

List of Tables for Chapter 6 (MVSPA)	
6-1	Summary of Key Findings for Intake Protection Zones - MVSPA
6-2	Summary of Potential Significant Threats to Surface Water Based Municipal Drinking Water Systems - MVSPA
6-3	Summary of Potential Significant Threats by Prescribed Drinking Water Threat Category for Surface Water Based Municipal Drinking Water Systems - MVSPA
6-4	Lower/Single Tier Municipalities located in Intake Protection Zones - MVSPA
6-5	Risk to Carleton Place IPZs based on Managed Lands and Livestock Density.
6-6	Summary of Potentially Significant Threats to Carleton Place Source Water and Prescribed Activities Considered
6-7	Risk to Britannia and Lemieux IPZs based on Managed Lands and Livestock Density.
6-8	Summary of Potentially Significant Threats to Britannia Source Water and Prescribed Activities Considered

Table 6-1
Summary of Key Findings for Intake Protection Zones - MVSPA
Mississippi - Rideau Source Protection Region

Municipal Drinking Water System (Source Protection Area)	Number of Intakes	Size of IPZ (km ²)		Vulnerability Scores	Area of IPZ where Potential Significant Threats may be present (km ²)	Number of Potential Significant Threats (line, polygon or point)	Number of Issues	Number of Conditions
		IPZ-1	IPZ-2					
Carleton Place (MVSPA)	1	IPZ-1	0.10	10	7.92	20	0	0
		IPZ-2	3.85	9				
		IPZ-3	1551	4 to 8				
		Total IPZ	1555					
Britannia and Lemieux Island (Ottawa) (MVSPA)	N/A	IPZ-3	2567	3.6 to 7.2	0	0	0	0
		IPZ-3	2567	3.6 to 7.2				
				Total	7.92	20	0	0

Total IPZ area for Carleton Place (km ²)	1,555
Total IPZ area for Britannia and Lemieux Island within MVSPA (km ²)	2,567
Total IPZ area for Mississippi Valley Source Protection Area (km ²)	2,596

Notes: MVSPA - Mississippi Valley Source Protection Area
RVSPA - Rideau Valley Source Protection Area

Compiled from: MRSPR Surface Water Technical Reports (see Appendix A-1)

Table 6-2

Summary of Potential Significant Threats to Surface Water Based Municipal Drinking Water Systems - MVSPA
Mississippi - Rideau Source Protection Region

System Name (Source Protection Area)	Potential Significant Threats			
	Line	Point	Poly	Total
Carleton Place (MVSPA)	0	1	19	20
Britannia (Ottawa) (MVSPA)	0	0	0	0
Lemieux Island (Ottawa) (MVSPA)	0	0	0	0
TOTAL	0	1	19	20

Notes: MVSPA - Mississippi Valley Source Protection Area
RVSPA - Rideau Valley Source Protection Area

Compiled from: Dillon Surface Water Threats and Issues Technical Report (see Appendix A-1)

Table 6-3
Summary of Potentially Significant Threats by Prescribed Drinking Water Threat Category for
Surface Water Based Municipal Drinking Water Systems - MVSPA
Mississippi - Rideau Source Protection Region

Prescribed Drinking Water Threat Category		Total Significant Threats Count for each Prescribed Drinking Water Threats in the Mississippi Valley Source Protection Area
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> .	0
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	0
3	The application of agricultural source material to land.	3
4	The storage of agricultural source material.	6
5	The management of agricultural source material.	0
6	The application of non-agricultural source material to land.	3
7	The handling and storage of non-agricultural source material.	0
8	The application of commercial fertilizer to land.	0
9	The handling and storage of commercial fertilizer.	0
10	The application of pesticide to land.	0
11	The handling and storage of pesticide.	1
12	The application of road salt.	0
13	The handling and storage of road salt.	0
14	The storage of snow.	0
15	The handling and storage of fuel.	1
16	The handling and storage of a dense non-aqueous phase liquid (DNAPLS).	0
17	The handling and storage of an organic solvent.	0
18	The management of runoff that contains chemicals used in the de-icing of aircraft.	0
19	An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.	0
20	An activity that reduces the recharge of an aquifer.	0
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.	6
Totals		20

Compiled from: Dillon Groundwater Threats and Issues Technical Report (see Appendix A-1)

Table 6-4**Lower/Single Tier Municipalities located in Intake Protection Zones - MVSPA
Mississippi - Rideau Source Protection Region**

