Table 1.1-1

Mississippi-Rideau Subwatersheds
Mississippi - Rideau Source Protection Region

Mississippi	Ottawa	Rideau
Big Gull	Carp River	Jock River
Buckshot Creek	Ottawa River (MVC)	Kemptville Creek
Clyde River	Ottawa River East	Lower Rideau
CP Dam	Ottawa River West	Middle Rideau
Fall River		Rideau Lakes
High Falls		Tay River
Indian River		
Lower Mississippi		
Mazinaw		
Upper Mississippi		

Notes:

Table 1.1-2

Stakeholders and Partners
Mississippi - Rideau Source Protection Region

Mississippi - Rideau Source Protection Region Stakeholders					
Municipalities					
Addington Highlands	Athens	Augusta	Beckwith	Carleton Place	Central Frontenac
Clarence - Rockland	Drummond - North Elmsley	Edwardsburg - Cardinal	Elizabethtown - Kitley	Frontenac	Greater Madawaska
Lanark	Lanark Highlands	Leeds & Grenville	Lennox & Addington	Merrickville - Wolford	Mississippi Mills
Montague	North Dundas	North Frontenac	North Grenville	Ottawa	Perth
Prescott & Russell	Renfrew	Rideau Lakes	Smiths Falls	South Frontenac	Stormont, Dundas & Glengarry
Tay Valley	Westport				
Provincial					
Cataraqui Region Conservation Authority	Conservation Ontario	Kingston, Frontenac Lennox & Addington Health Unit	Lanark, Leeds and Grenville District Health Unit	Lanark Health and Community Services	Ontario Ministry of Agriculture, Food and Rural Affairs
Ontario Ministry of Citizenship, Culture and Recreation	Ontario Ministry of Environment	Ontario Ministry of Municipal Affairs and Housing	Ontario Ministry of Natural Resources	Quinte Conservation	South Nation Conservation
Renfrew County and District Health Unit					
Federal					
Canadian Biodiversity Institute	Canadian Museum of Nature	Canadian River Management Society	Canadian Wildlife Service	Department of Fisheries and Oceans	Environment Canada
Health Canada	National Capital Commission	Parks Canada - Rideau Canal Office	Public Works & Government Services Canada		
First Nations					
Ardoch Algonquin First Nation	Ardoch Algonquin First Nation & Allies	Pikwakanagan	Sharbot Mishigama Anishinabe, Algonquin First Nation		

Table 1.1-2

Stakeholders and Partners
Mississippi - Rideau Source Protection Region

Mississippi - Rideau Source Protection Region Stakeholders					
Interested Stakeholders, Engaged Public, NGOs					
Action Sandy Hill	Adam Lake Property Owner's Association	Bass Lake	Bennett and Fagan Lakes Association	Bennett Lake Association	Beveridges Bay Cottage Association
Big Gull Lake East End Cottage Association	Big Gull Lake West Pinnacle Point Cottage Association	Big Rideau Lake Association	Black Lake Association	Buckshot Lake Association	Burridge Lake Association
Camp Shamria	Canadian Food Inspection Agency	Carleton Golf & Yacht Club	Carleton Golf & Yacht Club Homeowners Assn	Carp Agricultural Society	Carp Ridge Society
Centre for Sustainable Watersheds	Christie Lake Association	Christie Lake Boys & Girls Camp	City of Ottawa Parks Department	Clear Lake	Crosby Lake (Big) Association
Dalhousie Lake Association	Davern Lake Cottage Association	Dog Lake Association	Eagle Lake Property Owners Association	EJLB Foundation	Environment Committee of Ottawa-South
Environmental Committee of Ottawa South	Evergreen	Farren Lake Property Owners Association Inc.	Friends of the Carp River	Friends of the Jock River	Friends of the Rideau
Friends of the Tay	Frontenac Community Futures Development Corporation	Galetta Community Association	Greater Bob's and Crow Lake Association	Grenville Stewardship Council	Grindstone Lake Association
Heron Park Community Assn	Historical Society of Ottawa	Joe's Lake	Kanata West Landowners Group	Kangaro Lake	Kashwakamak Lake West Property Owners Association
Kemptville College	Kennebec Lake	Kinburn Community Association	Kiwanis Club Of Manotick	Lake Partner Program	LALAC
Lanark County Economic Development Tourism Association	Lanark County Stewardship Council	Lanark Federation of Agriculture	Lanark Soil and Crop Improvement Association	Links O'Tay Golf Club	Little Silver Lake and Rainbow Lake Cottage Property Owner's Association
Long Bay Cottage Owners Association	Long Island Marine	Long Lake Property Owners Association	Long Lake Watershed Property Owners Association	Long Pond Lake	Loon Lake and Hogg Bay
Manotick Classic Boat Club	Manotick Community Assn	Maple View Golf Course	March Rural Community Association	McNamara Field Naturalists	Mississippi Lake, Ebb's Bay
Mississippi Lakes Association	Mississippi Valley Field Naturalists	Monterey Inn	Mountain Equipment Co-op	Muskies Canada	Muskies Canada - Ottawa Valley Chapter
National Defense HQ - Fish &	O'Brien Lake	OFA - Arnprior	OFA - Frontenac	OFA - Lanark	OFA - Leeds and Grenville
OFA - Lennox and Addington	OFA - Ottawa	OFA - Renfrew	OMYA	Ontario Federation of Anglers & Hunters	Ottawa Environmental Advisory Committee
Ottawa Field Naturalists	Ottawa Flyfishers Society	Ottawa River Keeper	Ottawa South Community Assn	Ottawa Stewardship Council	Otter Lake Association
Patterson Lake	Patterson Lake Association	Paul's Boat Line	Pembroke Area Field Naturalists	Perth Chamber of Commerce	Perth Civitan
Perth Public Utilities Commission	Perth Rotary Club	Pike Lake Association	Poole Creek West Community Association	Renegade Bass Tournament Assn of E. ON	Richmond Agricultural Society
Richmond Snow Rovers	Richmond Village Association	Rideau Canoe Club	Rideau Environmental Action League & Lanark & Leeds Green Community	Rideau Glen Community Association	Rideau River Roundtable
Rideau Trail Association	Rideau Valley Field Naturalists	Rideau Waterfront Development Review Team	Rideau Waterway Land Trust Fund	Riverside Park Association	Round Lake
Shabomeka Lake Cottage Association	Sharbot Lake Property Owner's Association	Silver Lake Association	Smiths Falls Water Commission	Stittsville Village Association	University of Ottawa
Upper Rideau Lake Association	Waste Management	Westport Sand Lake	White Lake Property Owners Association	Wolfe Lake (Westport) Association	

Table 1.1-3

Mississippi-Rideau Municipalities
Mississippi - Rideau Source Protection Region

Conservation Authority	Upper / Single Tier	Lower Tier
MVC	Frontenac, County of	North Frontenac Township
	Lanark County	Carleton Place, Town of
		Lanark Highlands, Township of
		Mississippi Mills, Town of
	Lennox & Addington, County of	Addington Highlands, Township of
	Renfrew, County of	Greater Madawaska, Township of
RVCA	Frontenac, County of	South Frontenac, Township of
	Lanark County	Montague, Township of
		Perth, Town of
	Leeds & Grenville, United Counties of	Athens ,Township of
		Augusta, Township of
		Edwardsburg - Cardinal, Township of
		Elizabethtown - Kitley, Township of
		Merrickville - Wolford , Village of
		North Grenville, Municipality of
		Rideau Lakes, Township of
		Westport, Village of
	Prescott & Russell, United Counties of	Clarence - Rockland, City of
	Smiths Falls, Town of	
	Stormont, Dundas & Glengarry, United Counties of	North Dundas, Township of
MVC & RVCA	Frontenac, County of	Central Frontenac Township
	Lanark County	Beckwith Township
		Drummond/North Elmsley, Township of
		Tay Valley Township
	Ottawa, City of	

Notes: MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority

Table 1.2-1

Summary of Bedrock Formations
Mississippi - Rideau Source Protection Region

Formation	Age	Thickness	Lithology
OTTAWA GROUP			
Carlsbad	Upper Ordovician	0 to 120 m	shale and siltstone
Billings	Upper Ordovician	0 to 60 m	shale
Eastview	Upper Ordovician	0 to 10 m	limestone and shale
Lindsay	Upper Ordovician	0 to 20 m	limestone
Verulam	Middle Ordovician	0 to 50 m	limestone with shale interbeds
Bobcaygeon	Middle Ordovician		limestone with shale partings
Gull River	Middle Ordovician	0 to 80 m	limestone and dolostone
Shadow Lake	Middle Ordovician	0 to <5 m	dolostone with interbeds of sandstone and shaly partings
BEEKMANTOWN GOUP			
Rockcliffe	Middle Ordovician	0 to 50 m	interbedded sandstone, shale and limestone
Oxford	Lower Ordovician	0 to >100 m	dolostone
March	Lower Ordovician	0 to >70 m	dolomitic sandstone and dolostone
POTSDAM GROUP			
Nepean	Cambro-Ordovician	0 to >150 m	sandstone
Covey Hill	Cambrian	0 to >13 m	conglomerate and quartz sandstone
PRECAMBRIAN			
	Precambrian	basement rock	igneous and metamorphic rocks

Notes:

