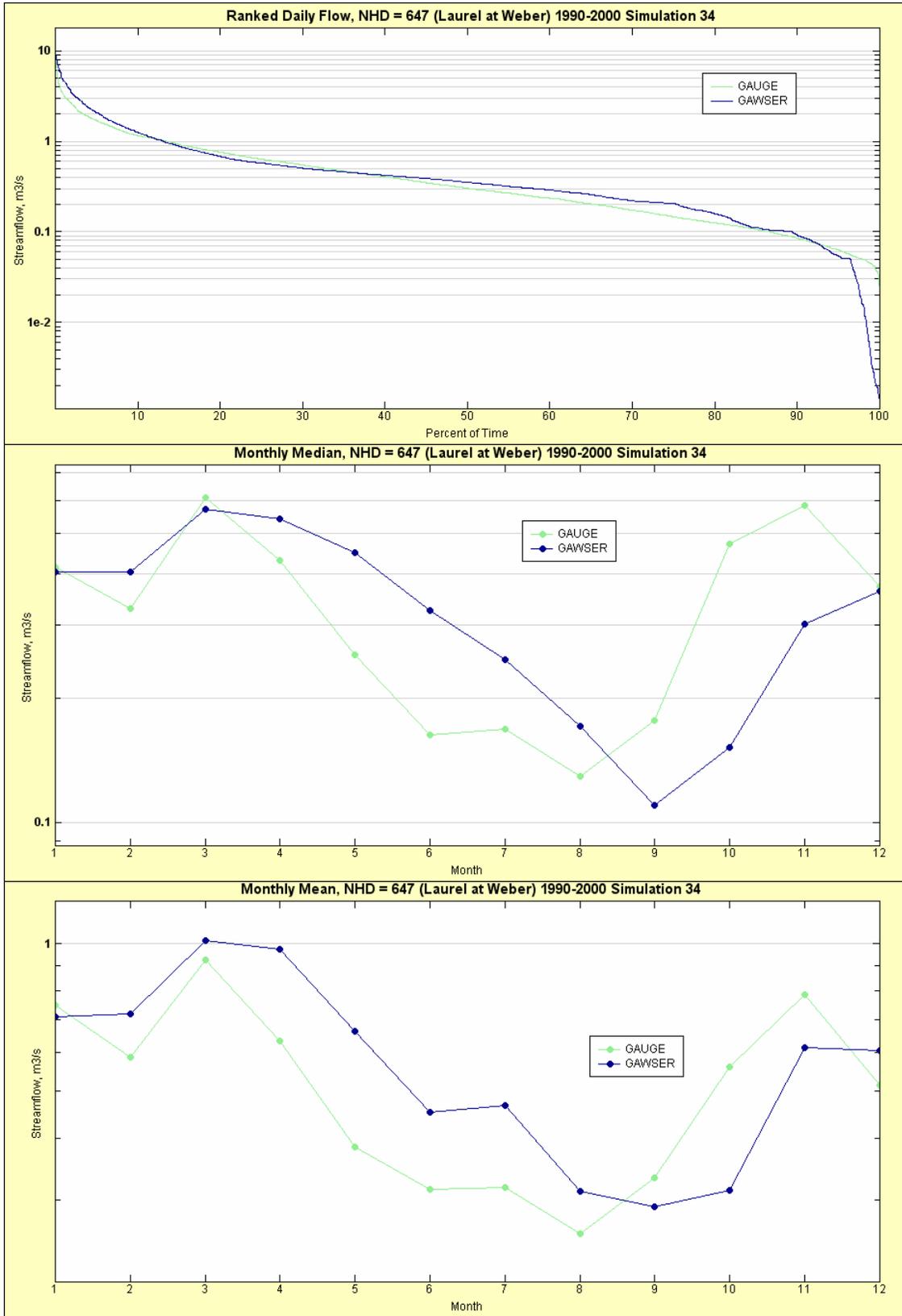


Figure 12 – Laurel Creek at Weber