Municipality	Intake Protection Zones	
	Carleton Place	Britannia and Lemieux Island (Ottawa)
Addington Highlands	✓	✓
Beckwith	✓	✓
Carleton Place	✓	✓
Central Frontenac	✓	✓
Drummond/North Elmsley	✓	✓
Greater Madawaska	✓	✓
Lanark Highlands	✓	✓
Mississippi Mills	✓	✓
North Frontenac	✓	✓
Ottawa		✓
Tay Valley	✓	✓

Compiled from: MRSPR Surface Water Technical Reports (see Appendix A-1)

Table 6-5
Risk to Carleton Place IPZs based on managed lands and livestock density
Mississippi - Rideau Source Protection Region

Municipal Drinking Water System	IPZ and Vulnerability Score	Percent Total Managed Lands	Risk for Over Application of Nutrients	Livestock Density (NU/acre)	Risk for Over-Application of ASM
Carleton Place	IPZ-1 (10)	18.2	LOW	0.00	LOW
	IPZ-2 (9)	28.3	LOW	0.27	LOW
	IPZ-3 (8)	17.4	LOW	0.14	LOW
	IPZ-3 (7)	23.9	LOW	0.13	LOW
	IPZ-3 (6)	14.7	LOW	0.13	LOW
	IPZ-3 (5)	10.3	LOW	0.17	LOW

Compiled from: Dillon Managed Lands and Livestock Density Technical Report (see Appendix A-1)

Table 6-6**Summary of Potentially Significant Threats to Carleton Place Source Water and Prescribed Activities Considered
Mississippi - Rideau Source Protection Region**

Land Use Activity	Prescribed Drinking Water Quality Threat Category						TOTAL
	The application of agricultural source material to land.	The application of non-agricultural source material to land.	The handling and storage of fuel.	The handling and storage of pesticide.	The storage of agricultural source material.	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	
	Poly	Poly	Point	Poly	Poly	Poly	
Cattle Ranching and Farming					2	3	5
Elementary and Secondary Schools			1				1
Other Animal Production					4	3	7
Other Crop Farming	3			1			4
Septage Waste Application		3					3
TOTAL	3	3	1	1	6	6	20

Compiled from: Dillon Surface Water Threats and Issues Technical Report (see Appendix A-1)

Table 6-7**Risk to Britannia and Lemieux IPZs Based on Managed Lands and Livestock Density
Mississippi - Rideau Source Protection Region**

Municipal Drinking Water System	IPZ and Vulnerability Score	Percent Total Managed Lands	Risk for Over Application of Nutrients	Livestock Density (NU/acre)	Risk for Over-Application of ASM
Britannia	IPZ-1 (9)	0	LOW	0.00	LOW
	IPZ-2 (8.1)	27.8	LOW	0.004	LOW
	IPZ-3 (7.2)	15.2	LOW	0.14	LOW
	IPZ-3 (6.3)	17.9	LOW	0.14	LOW
	IPZ-3 (5.4)	36.8	LOW	0.13	LOW
	IPZ-3 (4.5)	35.3	LOW	0.13	LOW
Lemieux Island	IPZ-1 (9)	0	LOW	0.00	LOW
	IPZ-2 (8)	20.5	LOW	0.00	LOW
	IPZ-3 (7.2)	7.3	LOW	0.15	LOW
	IPZ-3 (6.3)	28.1	LOW	0.13	LOW
	IPZ-3 (5.4)	42.7	MODERATE	0.13	LOW
	IPZ-3 (4.5)	40.6	MODERATE	0.13	LOW

N/A = Not Available

Compiled from: Dillon Managed Lands and Livestock Density Technical Report (see Appendix A-1)

Table 6-8**Summary of Potentially Significant Threats to Britannia Source Water and
Prescribed Activities Considered****Mississippi - Rideau Source Protection Region**

Land Use Activity	Prescribed Drinking Water Quality Threat Category				TOTAL
	The application of agricultural source material to land.	The application of pesticide to land.	The storage of agricultural source material.	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	
	Polygon	Polygon	Polygon	Polygon	
Fruit and Tree Nut Farming	1	1			2
Oilseed and Grain Farming	1	1			2
Other Animal Production			1	1	2
TOTAL	2	2	1	1	6

Compiled from: Dillon Surface Water Threats and Issues Technical Report (see Appendix A-1)