Table 1.2-2

Summary of Overburden Deposits
Mississippi - Rideau Source Protection Region

Sediment Type (Feature)	Location	Typical Thickness
Alluvium (fine-grained sand, silt, clay)	near surface water (Ottawa River, Rideau River, Mer Bleu, Constance Bay)	<2 m
Organic Deposits (muck, organic soils)	sporadic low lying areas in Leeds and Grenville County, Lanark County and southern portion of City of Ottawa	< 2 m
Sand and Gravel Eskers	[1] Arnprior-Richmond-Osgoode (east-west)	
	[2] Ottawa-Kemptville (north-south)	
	[3] Kemptville-Maitland (north-south)	2 to 30 m
Continuous sand plain	[1] east of City of Ottawa near Clarence/Rockland and Greely (Russell and Prescott Sand Plain Physiographic Region)	
	[2] Kemptville area extending eastward (Edwardsburg Sand Plain Physiographic Region)	5 to 20 m
Localized pockets of sand	throughout central, southern and western portions of study area	< 5 m
Clay	[1] Ottawa River Valley	
	[2] eastern portion of study area between Kemptville and City of Ottawa	2 to 40 m
Till (moraines and drumlins)	Township of North Gower (North Gower Drumlin Field Physiographic Region)	2 to 10 m

Notes:

Table 1.2-3

Summary of Surficial Geology
Mississippi - Rideau Source Protection Region

Surficial Geology	Total Area (km^2)	Percentage of MRSPR (%)
Clay	922	10.7%
Diamicton	825	9.6%
Fill	0	0.0%
Gravel	253	2.9%
Sand	438	5.1%
Silt	168	2.0%
Organic Deposits	1,251	14.6%
Paleozoic Bedrock	1,394	16.2%
Precambrian Bedrock	3,145	36.6%
No Data	191	2.2%
Total	**8,585**	**100%**

Notes:

Table 1.2-4

Summary of Soil Texture
Mississippi - Rideau Source Protection Region

Soil Texture	Total Area (km^2)	Percentage of MRSPR (%)
Eroded	249	2.9%
Heavy Clay	78	0.9%
Loam	2,618	30.5%
Loamy Sand	3,510	40.9%
Silty Clay	485	5.6%
Silty Loam	112	1.3%
Sandy Loam	1,535	17.9%
Total	**8,585**	**100%**

Notes:

Table 1.2-5a

Soil Texture by Surficial Geology (square kilometers)
Mississippi - Rideau Source Protection Region

Surficial Geology	Soil Texture							Total (km^2)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Clay	143.7	60.2	125.5	166.1	301.3	3.1	122.4	**922.2**
Diamicton	35.4	2.9	402.1	196.2	80.1	33.1	74.7	**824.5**
Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.1	**0.1**
Gravel	0.0	0.5	65.3	107.7	21.0	0.3	58.1	**253.0**
Sand	34.4	3.0	76.7	153.8	48.6	6.6	114.5	**437.6**
Silt	0.0	0.0	60.3	56.4	0.0	21.8	28.9	**167.5**
Organic Deposits	6.4	7.9	597.6	439.7	19.6	10.5	169.1	**1,250.9**
Paleozoic Bedrock	27.8	3.4	1,160.9	41.7	13.4	36.7	109.6	**1,393.5**
Precambrian Bedrock	0.3	0.0	129.3	2,176.7	0.5	0.0	837.9	**3,144.6**
No Data	0.0	0.0	0.0	171.4	0.0	0.0	19.2	**190.6**
Total	**248.0**	**77.9**	**2,617.8**	**3,509.7**	**484.5**	**112.1**	**1,534.6**	**8,585**

Notes:

Table 1.2-5b

Soil Texture by Surficial Geology (percentage of total area)
Mississippi - Rideau Source Protection Region

Surficial Geology	Soil Texture							Total Area (%)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Clay	1.7%	0.7%	1.5%	1.9%	3.5%	0.0%	1.4%	**11%**
Diamicton	0.4%	0.0%	4.7%	2.3%	0.9%	0.4%	0.9%	**10%**
Fill	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0%**
Gravel	0.0%	0.0%	0.8%	1.3%	0.2%	0.0%	0.7%	**3%**
Sand	0.4%	0.0%	0.9%	1.8%	0.6%	0.1%	1.3%	**5%**
Silt	0.0%	0.0%	0.7%	0.7%	0.0%	0.3%	0.3%	**2%**
Organic Deposits	0.1%	0.1%	7.0%	5.1%	0.2%	0.1%	2.0%	**15%**
Paleozoic Bedrock	0.3%	0.0%	13.5%	0.5%	0.2%	0.4%	1.3%	**16%**
Precambrian Bedrock	0.0%	0.0%	1.5%	25.4%	0.0%	0.0%	9.8%	**37%**
No Data	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.2%	**2%**
Total	**3%**	**1%**	**30%**	**41%**	**6%**	**1%**	**18%**	**100%**

Notes:

Table 1.2-5c

Soil Texture by Surficial Geology (percentage of Surficial Geology Type)
Mississippi - Rideau Source Protection Region

Surficial Geology	Soil Texture							Total Area of Each Surficial Geology Type(%)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Clay	15.6%	6.5%	13.6%	18.0%	32.7%	0.3%	13.3%	**100%**
Diamicton	4.3%	0.4%	48.8%	23.8%	9.7%	4.0%	9.1%	**100%**
Fill	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	**100%**
Gravel	0.0%	0.2%	25.8%	42.6%	8.3%	0.1%	23.0%	**100%**
Sand	7.9%	0.7%	17.5%	35.1%	11.1%	1.5%	26.2%	**100%**
Silt	0.0%	0.0%	36.0%	33.7%	0.0%	13.0%	17.2%	**100%**
Organic Deposits	0.5%	0.6%	47.8%	35.2%	1.6%	0.8%	13.5%	**100%**
Paleozoic Bedrock	2.0%	0.2%	83.3%	3.0%	1.0%	2.6%	7.9%	**100%**
Precambrian Bedrock	0.0%	0.0%	4.1%	69.2%	0.0%	0.0%	26.6%	**100%**
No Data	0.0%	0.0%	0.0%	89.9%	0.0%	0.0%	10.1%	**100%**

Notes:

Table 1.2-5d

Soil Texture by Surficial Geology (percentage of Soil Texture Type)
Mississippi - Rideau Source Protection Region

Surficial Geology	Soil Texture							
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Clay	57.9%	77.2%	4.8%	4.7%	62.2%	2.7%	8.0%	
Diamicton	14.3%	3.7%	15.4%	5.6%	16.5%	29.5%	4.9%	
Fill	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Gravel	0.0%	0.7%	2.5%	3.1%	4.3%	0.3%	3.8%	
Sand	13.9%	3.8%	2.9%	4.4%	10.0%	5.9%	7.5%	
Silt	0.0%	0.0%	2.3%	1.6%	0.0%	19.5%	1.9%	
Organic Deposits	2.6%	10.1%	22.8%	12.5%	4.0%	9.4%	11.0%	
Paleozoic Bedrock	11.2%	4.4%	44.3%	1.2%	2.8%	32.7%	7.1%	
Precambrian Bedrock	0.1%	0.0%	4.9%	62.0%	0.1%	0.0%	54.6%	
No Data	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	1.3%	
Total Area of Each Soil Texture Type	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

Notes:

Table 1.2-6

Summary of Land Cover Classification
Mississippi - Rideau Source Protection Region

Land Cover Type[1]	Total Area (km^2)	Percentage of MRSPR (%)
Aggregate		
Licensed Pits & Quarries	36	0.4%
Agriculture & Rural Land Use		
Agriculture	1,563	18.2%
Rural Land Use	1,472	17.1%
Aquatic & Wetlands		
Waterbody	561	6.5%
Wetlands	848	9.9%
Developed Areas		
Built-Up Areas	267	3.1%
Built-Up Areas Pervious	81	0.9%
Transportation	81	0.9%
Forest & Plantation		
Wooded Area	3,482	40.6%
Hedgerow	30	0.4%
Bedrock		
Bedrock	103	1.2%
Other		
Alvar	4	0.0%
Unclassified	57	0.7%
Total	**8,585**	**100%**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-7a

Soil Texture by Land Cover (square kilometers)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Soil Texture							Total (km^2)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Agriculture	52.7	41.2	531.7	405.4	287.3	33.2	211.1	**1,562.6**
Alvar	0.0	0.0	4.1	0.0	0.0	0.0	0.0	**4.1**
Bedrock	0.0	0.0	0.3	89.1	0.0	0.0	13.3	**102.7**
Built-Up Areas	121.7	11.7	35.7	27.4	33.2	2.7	34.2	**266.5**
Built-Up Areas Pervious	26.0	2.8	15.3	10.6	14.3	0.8	11.7	**81.4**
Hedgerow	0.7	0.1	17.2	5.0	3.9	0.9	2.8	**30.5**
Licensed Pits & Quarries	0.1	0.3	14.1	5.5	9.5	0.4	5.7	**35.5**
Rural Land Use	8.2	4.5	529.4	696.2	50.5	26.2	156.8	**1,471.8**
Transportation	5.9	1.3	36.7	12.4	11.6	1.8	11.8	**81.4**
Unclassified	1.9	0.1	15.0	5.6	2.1	0.5	31.8	**57.0**
Waterbody	2.8	0.0	98.8	313.5	4.2	6.0	135.9	**561.3**
Wetlands	3.3	7.6	529.7	182.4	5.5	24.9	94.5	**848.1**
Wooded Area	25.2	8.2	789.8	1,756.6	62.5	14.9	825.3	**3,482.4**
Total	**248.6**	**77.9**	**2,617.8**	**3,509.7**	**484.5**	**112.1**	**1,534.7**	**8,585**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-7b

Soil Texture by Land Cover (percentage of total area)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Soil Texture							Total Area (%)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Agriculture	0.6%	0.5%	6.2%	4.7%	3.3%	0.4%	2.5%	**18%**
Alvar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0%**
Bedrock	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.2%	**1%**
Built-Up Areas	1.4%	0.1%	0.4%	0.3%	0.4%	0.0%	0.4%	**3%**
Built-Up Areas Pervious	0.3%	0.0%	0.2%	0.1%	0.2%	0.0%	0.1%	**1%**
Hedgerow	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	**0%**
Licensed Pits & Quarries	0.0%	0.0%	0.2%	0.1%	0.1%	0.0%	0.1%	**0%**
Rural Land Use	0.1%	0.1%	6.2%	8.1%	0.6%	0.3%	1.8%	**17%**
Transportation	0.1%	0.0%	0.4%	0.1%	0.1%	0.0%	0.1%	**1%**
Unclassified	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.4%	**1%**
Waterbody	0.0%	0.0%	1.2%	3.7%	0.0%	0.1%	1.6%	**7%**
Wetlands	0.0%	0.1%	6.2%	2.1%	0.1%	0.3%	1.1%	**10%**
Wooded Area	0.3%	0.1%	9.2%	20.5%	0.7%	0.2%	9.6%	**41%**
Total	**3%**	**1%**	**30%**	**41%**	**6%**	**1%**	**18%**	**100%**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-7c

