

APPENDIX E: ANNUAL LOADING ESTIMATES

Summary of 2000 – 2022 annual total phosphorus loadings generated for each creek. Note some records extend back to the 1960s.

Year is presented as YY (i.e. 2000 = '00)

Red denotes >5% of flow data is missing for the water year

Green denotes between 0 and 5% of flow data is missing for the water year

Blue denotes flow is provisional

Tributary	Bias Statistic	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
Four Mile	0.0434								11.3	7.5	9.1	5	7.1	4.8	7	5	2.5	2.7	5.4	4.5	6.9	5.6	3.6	5.9
Welland Canal	0.00979	141	159	167	152	159	167	129	139	168	154	143	79	175	132	146	164	171	121	141				
Twelve Mile	-0.112								2.3	1.8	1.9	1.2	2.0	1.3	1.6	2.4	1.0	0.8	1.8	1.9	1.5	1.3	0.8	1.5
Twenty Mile	0.0404	53.7	34.5	37.4	28.4	75.7	83.7	63.3	94.1	56.6	91.3	42.1	87.0	42.3	66.6	54.8	24.2	21.3	37.3	41.0	48.1	34.2	13.1	41.5
Redhill	-0.186											4.1	2.6	3.2	2.6	1.9	1.5		3.5	2.1	2.2	2.3	1.7	2.8
Spencer	-0.145																6.0	3.9	8.2	6.9	9.6	7.6	4.3	6.4
Grindstone	-0.416				2.2	3.2	3.5	2.9	5.2	5.0	7.7	10.1	4.3	2.9	4	4.1	1.3	1.3	3	6.4	3.9	3.4	1.7	2.5
Indian	0.217																				1.0	0.9	0.9	1.8
Bronte	-0.0918				4.5	7.5	13.1	7.0	11.8	8.4	12.3	6.3	8.2	2.8	6.4	6.8	2.8	2.5	7.4	5.9	13.0	7.4	3.2	9.1
Fourteen Mile	0.264				1.3	3.3	4.0	2.8	5.2	5.2	4.4	4.4	3.1	1.4	2.6	3.0	0.7	0.8	1.5	2.1	2.0	2.0	0.7	1.4
Oakville - Sixteen Mile	-0.174	19.9	3.2	22.7	22.6	22.2	21.7	20.9	20.1	19.8	19.6	19.7	19.9	20.0	20.1	20.1	19.8	20.0	20.3	20.7	20.9	22.2	22.6	22.7
Sheridan	0.181																	0.8	1.4	1.5	1.6	1.7	1.6	1.1
Credit River	0.052																	9.5	15.2	15.4	21.8	21.1	7.7	11.8
Cooksville	0.198														0.3									0.7
Etobicoke	0.197				14.4	18.4	27.4	30.7	23.0	41.3	47.4	19.4	20.8	17.1	17.5	13.0	11.3	9.3	20.4	15.4	11.7	27.5	6.5	11.3
Mimico	0.0438				4.8	6.0	9.6	11.7	7.6	10.7	9.8	6.7	6.6	9.2	7.0	2.1	5.1	3.6	8.3	6.0	6.4	7.7	5.5	5.1
Humber	0.158	81.4	20.9	19.5	30.2	67.6	74.0	76.3	43.7	52.4	74.7	32.6	34.8	27.2	51.6	41.1	31.8	22.2	43.1	39.1	54.3	70.1	18.4	39.3
Don River	0.0812	50.0	20.7	28.1	24.6	30.6	38.8	40.7	40.7	58.3	59.8	30.7	34.9	35.0	32.6	23.4	33.8	28.6	29.1	35.8	33.4	30.6	21.6	

Estimating Tributary Phosphorus Loads for Western Lake Ontario

Tributary	Bias Statistic	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
Highland	0.162							6.4	4.5	8.7	15.9	6.1	10.1	5.1	8.2	6.5	7.1	9.0	11.3	7.7	8.6	10.6	4.3	4.2
Rouge River	0.101 and 0.0859				10.6	14.2	14.7	27.5	14.4	27.8	50.8	25.0	41.2	19.4	20.6	22.9	17.2	10.8	28.2	16.7	23.6	69.9	6.6	13.2
Petticoat	-0.078										1.1	0.9	1.7	0.7	0.4	0.8	1.3	0.4	0.7	0.8	1.6	0.8	0.3	0.5
Duffin's	0.15	20.2	4.7	6.4	72.9	13.6	17.2	61.3	16.7	41.5	118.1	35.7	43.6	8.4	19.9	23.2	12.6	10.7	15.0	20.7	21.8	29.4	3.8	9.1
Carruthers	0.0769									2.0	3.4	1.3	2.4	1.0	1.5	1.7	1.5	0.7	1.7	1.5	1.7	1.3	0.4	1.0
Lynde Creek	-0.00109	9.7	0.7	1.4	1.3	2.3	1.4	2.2	2.5	3.4	4.1	1.4	2.1	1.7	2.4	2.3	2.9	1.6	3.6	4.0	4.8	5.1		
Oshawa	-0.202														5.4	3.9	3.1	4.4	9.8	5.6	21.4	0.9	3.9	
Bowmanville	0.0221								2.4	7.2	9.2	2.4	3.7	2.3	3.5	0.6	3.5	3.3	7.3	5.6	9.5	14.5	2.6	6.0
Wilmot	0.0638				1.4	2.3	2.9	1.5	1.5	5.1	8.0	5.2	5.9	1.1	2.0	1.6	1.1	1.8	1.7	6.4	7.1	6.2	0.9	2.5
Graham	-0.245												2.3	0.9	1.3	2.4	1.4	0.6	0.4	2.6	4.4	5.9	1.9	2.9
Wesleyville	-0.0929														0.3	0.3	0.2	0.1	0.4	0.2				0.1
Ganaraska	-0.152	15.2	2.5	3.7	10.9	9.4	11.2	7.0	10.4	12.5	21.4	12.5	12.2	3.5	4.6	5.8	4.6	7.1	9.0	12.9	13.6	28.7	4.0	6.1
Gages Creek	-0.0465																		0.8	0.7	1.4	2.0	1.1	
Cobourg	-0.0358						1.6	1.4	2.0	1.2	2.4	2.3	2.5	1.8	1.4	2.6	2.3	2.5	3.0	2.7	4.9	2.6	1.6	1.9