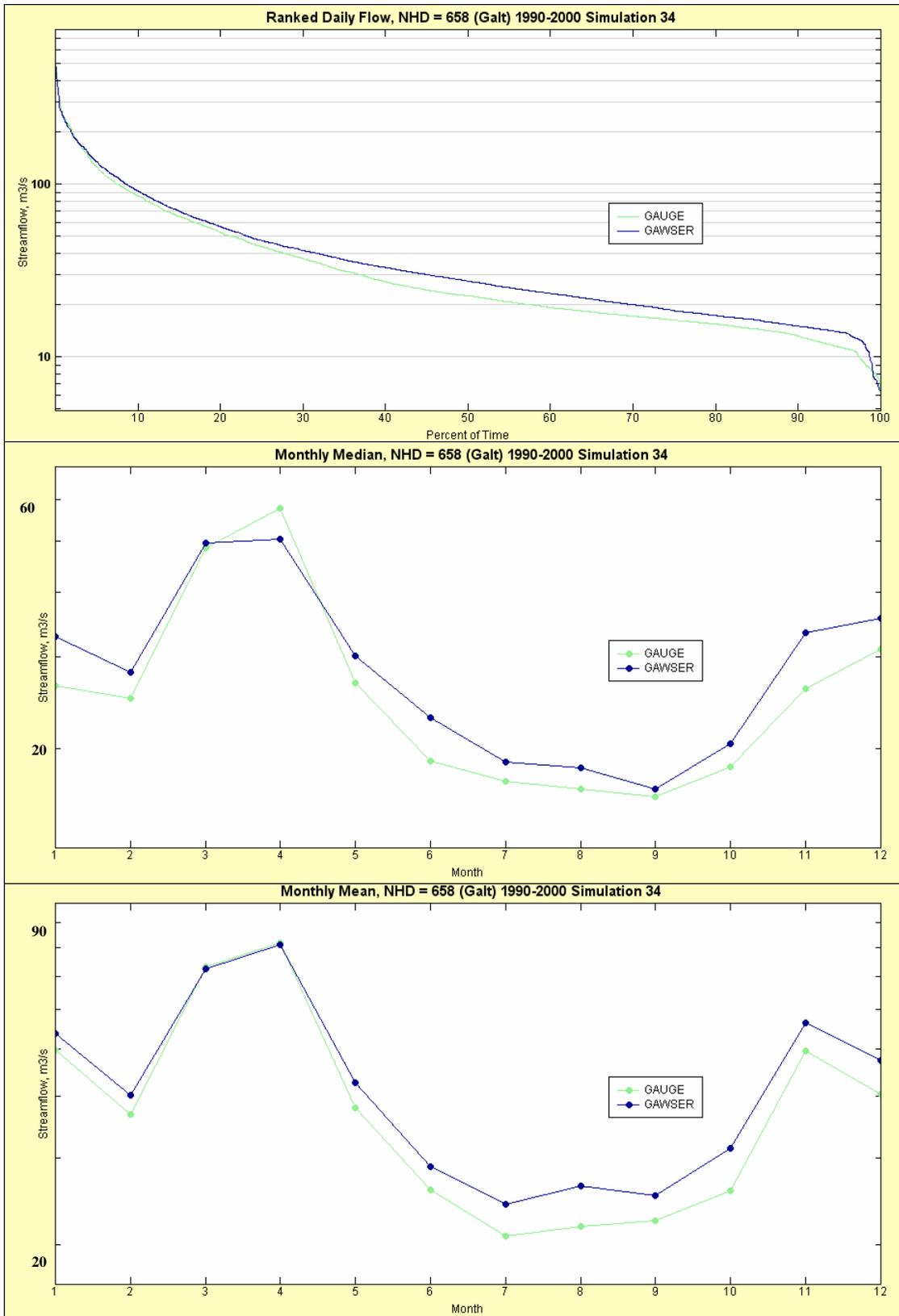


Figure 13 – Grand at Galt