Soil Texture by Land Cover (percentage of Land Cover Type)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Soil Texture							Total Area of Each Land Cover Type(%)
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Agriculture	3.4%	2.6%	34.0%	25.9%	18.4%	2.1%	13.5%	**100%**
Alvar	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**100%**
Bedrock	0.0%	0.0%	0.3%	86.8%	0.0%	0.0%	12.9%	**100%**
Built-Up Areas	45.7%	4.4%	13.4%	10.3%	12.4%	1.0%	12.8%	**100%**
Built-Up Areas Pervious	32.0%	3.5%	18.7%	13.0%	17.5%	1.0%	14.3%	**100%**
Hedgerow	2.2%	0.2%	56.6%	16.3%	12.7%	2.9%	9.1%	**100%**
Licensed Pits & Quarries	0.4%	0.7%	39.6%	15.5%	26.9%	1.1%	15.9%	**100%**
Rural Land Use	0.6%	0.3%	36.0%	47.3%	3.4%	1.8%	10.7%	**100%**
Transportation	7.3%	1.6%	45.1%	15.2%	14.2%	2.2%	14.5%	**100%**
Unclassified	3.3%	0.2%	26.4%	9.9%	3.6%	0.9%	55.8%	**100%**
Waterbody	0.5%	0.0%	17.6%	55.8%	0.8%	1.1%	24.2%	**100%**
Wetlands	0.4%	0.9%	62.5%	21.5%	0.7%	2.9%	11.1%	**100%**
Wooded Area	0.7%	0.2%	22.7%	50.4%	1.8%	0.4%	23.7%	**100%**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-7d

Soil Texture by Land Cover (percentage of Soil Texture Type)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Soil Texture							
	Eroded	Heavy Clay	Loam	Loamy Sand	Silty Clay	Silty Loam	Sandy Loam	
Agriculture	21.2%	52.9%	20.3%	11.6%	59.3%	29.6%	13.8%	
Alvar	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	
Bedrock	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.9%	
Built-Up Areas	48.9%	15.0%	1.4%	0.8%	6.8%	2.4%	2.2%	
Built-Up Areas Pervious	10.5%	3.7%	0.6%	0.3%	2.9%	0.7%	0.8%	
Hedgerow	0.3%	0.1%	0.7%	0.1%	0.8%	0.8%	0.2%	
Licensed Pits & Quarries	0.1%	0.3%	0.5%	0.2%	2.0%	0.3%	0.4%	
Rural Land Use	3.3%	5.8%	20.2%	19.8%	10.4%	23.4%	10.2%	
Transportation	2.4%	1.6%	1.4%	0.4%	2.4%	1.6%	0.8%	
Unclassified	0.8%	0.2%	0.6%	0.2%	0.4%	0.4%	2.1%	
Waterbody	1.1%	0.0%	3.8%	8.9%	0.9%	5.3%	8.9%	
Wetlands	1.3%	9.8%	20.2%	5.2%	1.1%	22.2%	6.2%	
Wooded Area	10.1%	10.6%	30.2%	50.1%	12.9%	13.3%	53.8%	
Total Area of Each Soil Texture Type	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-8a

Surficial Geology by Land Cover (square kilometers)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Surficial Geology										Total (km^2)
	Clay	Diamicton	Fill	Gravel	Sand	Silt	Organic Deposits	Paleozoic Bedrock	Precambrian Bedrock	No Data	
Agriculture	553.9	300.0	0.0	72.6	123.6	65.0	43.7	262.3	137.8	3.7	**1,562.6**
Alvar							0.0	4.1			**4.1**
Bedrock		3.1		3.8	0.3	0.9	4.7	0.1	89.0	0.9	**102.7**
Built-Up Areas	112.6	45.6		8.5	33.7	1.7	7.2	39.8	17.5		**266.5**
Built-Up Areas Pervious	28.3	11.7		3.4	14.0	0.8	2.7	17.3	3.2		**81.4**
Hedgerow	5.3	13.7		0.8	1.7	1.9	0.3	6.4	0.4		**30.5**
Licensed Pits & Quarries	0.9	2.9	0.1	16.4	4.1	0.2	2.0	8.8	0.2	0.0	**35.5**
Rural Land Use	98.2	246.9		52.6	41.0	36.0	103.7	293.3	585.7	14.4	**1,471.8**
Transportation	20.3	15.6		3.5	9.8	2.8	4.5	21.8	3.0	0.0	**81.4**
Unclassified	16.0	7.4	0.0	2.0	7.5	0.6	5.8	12.1	5.5	0.0	**57.0**
Waterbody	8.4	6.8	0.0	8.7	8.9	3.0	67.8	53.6	393.9	10.3	**561.3**
Wetlands	6.8	23.9	0.0	7.7	39.4	24.1	556.6	96.7	90.1	2.8	**848.1**
Wooded Area	71.7	146.9	0.0	73.2	153.6	30.5	451.9	577.2	1,818.3	159.2	**3,482.4**
Null					0.0		0.0	0.0	0.0		**0.0**
Total	**922.2**	**824.5**	**0.1**	**253.0**	**437.6**	**167.5**	**1,250.9**	**1,393.5**	**3,144.6**	**191.3**	**8,585**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-8b

Surficial Geology by Land Cover (percentage of total area)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Surficial Geology										Total Area (%)
	Clay	Diamicton	Fill	Gravel	Sand	Silt	Organic Deposits	Paleozoic Bedrock	Precambrian Bedrock	No Data	
Agriculture	6.5%	3.5%	0.0%	0.8%	1.4%	0.8%	0.5%	3.1%	1.6%	0.0%	**18%**
Alvar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0%**
Bedrock	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	1.0%	0.0%	**1%**
Built-Up Areas	1.3%	0.5%	0.0%	0.1%	0.4%	0.0%	0.1%	0.5%	0.2%	0.0%	**3%**
Built-Up Areas Pervious	0.3%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	**1%**
Hedgerow	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0%**
Licensed Pits & Quarries	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0%**
Rural Land Use	1.1%	2.9%	0.0%	0.6%	0.5%	0.4%	1.2%	3.4%	6.8%	0.2%	**17%**
Transportation	0.2%	0.2%	0.0%	0.0%	0.1%	0.0%	0.1%	0.3%	0.0%	0.0%	**1%**
Unclassified	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	**1%**
Waterbody	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.8%	0.6%	4.6%	0.1%	**7%**
Wetlands	0.1%	0.3%	0.0%	0.1%	0.5%	0.3%	6.5%	1.1%	1.0%	0.0%	**10%**
Wooded Area	0.8%	1.7%	0.0%	0.9%	1.8%	0.4%	5.3%	6.7%	21.2%	1.9%	**41%**
Null	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0%**
Total	**11%**	**10%**	**0%**	**3%**	**5%**	**2%**	**15%**	**16%**	**37%**	**2%**	**100%**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-8c

Surficial Geology by Land Cover (percentage of Land Cover Type)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Surficial Geology										Total Area of Each Land Cover Type(%)
	Clay	Diamicton	Fill	Gravel	Sand	Silt	Organic Deposits	Paleozoic Bedrock	Precambrian Bedrock	No Data	
Agriculture	35.4%	19.2%	0.0%	4.6%	7.9%	4.2%	2.8%	16.8%	8.8%	0.2%	**100%**
Alvar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	99.3%	0.0%	0.0%	**100%**
Bedrock	0.0%	3.0%	0.0%	3.7%	0.3%	0.9%	4.6%	0.1%	86.7%	0.8%	**100%**
Built-Up Areas	42.2%	17.1%	0.0%	3.2%	12.6%	0.6%	2.7%	14.9%	6.6%	0.0%	**100%**
Built-Up Areas Pervious	34.8%	14.4%	0.0%	4.2%	17.2%	1.0%	3.3%	21.3%	3.9%	0.0%	**100%**
Hedgerow	17.3%	44.9%	0.0%	2.6%	5.6%	6.4%	0.9%	21.0%	1.3%	0.0%	**100%**
Licensed Pits & Quarries	2.5%	8.1%	0.2%	46.2%	11.6%	0.5%	5.7%	24.8%	0.4%	0.0%	**100%**
Rural Land Use	6.7%	16.8%	0.0%	3.6%	2.8%	2.4%	7.0%	19.9%	39.8%	1.0%	**100%**
Transportation	25.0%	19.1%	0.0%	4.3%	12.1%	3.4%	5.6%	26.8%	3.7%	0.0%	**100%**
Unclassified	28.0%	13.0%	0.0%	3.5%	13.2%	1.1%	10.1%	21.3%	9.7%	0.0%	**100%**
Waterbody	1.5%	1.2%	0.0%	1.5%	1.6%	0.5%	12.1%	9.5%	70.2%	1.8%	**100%**
Wetlands	0.8%	2.8%	0.0%	0.9%	4.6%	2.8%	65.6%	11.4%	10.6%	0.3%	**100%**
Wooded Area	2.1%	4.2%	0.0%	2.1%	4.4%	0.9%	13.0%	16.6%	52.2%	4.6%	**100%**
Null	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	2.3%	1.9%	89.5%	0.0%	**100%**

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.2-8d

Surficial Geology by Land Cover (percentage of Surficial Geology Type)
Mississippi - Rideau Source Protection Region

Land Cover[1]	Surficial Geology										
	Clay	Diamicton	Fill	Gravel	Sand	Silt	Organic Deposits	Paleozoic Bedrock	Precambrian Bedrock	No Data	
Agriculture	60.1%	36.4%	0.4%	28.7%	28.2%	38.8%	3.5%	18.8%	4.4%	1.9%	
Alvar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	
Bedrock	0.0%	0.4%	0.0%	1.5%	0.1%	0.5%	0.4%	0.0%	2.8%	0.4%	
Built-Up Areas	12.2%	5.5%	0.0%	3.4%	7.7%	1.0%	0.6%	2.9%	0.6%	0.0%	
Built-Up Areas Pervious	3.1%	1.4%	0.0%	1.4%	3.2%	0.5%	0.2%	1.2%	0.1%	0.0%	
Hedgerow	0.6%	1.7%	0.0%	0.3%	0.4%	1.2%	0.0%	0.5%	0.0%	0.0%	
Licensed Pits & Quarries	0.1%	0.3%	82.9%	6.5%	0.9%	0.1%	0.2%	0.6%	0.0%	0.0%	
Rural Land Use	10.6%	29.9%	0.0%	20.8%	9.4%	21.5%	8.3%	21.0%	18.6%	7.5%	
Transportation	2.2%	1.9%	0.0%	1.4%	2.3%	1.7%	0.4%	1.6%	0.1%	0.0%	
Unclassified	1.7%	0.9%	8.1%	0.8%	1.7%	0.4%	0.5%	0.9%	0.2%	0.0%	
Waterbody	0.9%	0.8%	0.5%	3.4%	2.0%	1.8%	5.4%	3.8%	12.5%	5.4%	
Wetlands	0.7%	2.9%	4.7%	3.0%	9.0%	14.4%	44.5%	6.9%	2.9%	1.5%	
Wooded Area	7.8%	17.8%	3.3%	28.9%	35.1%	18.2%	36.1%	41.4%	57.8%	83.2%	
Null	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Area of Each Surficial Geology Type	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

Notes: 1 - The Land Cover is a merged product, comprised of the SOLRIS Interim Landcover (SIL) product for Southern Ontario, and in the Precambrain Shield areas, the Provincial Land Cover 2000 (PLC 2000).

Table 1.3-1

Major Drainage Areas
Mississippi - Rideau Source Protection Region

Conservation Area	Watershed	Subwatershed	Area (km2)
MVC	Mississippi River	Big Gull Lake	150
		Buckshot Creek	291
		Clyde River	663
		CP Dam	503
		Fall River	487
		High Falls	203
		Indian River	213
		Lower Mississippi	665
		Mazinaw Lake	357
		Upper Mississippi	233
		Sub-Total	**3,765**
	Carp River	Carp River	300
	Ottawa River	Tributaries	287
		Total	**4,352**
RVCA	Rideau River	Jock River	569
		Kemptville Creek	451
		Lower Rideau	757
		Middle Rideau River	823
		Rideau Lakes	450
		Tay River	799
		Sub-Total	**3,849**
	Ottawa River	East Tributaries	263
		West Tributaries	122
		Total	**4,234**
MVC - RVCA		**Total**	**8,585**

Notes: MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority

Table 1.3-2

Physical Characteristics of the Mississippi River
Mississippi - Rideau Source Protection Region

Characteristics		
Drainage Area	3,765	km^2
Watershed Length	212	km
Upper Elevation	325	masl
Downstream Elevation	73	masl
Total Drop	252	m
Average Slope	0.1%	

Notes:

Table 1.3-3

Physical Characteristics of Major Tributaries on the Mississippi River
Mississippi - Rideau Source Protection Region

Subwatershed	Tributary	Drainage Area (km^2)	Length (km)	Drop (m)	Gradient (%)
Clyde River	Central	663	79.5	232	0.3
Fall River	Central	487	69.6	108	0.2
Buckshot Creek	Western	291	39.2	91	0.2
Indian River	Eastern	213	40	148	0.4
Indian Creek	Eastern	TBD	24.3	87	0.4

Notes: TBD - To be determined

Table 1.3-4

Physical Characteristics of Major Lakes on the Mississippi River[1]
Mississippi - Rideau Source Protection Region

Region	Lake	Control Structure	Drainage Area (km^2)	Surface Area (ha)	Lake Volume (m^3)	Total Storage Volume[2] (ha.m)	Usable Storage Volume[3] (ha.m)
Western	Shabomeka Lake	Dam	41	270	3.3 x 10^7	536	402
	Mazinaw Lake	Dam	339	1,590	685 x 10^6	3,423	1,793
	Kashwakamak Lake	Dam	417	1,191	9.7 x 10^7	3,822	1,911
	Mississagagon Lake	Dam	22	524	4.8 x 10^7	491	382
	Big Gull Lake	Dam	135	2,360	9.2 x 10^7	3,048	1,524
	Crotch (Cross) Lake	Dam	1,030	2,160	1.2 x 10^8	7,617	5,859
Central	Dalhousie Lake	-	1,309	604	3.15 x 10^7	-	-
	Mississippi Lake	-	2,876	2,349	6.36 x 10^7	3,787	-

Notes: 1 - after Figure 3.3 in the Mississippi Water Management Plan
2 - Total storage volume is based on the height of stop logs times surface area of the lake.
3 - Usable storage volume refers to the actual operating range currently in place
(maximum of summer target range to minimum full level - not maximum spring level to sill elevation of structure).

Table 1.3-5

Major Water Control Structures on the Mississippi River[1]
Mississippi - Rideau Source Protection Region

Waterpower Generating Stations	Water Control Structures
High Falls Generating Station	Shabomeka Lake Dam
Appleton Generating Station	Mazinaw Lake Dam
Enerdu Generating Station	Kashwakamak Lake Dam
Almonte Generating Station	Mississagagon Lake Dam
Galetta Generating Station	Big Gull Lake Dam
	Crotch (Cross) Lake Dam
	Carleton Place Dam

Notes: 1 - Excludes control structures on the tributaries

Table 1.3-6

Physical Characteristics of the Rideau River
Mississippi - Rideau Source Protection Region

Characteristics		
Drainage Area	3,849	km^2
Watershed Length	160	km
Upper Elevation	163	masl
Downstream Elevation	84	masl
Total Drop	79	m
Average Slope	0.05%	

Notes:

Table 1.3-7

Physical Characteristics of Major Tributaries on the Rideau River
Mississippi - Rideau Source Protection Region

Tributary	Drainage Area (km^2)	Length (km)	Drop (m)	Gradient (%)
Jock River	569	68.8	59.5	0.10
Tay River	799	91.2	101.0	0.09
Kemptville Creek	451	22.4	12.5	0.06
Irish Creek	168	25.6	32.3	0.13

Notes:

Table 1.3-8

Physical Characteristics of Major Lakes on the Rideau River
Mississippi - Rideau Source Protection Region

Lakes	Control Structure	Drainage Area		Surface Area	Lake Volume[1]	Live Storage Volume
		Local (km^2)	Total (km^2)	(km^2)		(1000 m^3)
Bob's / Crow Lakes	Control Structure	357	357	33.4		47,011
Christie Lake	-	67	424	5.1		5,819
Tay Marsh	Beveridges	362	786			0
Wolfe Lake	Control Structure	73	73	9.7		6,984
Upper Rideau Lake	Narrows	88	161	13.8		10,488
Big Rideau / Lower Rideau Lakes	Poonamalie	343	1,290	59.1		47,280

Notes: 1 - Lake volumes can be calculated from lake bathymetry data. Significant processing time is required to generate these volumes.

Table 1.3-9

Major Water Control Structures on the Rideau River
Mississippi - Rideau Source Protection Region

Hydroelectric Generating Station	Rideau Canal Locks		Rideau Canal Dams	Other Control Structures
	Lock Station	Lock No.		
Smiths Falls Generating Station	Newboro	36	Clowes Dam	Eagle Lake Dam
Merrickville Generating Station	Narrows	35	Long Island Dam	Pike Lake Dam
Rideau Falls Generating Station	Beveridges	33-34	Black Rapids Dam	Oxford Mills Dam
	Poonamalie	32	Hogs Back Dam	RVCA - Ashton Dam
	Smith's Falls - Combined	31	Bob's Lake	RVCA - Mott's Mills Dam
	Smith's Falls - Detached	28-30	Wolfe Lake	RVCA - Bellamy Pond Storage Weir
	Old Slys	26-27	Tay Marsh at Beveridges	RVCA - Heart's Desire Storage Weir
	Edmonds	25		RVCA - Richmond Storage Weir
	Kilmarnock	24		
	Merrickville	21-23		
	Clowes	20		
	Nicholsons	18-19		
	Burritts Rapids	17		
	Long Island	14-16		
	Black Rapids	13		
	Hogs Back	11-12		
	Hartwell	9-10		
	Ottawa	1-8		

Notes:

Table 1.3-10

Stream Flow Gauges in the Mississippi River Watershed
Mississippi - Rideau Source Protection Region