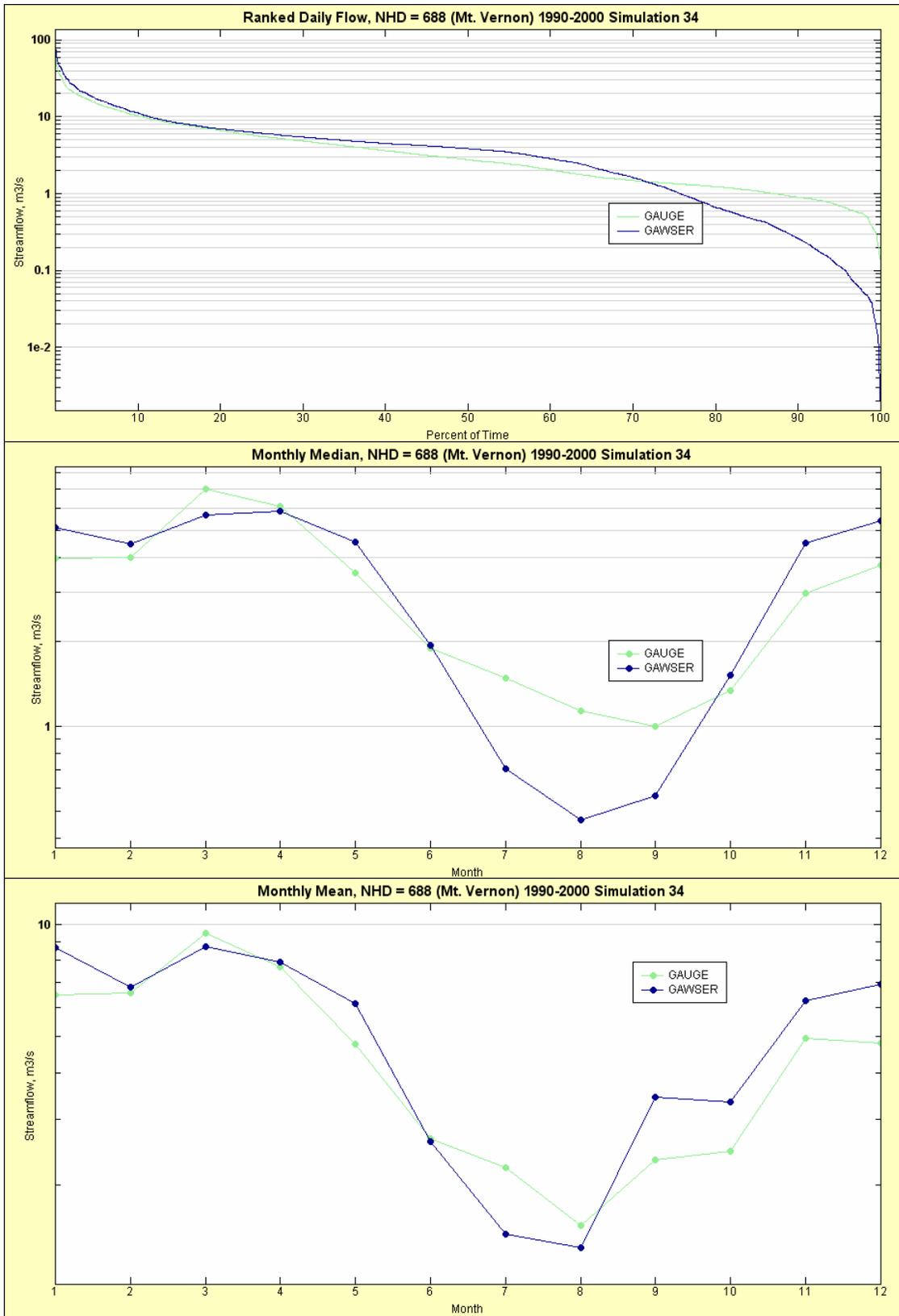


Figure 14 – Whiteman’s Creek near Mt. Vernon