No.	Station ID	Station Name	Data	Period of Record	Years of Data	Operator
1	02KF016	Mississippi River below Marble Lake	Flow	1988-2003	16	WSC
2	02KF017	Buckshot Creek near Plevna	Flow	1993-2003	11	WSC
3	02KF013	Clyde River at Gordon Rapids	Flow	1971-2003	33	WSC
4	02KF010	Clyde River near Lanark	Flow	1970-2003	34	WSC
5	02KF001	Mississippi River at Fergusons Falls	Flow	1915-2003	89	WSC
6	02KF006	Mississippi River at Appleton	Flow	1918-2003	86	WSC
7	02KF012	Indian River near Blakeney	Flow	1971-2003	33	WSC
8	02KF002	Mississippi River at Galetta	Flow	1915-1919	5	WSC
9	02KF003	Mississippi River near Snow Rd. Stn.	Flow	1915-1919	5	WSC
10	02KF007	Mississippi River at Ragged Chute	Flow	1919-1957	39	WSC
11	02KF014	Fall River near Fall Brook	Flow	1974-1992	19	WSC
12	-	Shabomeka Lake	Level	1993-2005	13	MVC
13	-	Mazinaw Lake	Level	1993-2005	13	MVC
14	-	Kashwakamak Lake	Level	1993-2005	13	MVC
15	-	Big Gull (Clarendon Lake)	Level	1993-2005	13	MVC
16	-	Cross Lake	Level	1993-2005	13	MVC
17	-	Dalhousie Lake	Level	2004 -2005	2	MVC
18	-	Palmerston Lake (upstream of S. Clyde River)	Level	*		MVC
19	-	Clyde River at Lanark Village	Level	2,005	1	MVC
20	-	Sharbot Lake	Level	2004-2005	2	MVC
21	-	Bennett Lake	Level	2004-2005	2	MVC
22	-	Mississippi Lake	Level	2003-2005[1]	3	MVC
				1993-2002[2]	10	MVC
				1981-1992[3]	12	MVC
				1950-1980[4]	31	MVC

Notes: 1 - Telemarks - automated but no data storage
2 - Telemetric staff gauge - instantaneous daily water level data
3 - Weekly staff gauge
4 - Some data available, not sure where taken
MVC - Mississippi Valley Conservation
WSC - Water Survey of Canada

Table 1.3-11

Stream Flow Gauges in the Rideau River Watershed
Mississippi - Rideau Source Protection Region

No.	Station ID	Station Name	Data	Period of Record	Years of Data	Operator
1	02LA004	Rideau River at Ottawa	Flow	1933-present	73	WSC
2	02LA007	Jock River near Richmond	Flow	1969-present	37	WSC
3	02LA006	Kemptville Creek near Kemptville	Flow	1969-present	37	WSC
4	02LA024	Tay River in Perth	Flow	1994-present	12	WSC
5	OMYA	Tay River at OMYA	Flow	2003-present	3	OMYA
6	JKFRK	Jock River at Franktown	Flow	2003-present	3	RVCA
7	02LA012	Rideau River below Manotick	Flow	1980-1996	17	WSC
				1996-present	10	Parks
8	02LA011	Rideau River below Merrickville	Flow	1979-1996	18	WSC
				1996-present	10	Parks
9	02LA005	Rideau River above Smiths Falls	Flow	1970-1996	27	WSC
				1996-present	10	Parks
10	02LA016	Tay River at Port Elmsley	Flow	1982-1988	7	WSC
11	02LA001	Tay River near Glen Tay	Flow	1915-1926	12	WSC
12	-	Wolfe Lake	Level	Nov. 2001- present	4	Parks
13	02LA025	Upper Rideau (Narrows)	Level	Nov. 1997-present	9	Parks
14	02LA014	Rideau River at Rideau Ferry (Big Rideau Lake)	Level	1980-1982	3	WSC
				1982-present	25	Parks
15	02LA017	Tay River below Bob's Lake (Bolingbroke)	Flow	1984-1995	12	WSC
			Both	1995-present	13	Parks
16	02LA018	Rideau River at Merrickville	Level	1988-1988	1	WSC
				1988-present	20	Parks
17	02LA010	Rideau River near Becketts Landing	Level	1978-1979	2	WSC
				1979-present	29	Parks
18	02LA009	Rideau River at Poonamalie Locks	Level	1972-1977	6	WSC

Notes: OMYA - OMYA Inc.
Parks - Parks Canada
RVCA - Rideau Valley Conservation Authority
WSC - Water Survey of Canada

Table 1.3-12

Stream Flow Gauges on the Ottawa River and its Tributaries
Mississippi - Rideau Source Protection Region

No.	Station ID	Station Name	Data	Period of Record	Years of Data	Operator
1	02KF011	Carp River near Kinburn	Flow	1971-2003	33	WSC
2	02KF005	Ottawa R. at Britannia	Flow	1960-present	46	WSC
			Level	1915-present	91	WSC
3	02LA015	Ottawa R. at Hull (QC)	Level	1964-present	44	WSC
4	02LA013	Sawmill Creek at Ottawa[1]	Flow	1981-1983	2	WSC
5	02LA003	Ottawa R. at Rideau Locks	Level	1850-1977	128	WSC
6	02KF009	Ottawa R. at Chats Falls	Flow	1915-1994	80	WSC
7	02LA008	Black Rapids Ck. Trib. at Ottawa	Flow	1972-1979	8	WSC
8	02KF015	Graham Ck. at Nepean	Flow	1987-1995	8	WSC
9	02LB010	Ottawa R. at Cumberland	Level	1918-1996	79	WSC

Notes: 1 - Recently reinstated by City of Ottawa.
WSC - Water Survey of Canada

Table 1.3-13

Summary of Data Gaps
Mississippi - Rideau Source Protection Region

Station ID	Station Name	# Years from 1974-2003	Missing Data
02LA004	Rideau River at Ottawa	30	0
02LA007	Jock River near Richmond	30	0
02LA006	Kemptville Creek near Kemptville	29	2000
02LA024	Tay River in Perth[1]	7	1974-1994, 1996-2003
02LA012	Rideau River below Manotick[1]	18	1974-1980, 1991-1995
02LA011	Rideau River below Merrickville[1]	19	1991-1995
02LA005	Rideau River above Smiths Falls[1]	12	1978-1995
02KF001	Mississippi River at Fergusons Falls	21	1974-1982
02KF006	Mississippi River at Appleton	30	Excellent
02KF010	Clyde River near Lanark	30	1984-June~Dec,1985 Jan
02KF01	Carp River near Kinburn	30	0
02KF012	Indian River near Blakeney	27	1998 April~Dec, 1999~2001
02KF016	Mississippi River below Marble Lake	16	1974-1987
02KF014	Fall River near Fallbrook	19	Jan-Sep (1974), April 1992 ~Dec 2003

Notes: 1 - These stations have data from Parks Canada from 1996 - 2003

Table 1.3-14

Summary of Regional Hydrostratigraphic Units
Mississippi - Rideau Source Protection Region

Stratigraphic Unit		Formation	Thickness / Depth	Comments	Percent Used[1]
Regional Bedrock Aquifers					
1	Igneous / Metamorphic	Precambrian	< 50 mbgs	Domestic supply	21%
2	Sandstone	Nepean / Covey Hill	~ 40 m	Municipal supply	14%
3	Dolostone / Sandstone	Oxford / March	20 to 35 m	Domestic supply	43%
4	Limestone / Shale / Sandstone	Rockcliffe, Gull River, Bobcaygeon, Verulam, Lindsay, Eastview, Billings, Carlsbad	≤ 40 m	Poor domestic supply	2%
5	Upper Weathered Bedrock Units	Upper 10 m of bedrock	Upper 10 m	Domestic supply	13%
				Subtotal	**93%**
Regional Overburden Aquifers					
6	Surficial Sand Units		≤ 20 m	Domestic supply	2%
7	Basal Sand & Gravel Units		≤ 15 m	Domestic & municipal supply	3%
8	Sand & Gravel Eskers		≤ 15 m	Domestic & municipal supply	2%
				Subtotal	**7%**
Regional Bedrock Aquitards					
9	Igneous / Metamorphic	Precambrian	> 50 mbgs		NA
10	Dolostone	Oxford / March	20 to 35 m	Local conditions	NA
11	Limestone / Shale	Rockcliffe, Gull River, Bobcaygeon, Verulam, Lindsay, Eastview, Billings, Carlsbad	≤ 40 m		NA
Regional Overburden Aquitards					
12	Silt, Clay & Clay Till Units		≤ 20 m	Not used as supply	NA

Notes: 1 - Statistics calculated using the updated MOE WWIS database (2006) with 73,861 entries.
mbgs - metres below ground surface
NA - not applicable

Table 1.3-15

Summary Statistics of Available AES Climate Stations
Mississippi - Rideau Source Protection Region

AES Climate Station Location	Total No.	# Active	# Discontinued
MVC	15	4	11
RVCA	57	3	54
Within 10km[1]	33	1	32
Total	105	8	97

Notes: 1 - Includes Ontario sites only (excludes Quebec).
MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority

Table 1.3-16

AES Climate Stations

Mississippi - Rideau Source Protection Region

No.		Watershed	Station Name	Station ID	Period of Record	Status	Total Years
1	1	MVC	APPLETON	6100285	1992-present	Active	14
2	2	MVC	DRUMMOND CENTRE	6102J13	1984-present	Active	22
3	3	MVC	OMPAH	6105760	1994-present	Active	12
4	4	MVC	OMPAH-SEITZ	6105762	1994-present	Active	12
5	5	MVC	ALMONTE	6100226	1912-1980	Historic	69
6	6	MVC	CARLETON PLACE	6101250	1984-1999	Historic	16
7	7	MVC	CARLETON PLACE	6101249	1948-1976	Historic	29
8	8	MVC	CARP	6101260	1960-1975	Historic	16
9	9	MVC	DALHOUSIE L HIGH FALLS	6101955	1923-1983	Historic	61
10	10	MVC	DUNROBIN	6102150	1990-1991	Historic	2
11	11	MVC	OTTAWA HAZELDEAN	6105993	1969	Historic	1
12	12	MVC	OTTAWA KANATA	6106003	1969	Historic	1
13	13	MVC	OTTAWA SOUTH MARCH	6106102	1969	Historic	1
14	14	MVC	SHIRLEY BAY	6107699	1954-1956	Historic	3
15	15	MVC	WOODLAWN	6109590	1975-1982	Historic	8
16	1	Outside	BROCKVILLE PCC	6100971	1965-present	Active	41
17	2	Outside	ARDEN	6100310	1895-1911	Historic	17
18	3	Outside	ARNPRIOR	6100340	1959-1964	Historic	6
19	4	Outside	ARNPRIOR GRANDON	6100345	1959-1999	Historic	41
20	5	Outside	ATHENS	6100375	1969-1978	Historic	10
21	6	Outside	BARRETT CHUTE	6100521	1950-1968	Historic	19
22	7	Outside	BOURGET	6100828	1950-1951	Historic	2
23	8	Outside	BROCKVILLE	6100969	1871-1980	Historic	110
24	9	Outside	CALABOGIE	6101077	1950-1956	Historic	7
25	10	Outside	CHATS FALLS	6101440	1950-1992	Historic	43
26	11	Outside	CLAYBANK	6101555	1961-1994	Historic	34
27	12	Outside	CLOYNE ONT HYDRO	6161662	1967-1981	Historic	15
28	13	Outside	DELTA	6101986	1969-1994	Historic	26
29	14	Outside	DENBIGH	6161990	1883-1896	Historic	14
30	15	Outside	FITZROY HARBOUR	6102417	1870-1906	Historic	37
31	16	Outside	GLOUCESTER DESJARDINS	6102839	1975-1977	Historic	3
32	17	Outside	GLOUCESTER RCN	6102841	1954	Historic	1
33	18	Outside	GLOUCESTER TINKER	6102842	1975-1976	Historic	2
34	19	Outside	GODFREY	6102857	1981-2003	Historic	23
35	20	Outside	HINCHINBROOKE	6103470	1961-1973	Historic	13
36	21	Outside	LEONARD	6104400	1960-1962	Historic	3
37	22	Outside	LYN	6104723	1960-1969	Historic	10
38	23	Outside	MAITLAND	6104840	1953-1954	Historic	2
39	24	Outside	MALLORYTOWN GRAHAM LAKE	6104880	1961-1989	Historic	29
40	25	Outside	MATAWATCHAN	6105010	1983-1988	Historic	6
41	26	Outside	METCALFE OSGOODE	6105066	1968-1976	Historic	9
42	27	Outside	NORTH AUGUSTA MAHONEY	6105679	1973-1980	Historic	8
43	28	Outside	OTTAWA LEMIEUX ISLAND	6106052	1953-1979	Historic	27
44	29	Outside	RIDEAU CANAL WOLFE LAKE	6107119	1954-1961	Historic	8
45	30	Outside	SARSFIELD	6107533	1985-1989	Historic	5
46	31	Outside	SOUTH MOUNTAIN	6107955	1960-1996	Historic	37
47	32	Outside	SPENCERVILLE	6107971	1953-1959	Historic	7
48	33	Outside	STEWARTVILLE	6108027	1950-1969	Historic	20
49	1	RVCA	KEMPTVILLE CS	6104027	1997-2003	Active	5
50	2	RVCA	OTTAWA CDA RCS	6105978	2003-present	Active	3
51	3	RVCA	OTTAWA MACDONALD-CARTIER	6106000	1938-2003	Active	68
52	4	RVCA	ASHTON	6100353	1956	Historic	1
53	5	RVCA	ASHTON STN SESIA FARM	6100363	1959-1973	Historic	15
54	6	RVCA	BELLS CORNERS	6100722	1991	Historic	1
55	7	RVCA	CITY VIEW	6101521	1953-1960	Historic	8
56	8	RVCA	CROW LAKE	6101920	1972-1991	Historic	20
57	9	RVCA	CUMBERLAND	6101935	1973-1980	Historic	8
58	10	RVCA	GLOUCESTER KETTLES	6102840	1975-1982	Historic	8
59	11	RVCA	KEMPTVILLE	6104025	1928-1997	Historic	70
60	12	RVCA	MACCUE	6104733	1883-1918	Historic	36
61	13	RVCA	MANOTICK	6104931	1953-1956	Historic	4
62	14	RVCA	MANOTICK	6104932	1975-1986	Historic	12
63	15	RVCA	MERIVALE CDA	6105061	1972-1977	Historic	6

Table 1.3-16

AES Climate Stations
Mississippi - Rideau Source Protection Region

No.		Watershed	Station Name	Station ID	Period of Record	Status	Total Years
64	16	RVCA	MERIVALE TS	610E061	1983-1994	Historic	12
65	17	RVCA	MONTAGUE	6105262	1895-1915	Historic	21
66	18	RVCA	NAVAN	6105576	1973-1974	Historic	2
67	19	RVCA	NORTH AUGUSTA	6105678	1971-1972	Historic	2
68	20	RVCA	NORTH GOWER	6105710	2001-2004	Historic	4
69	21	RVCA	NORTH GOWER	6105709	1902-1925	Historic	24
70	22	RVCA	ORLEANS VEH PRVG GND	6105832	1953-1958	Historic	6
71	23	RVCA	OTTAWA	6105887	1872-1935	Historic	64
72	24	RVCA	OTTAWA ALBION RD	6105910	1954	Historic	1
73	25	RVCA	OTTAWA ALTA VISTA	6105913	1961-1963	Historic	3
74	26	RVCA	OTTAWA BECKWITH RD	6105938	1955-1961	Historic	7
75	27	RVCA	OTTAWA BILLINGS BRIDGE	6105950	1953-1954	Historic	2
76	28	RVCA	OTTAWA BRITANNIA	6105960	1972-1984	Historic	13
77	29	RVCA	OTTAWA CDA	6105976	1889-2003	Historic	117
78	30	RVCA	OTTAWA CITY HALL	6105980	1966-1975	Historic	10
79	31	RVCA	OTTAWA HOGS BACK	6105995	1953-1954	Historic	2
80	32	RVCA	OTTAWA LA SALLE ACAD	6106014	1954-1967	Historic	14
81	33	RVCA	OTTAWA NEPEAN	6106080	1960-1962	Historic	3
82	34	RVCA	OTTAWA NRC	6106090	1951-1984	Historic	34
83	35	RVCA	OTTAWA RIDEAU WARD	6106098	1972-1975	Historic	4
84	36	RVCA	OTTAWA ROCKCLIFFE A	6106100	1942-1964	Historic	23
85	37	RVCA	OTTAWA U OF O	6106105	1954-1955	Historic	2
86	38	RVCA	PERTH	610F3Q0	1989	Historic	1
87	39	RVCA	PERTH	610FLPR	1986-1987	Historic	2
88	40	RVCA	PERTH ONTARIO HYDRO	6106385	1982-1983	Historic	2
89	41	RVCA	PORT ELMSLEY	6106660	1948-1968	Historic	21
90	42	RVCA	PORTLAND	6106677	1953-1958	Historic	6
91	43	RVCA	RAMSAYVILLE CRF	6106874	1972-1976	Historic	5
92	44	RVCA	RICHMOND	61070AA	1981-1984	Historic	4
93	45	RVCA	RICHMOND	6107011	1971-1972	Historic	2
94	46	RVCA	RICHMOND	6107010	1973-1974	Historic	2
95	47	RVCA	RIDEAU C BURRITS RAPIDS	6107031	1954-1969	Historic	16
96	48	RVCA	RIDEAU CANAL BOBS LAKE	6107017	1954-1961	Historic	8
97	49	RVCA	RIDEAU CANAL KILMARNOCK	6107059	1954-1969	Historic	16
98	50	RVCA	RIDEAU CANAL LONG ISLAND	6107073	1954-1969	Historic	16
99	51	RVCA	RIDEAU CANAL NARROWS	6107087	1954-1969	Historic	16
100	52	RVCA	RIDEAU CANAL PERTH	6107096	1954-1956	Historic	3
101	53	RVCA	RIDEAU FERRY	6107133	1948-1969	Historic	22
102	54	RVCA	SMITHS FALLS	6107834	1895-1922	Historic	28
103	55	RVCA	SMITHS FALLS TS	6107836	1982-1989	Historic	8
104	56	RVCA	SMITHS FALLS WPCP	6107835	1964-1983	Historic	20
105	57	RVCA	WESTPORT	6109458	1895-1920	Historic	26

Notes: MVC - Mississippi Valley Conservation
Outside - outside of both MVC & RVCA
RVCA - Rideau Valley Conservation Authority

Table 1.3-17

Selected AES Climate Stations
Mississippi - Rideau Source Protection Region

Watershed	Station	Name	Period of Record	Data Recorded during Period of Record						
				Max Temp	Min Temp	Mean Temp	Daily Rainfall	Daily Snowfall	Daily Precip.	Snow Depth
Mississippi	6100285	Appleton	1992-present	yes	yes	yes	yes	yes	yes	yes
Mississippi	6102J13	Drummond Centre	1984-present	yes	yes	yes	yes	yes	yes	yes
Mississippi	6105760	Ompah	1994-2005	yes	yes	yes	yes	yes	yes	yes
Mississippi	6105762	Ompah-Seitz	1994-2005	yes	yes	yes	yes	yes	yes	yes
Rideau	6101920	Crow Lake	1972-July1991	no	no	no	yes	yes	yes	yes
Rideau	6104025	Kemptville	1928-1997	yes	yes	yes	yes	yes	yes	1971-1997
Rideau	6104027	Kemptville CS	2001-present	yes	yes	yes	1997-1999	1997-1999	yes	yes
Rideau	6106000	Ottawa Airport	1938-present	yes	yes	yes	yes	yes	yes	1947-present
Rideau	6105976	Ottawa CDA RS	2000-present	yes	yes	yes	no	no	yes	yes
Rideau	6105978	Ottawa CDA	1889-2005	yes	yes	yes	yes	yes	yes	1961-2005
Rideau	6107836	Smiths Falls TS	1982-1989	1983-1989	1983-1989	1983-1989	yes	yes	yes	1983-1989
Rideau	6107835	Smiths Falls WPCP	1964-1983	yes	yes	yes	yes	yes	yes	1982-1983
Outside	6100971	Brockville PCC	1965-present	yes	yes	yes	yes	yes	yes	1980-present
Outside	6102857	Godfrey	1981- May 2003	1984-2003	1984-2003	1984-2003	yes	yes	yes	yes
Outside	6103367	Hartington IHD	1967-present	yes	yes	yes	yes	yes	yes	1980-present
Outside	6107247	Russell	1954-present	yes	yes	yes	yes	yes	yes	1980-present
Québec	7030170	Angers	1962-2005	1966-2005	1966-2005	1966-2005	yes	yes	yes	1980-2005
Québec	7031360	Chelsea	1927-2005	yes	yes	yes	yes	yes	yes	1980-2005
Québec	7034365	Luskville	1980-2005	yes	yes	yes	yes	yes	yes	yes