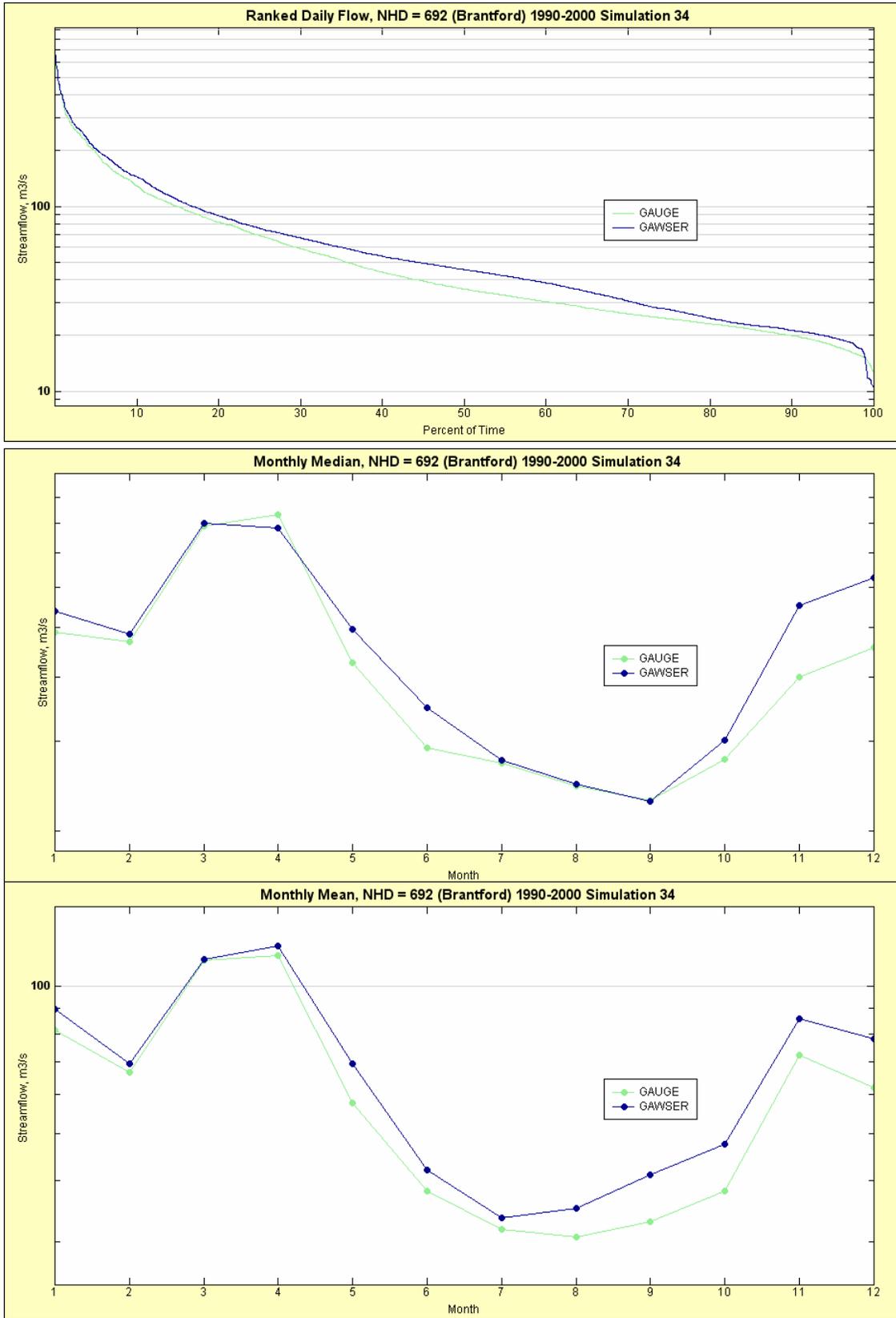


Figure 15 – Grand at Brantford