Notes:

Table 1.3-18

MVC & RVCA Rainfall Gauges
Mississippi - Rideau Source Protection Region

No.	Watershed	Name	Station	Data	Period of Record	Years of Data	Owner
1	Mississippi	Marble Lake	02KF016	Rain	1993-present	11	MVC
2	Mississippi	Plevna	02KF017	Rain	1997- present	7	MVC
3	Mississippi	Gordon Rapids	02KF013	Rain	1993-present	11	MVC
4	Mississippi	Lanark	02KF010	Rain	1993-present	11	MVC
5	Mississippi	Fergusons Falls	02KF001	Rain	1993- present	11	MVC
6	Mississippi	Appleton	02KF006	Rain	1993-present	10	MVC
7	Mississippi	Blakeney	02KF012	Rain	1993- present	10	MVC
8	Mississippi	Kinburn	02KF011	Rain	1993- present	9	MVC
9	Rideau	OMYA Inc.	OMYA	Rain	2005-present	1	RVCA
10	Rideau	Irish Creek	Irish Ck	Rain	2004-present	2	RVCA

Notes: MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority

Table 1.3-19

City of Ottawa Rainfall Gauges
Mississippi - Rideau Source Protection Region

No.	Station Name	Description	Period of Record
1	Acres	Acres Rain Gauge 105	1996,1998-2000, 2002-2005
2	Airport	O.I. Airport Rain Gauge 102	1996,1998-2000, 2002-2005
3	Carp	Carp Rain Gauge 113	2002-2005
4	Clyde	Clyde Rain Gauge 115	2002-2005
5	Colonnade	Colonnade Rain Gauge 103	1996, 1998-2005
6	Hawthorne	Hawthorne Rain Gauge 111	2000-2005
7	Kinburn	Kinburn Rain Gauge	2003-2005
8	Lee's	Lees Rain 107	1996, 1998-2005
9	Lemieux	Lemieux Rain Gauge 108	1996, 1998-2005
10	Manotick	Manotick Rain Gauge 110	1996, 1998-1999, 2002-2005
11	Maple Grove	Maple Grove Rain Gauge 116	2002-2005
12	March	March Rain Gauge 106	1996, 1998-2005
13	North Gower	North Gower Rain Gauge 118	2003-2005
14	Richmond	Richmond Rain Gauge 109	1996, 1998-2005
15	ROPEC	Ropec Rain Gauge 101	1996, 1998-2005
16	Riverside S	RSP 1 Rain Gauge 203	1998-2005
17	Trim	Trim Road Rain Gauge 112	2000-2005
18	Vars	Vars Rain Gauge 117	2003-2005
19	Walkley	Walkley Rain Gauge 201	1996, 1998-2000, 2002-2005
20	Barrhaven	Walter Baker Centre Rain Gauge 114	2002-2005

Notes:

Table 1.3-20

Snow Pack Sites
Mississippi - Rideau Source Protection Region

No.	Watershed	Station	Period of Record	Years of Data	Operator
1	Mississippi	Mackavoy	1986-present	19	MVC
2	Mississippi	Bon Echo	1982-present	24	MVC
3	Mississippi	Buckshot	1985-present	20	MVC
4	Mississippi	Ardoch	1981-present	24	MVC
5	Mississippi	Canonto	1986-present	19	MVC
6	Mississippi	Snow Road	1981-present	24	MVC
7	Mississippi	Maberley	1979-present	26	MVC
8	Mississippi	Lavant Station	1986-present	19	MVC
9	Mississippi	Gordon Rapids	1985-present	20	MVC
10	Mississippi	Fallbrook	1986-present	19	MVC
11	Mississippi	Brightside	1981-present	26	MVC
12	Mississippi	Innisville	1979-present	26	MVC
13	Mississippi	Blakeney	1979-present	26	MVC
14	Mississippi	Kinburn	1979-present	26	MVC
1	Rideau	Westport	1942-present	63	Parks
2	Rideau	Portland	1942-present	63	Parks
3	Rideau	Houghton	1942-present	63	Parks
4	Rideau	Bolingbroke	1942-present	63	Parks
5	Rideau	Bathurst	1942-present	63	Parks
6	Rideau	Perth	1942-present	63	Parks
7	Rideau	Nolans Corners	1976-present	30	RVCA
8	Rideau	Wolford Centre	1976-present	30	RVCA
9	Rideau	Pierces Corners	1976-present	30	RVCA
10	Rideau	Ashton	1974-present	32	RVCA
11	Rideau	Bells Corners	1978-present	28	RVCA

Notes: MVC - Mississippi Valley Conservation
Parks - Parks Canada
RVCA - Rideau Valley Conservation Authority

Table 1.3-21

Average Monthly Precipitation and Temperature (1974-2003)
Mississippi - Rideau Source Protection Region

Month	Mississippi Watershed Climate Station : Drummond Centre		Rideau Watershed Climate Station : Kemptville	
	Precipitation (mm)	Temperature (°C)	Precipitation (mm)	Temperature (°C)
January	80	-10.0	67	-8.6
February	47	-8.1	54	-7.4
March	55	-1.6	64	-2.6
April	56	5.4	78	6.1
May	73	12.4	82	13.0
June	87	18.3	81	18.1
July	92	20.2	88	20.6
August	66	19.3	82	19.5
September	88	15.1	86	14.7
October	74	8.1	84	8.2
November	84	1.9	80	1.8
December	67	-4.8	66	-5.2
Annual	**870**	**6.4**	**914**	**6.5**

Notes:

Table 1.4-1

Wetlands

Mississippi - Rideau Source Protection Region

Wetland Type	MVC			RVCA			Total (km^2)
	Provincially Significant	Locally Significant	Not Significant	Provincially Significant	Locally Significant	Not Significant	
Bog	3.3	0.1		11.0			**14.5**
Fen	1.7	0.0		4.6	0.2		**6.5**
Marsh	28.2	3.2		49.2	3.8	0.5	**84.8**
Open Water	24.9	1.4		16.1	1.4		**43.7**
Swamp	97.1	12.2		279.1	21.4		**409.8**
Upland				0.0			**0.0**
Unclassified			0.3	20.4		3.6	**24.3**
Total	**155.2**	**17.0**	**0.3**	**380.5**	**26.7**	**4.1**	**584**

Notes: MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority

Table 1.6-1

Estimated Population Distribution
Mississippi - Rideau Source Protection Region

Upper/Single Tier	Lower Tier	% Area in MRSPR	2006 Census Population	2006 Population in MRSPR[1]
Frontenac County	Central Frontenac Township	54	4,665	2,593
	North Frontenac Township	71	1,904	1,543
	South Frontenac Township	13	18,227	801
Lanark County	Beckwith Township	100	6,387	6,387
	Carleton Place, Town of	100	9,453	9,453
	Drummond/North Elmsley Township	100	7,118	7,118
	Lanark Highlands Township	91	5,180	4,924
	Mississippi Mills, Town of	89	11,734	11,254
	Montague Township	100	3,595	3,595
	Perth, Town of	100	5,907	5,907
	Tay Valley Township	100	5,634	5,634
Leeds&Grenville Count	Athens Township	4	3,086	43
	Augusta Township	19	7,510	810
	Edwardsburg - Cardinal Township	1	6,689	5
	Elizabethtown - Kitley Township	61	10,201	3,742
	Merrickville-Wolford, Village of	100	2,867	2,867
	North Grenville Township	67	14,198	11,756
	Rideau Lakes Township	51	10,350	6,200
	Westport, Village of	100	645	645
Lennox & Addington Co	Addington Highlands Township	21	2,512	362
Ottawa, City of	Ottawa, City of	73	812,129	770,006
Prescott and Russell	Clarence-Rockland, City of	3	20,790	726
Smiths Falls, Town of	Smiths Falls, Town of	100	8,777	8,777
Stormount, Dundas &	North Dundas Township	1	11,095	134
Renfrew County	Greater Madawaska Township	3	2,751	106
		Total		**865,388**

Notes: Population data collected from Statistics Canada 2006 Census by Dissemination Area
1 - Population data not for entire municipality
% in MRSPR based on portion of the area within region.

Table 1.6-2

Projected Population Distribution
Mississippi - Rideau Source Protection Region

Upper/Single Tier Municipality	Total Population	Total Projected Population			Projected Population Growth (%)		
	2001	2011	2021	2031	2011	2021	2031
Frontenac County	138,606	158,600	172,800	184,200	14%	25%	33%
Lanark County	62,495	72,900	80,400	85,600	17%	29%	37%
Leeds&Grenville County	96,606	106,200	112,200	117,000	10%	16%	21%
Lennox & Addington County	39,461	43,000	45,600	48,000	9%	16%	22%
Ottawa, City of	774,072	904,900	1,014,100	1,116,700	17%	31%	44%
Prescott and Russell County	76,446	89,100	96,700	102,200	17%	26%	34%
Stormount, Dundas &	109,522	119,500	124,100	127,900	9%	13%	17%
Renfrew County	95,138	101,200	106,200	110,300	6%	12%	16%
				Average	**12%**	**21%**	**28%**

Notes: Population data collected from Statistics Canada 2001 Census
Projected population data collected from Ministry of Finance
Projected population growth referenced to 2001 population data.