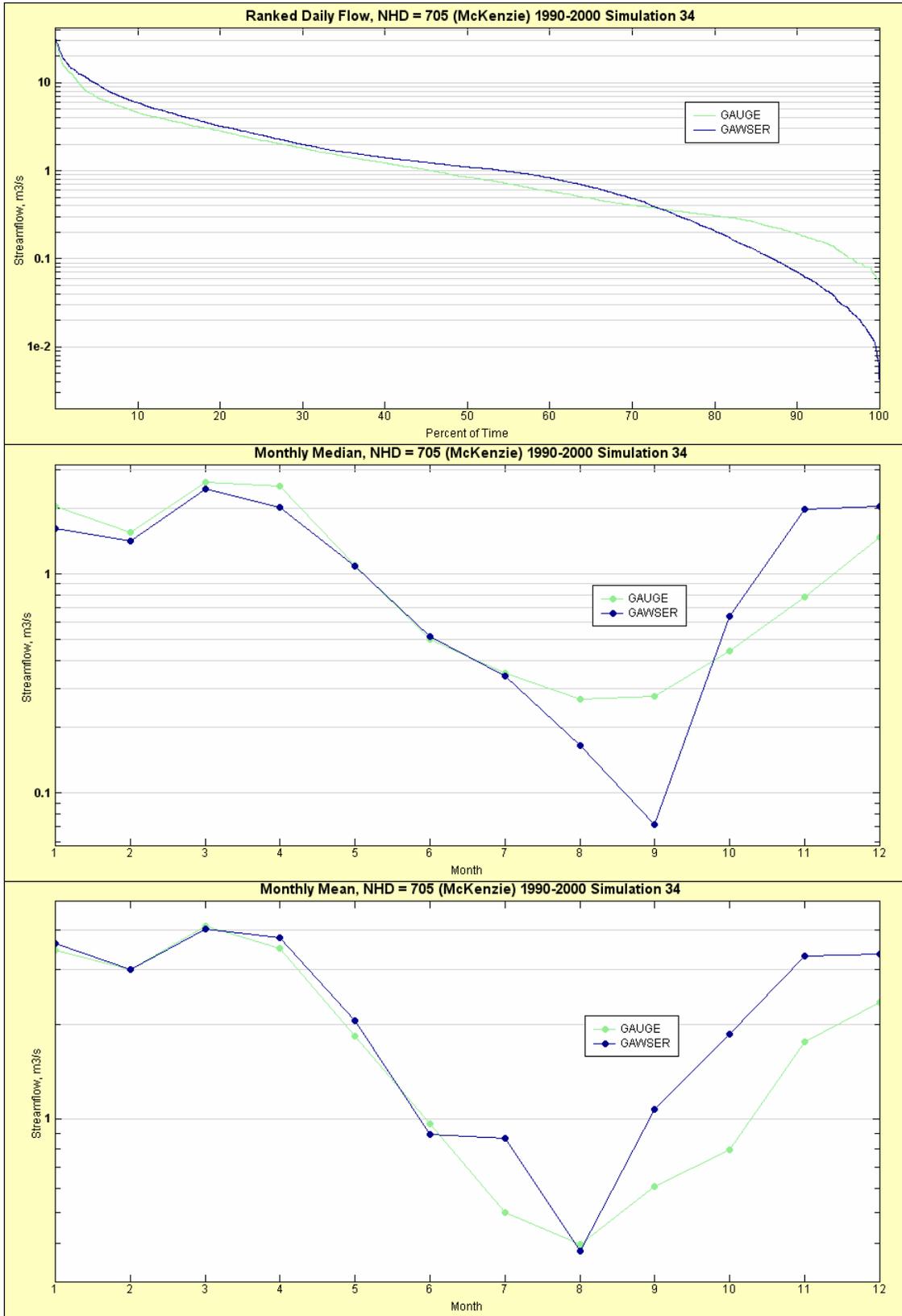


Figure 16 – Fairchild Creek