Table 1.6-3

Development Areas with Populations Greater Than 500 Persons[1]
Mississippi - Rideau Source Protection Region

Development Areas	Population	Data Source
Almonte	4,649	Census 2001
Blacks Corners	753	Census 2006 DA Estimate
Carleton Place	9,453	Census 2006
Carp	1,434	City of Ottawa 2005
Constance Bay	2,640	City of Ottawa 2005
Cumberland	1,896	City of Ottawa 2005
Fitzroy Harbour	654	City of Ottawa 2005
Kars	648	City of Ottawa 2005
Kemptville	3,667	Census 2001
Lanark	869	Census 2001
Manotick	5,217	City of Ottawa 2005
Merrickville	968	Census 2001
Munster	1,320	City of Ottawa 2005
North Gower	1,776	City of Ottawa 2005
Osgoode	2,784	City of Ottawa 2005
Perth	5,907	Census 2006
Richmond	4,377	City of Ottawa 2005
Smiths Falls	8,777	Census 2006
Westport	645	Census 2006

Notes: 1 - Excluding the urban portion of Ottawa (Barrhaven / Riverside South, Kanata / Stittsville, Orleans and Ottawa)
DA - Dissemination Area

Table 1.6-4

Municipal Wastewater Systems
Mississippi - Rideau Souce Protection Region

Municipality	Sewage Treatment Plant	Receiving Waterbody
Carleton Place, Town of	Carleton Place Water Pollution Control Plant	Mississippi River
Merrickville-Wolford, Village of	Merrickville Water Pollution Control Plant	Rideau River
Mississippi Mills, Town of	Almonte Lagoons	Mississippi River
North Grenville, Municipality of	Kemptville Water Pollution Control Plant	Rideau River
Ottawa, City of	Robert O. Pickard Environmental Centre	Ottawa River
	Village Walk (Manotick) Pollution Control Plant	Rideau River
Perth, Town of	Perth Lagoon	Tay River
Smiths Falls, Town of	Smiths Falls Water Pollution Control Plant	Rideau River
Westport, Village of	Westport Lagoon / Snow-fluent	NA

Notes: 1 - Ottawa includes Barrhaven/Riverside South, Carp, Kanata, Munster, Orleans and Richmond
NA - Not Applicable

Table 1.6-5

Municipal Water Systems
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Water Supply Location
Groundwater	Merrickville-Wolford, Village of	Merrickville
	Mississippi Mills, Town of	Almonte
	North Grenville, Municipality of	Kemptville
	Ottawa, City of	Carp
		King's Park (subdivision in Richmond)
		Munster Hamlet
	Westport, Village of	Westport
Surface Water	Carleton Place, Town of	Carleton Place
	Ottawa, City of	Britannia (Ottawa[1])
		Lemieux Island (Ottawa[1])
	Perth, Town of	Perth
	Smiths Falls, Town of	Smiths Falls

Notes: 1 - Ottawa includes Barrhaven/Riverside South, Kanata and Orleans

Table 1.6-6

Population of Municipal & Non-Municipal Water Serviced Areas
Mississippi - Rideau Source Protection Region

Upper/Single Tier	Lower Tier	Name of Municipal Water Service Area	Population in MRSPR[1]	Municipally Serviced Population[2, 3]	Non-Municipally Serviced Population
Frontenac County	Central Frontenac Township		2593		2593
	North Frontenac Township		1543		1543
	South Frontenac Township		801		801
Lanark County	Beckwith Township		6387		6387
	Carleton Place, Town of		9,453	9,453	
	Drummond / North Elmsley		7,118		7,118
	Lanark Highlands Township		4924		4924
	Mississippi Mills, Town of		11,254		6,595
		Almonte		4,659	
	Montague Township		3595		3,035
		Adirondo		560	
	Perth, Town of	Perth	5,907	5,907	
	Tay Valley Township		5,634		5,634
Leeds&Grenville County	Athens Township		43		43
	Augusta Township		810		810
	Edwardsburg - Cardinal Township		5		5
	Elizabethtown - Kitley Township		3,742		3,742
	Merrickville-Wolford, Village of		2,867		1,766
		Merrickville		1,101	
	North Grenville Township		11,756		8,361
		Kemptville		3,395	
	Rideau Lakes Township		6200		6200
	Westport, Village of	Westport	645	645	
Lennox & Addington County	Addington Highlands		362		362
Ottawa, City of			770,006		74,352
		Urban Area[4, 5]		695,654	
Prescott & Russell County	Clarence-Rockland, City of		726		726
Smiths Falls, Town of		Smiths Falls	8,777	8,777	
Stormont, Dundas & Glengarry	North Dundas Township		134		134
Renfrew County	Greater Madawaska Township		106		106
		Total	**865,388**	**730,151**	**135,237**

Notes: 1 - Population data not for entire municipality, Stats Canada 2006 Census by Dissemination Area
2 - Municipally serviced population data collected from Statistics Canada Municipal Water Use Database (MUD)
3 - Population of entirely serviced municipalities adjusted to Stats Canada 2006 Census data
4 - Urban Area of the City of Ottawa includes Barrhaven / Riverside South, Kanata / Stittsville, Orleans and Ottawa
5 - Urban Area also includes municipal service areas of Carp, King's Park, Manotick and Munster

Table 1.6-7

Agriculture Sector Distribution
Mississippi - Rideau Source Protection Region

	Frontenac County	Lanark County	Leeds & Grenville	Lennox & Addington	Ottawa
Number of Farms	699	910	1348	629	1,318
Land Use (hectares)					
Cropland	31563	34940	63139	36,115	80,254
Summer fallow	96	121	274	285	773
Improved pasture	5763	8643	8498	4,991	7,441
Unimproved pasture	23326	20475	25180	20,867	13,585
Other land	22431	33744	39146	17,643	18,400
Major Field Crops					
Winter wheat	21	259	116	1,076	289
Oats for grain	437	548	794	562	1,253
Barley for grain	1180	1719	2611	1,721	2,572
Mixed grains	584	555	854	746	1,283
Corn for grain	1686	2736	10755	3,932	21,587
Hay	24304	24088	37135	22,007	29,493
Soybeans	1383	2001	6436	3,985	13,024
Dry white beans	x	x	x	0	444
Tobacco	0	0	0	0	0
Potatoes	16	10	21	x	29
Major Fruit Crops					
Apples	5	11	123	42	41
Peaches	0	0	0	0	0
Sour Cherries	0	0	x	0	1
Raspberries	x	10	x	17	27
Strawberries	8	31	26	30	100
Grapes	x	0	x	x	x
Total Fruit	25	57	173	96	182
Major Vegetable Crops					
Sweet corn	44	48	80	20	147
Tomatoes	5	2	6	6	20
Green peas	1	x	2	1	23
Green beans	1	1	4	1	33
Total vegetables	79	86	131	51	499
Livestock					
Total Cattle	26695	31788	46623	25,070	49,123
Total Pigs	251	x	7438	x	7,950
Total sheep and lambs	3467	6488	9638	7,230	5,353
Poultry					
Total hens and chickens	14576	15553	1064076	492,877	213,429
Total turkeys	184	501	1044	391	800

Notes: Data collected from 2001 Census of Agriculture - OMAFRA
x Suppressed data

Table 1.7-1

Details of Large Municipal Water Systems
Mississippi - Rideau Source Protection Region

Facility	Permit Number	Drinking Water System Number	PTTW (m^3/day)	5-year average (2000-2005) (m^3/day)
Almonte	8474-6MJR6X	200001290	6,895	1,831
Britannia	00-P-4139	220003154	360,000	171,968
Carleton Place	6882-686R5M	210000372	12,000	6,318
Carp	3630-62UPSJ	210002272	2,782	311
Kemptville	97-P-4036	220001236	4,490	1,492
	00-P-4138			
	01-P-4061			
King's Park	6540-64UJKL	200007999	2,620	186
Lemieux Island	2642-642LKE	220003207	325,000	162,380
Merrickville	87-P-4101	220001227	4,295	515
Munster Hamlet	3876-6QBL9J	220008006	2,362	409
Perth	5464-6MHL84	220001272	9,092	159
Smiths Falls	88-P-4010	220001307	18,100	9,494
Westport	00-P-4134	210001004	1,750	190
	0154-62QJ3N			

Notes:

Table 1.7-2

Communal Wells and Designated Facilities
Mississippi - Rideau Source Protection Region

Municipality	Facility Type					
	Non-Municipal Seasonal Residential Supply (NMSRS)	Non-Municipal Year-Round Residential Supply (NMYRRS)	Large Non-Municipal Non-Residential Supply (LNMNRS)	Small Non-Municipal Non-Residential Supply (SNMNRS)	Large Municipal Non-Residential Supply (LMNRS)	Small Municipal Non-Residential Supply (SMNRS)
Addington Highlands	2			12		2
Athens				4		1
Augusta						
Beckwith	1	2		2		1
Carleton Place				3		
Central Frontenac	2		1	22		1
Clarence-Rockland	2	3		5		
Drummond/North Elmsley	1	2		8		
Edwardsburgh - Cardinal	1			9	1	4
Elizabethtown-Kitley			1	13		14
Greater Madawaska	3	2	1	19		3.0
Lanark Highlands	3	2		12		10
Merrickville-Wolford				3		1
Mississippi Mills	2	2		11		5
Montague	1	1		4		2
North Dundas		1		12		7
North Frontenac	4		2	6		1
North Grenville		1		10		
Ottawa Amalgamated	4	16	3	128	1	49
Perth						
Rideau Lakes	6	4		29	1	17
Smiths Falls				3		
South Frontenac	11	3		23	1	13
Tay Valley	4		2	22		
Westport				1		
Total	**47**	**39**	**10**	**361**	**4**	**131**

Notes:

Table 1.7-3

Estimated Domestic Private Water Use
Mississippi - Rideau Source Protection Region

Municipality	Number of Wells	Estimated Population[1]	High Average Daily Use (m^3)[2]	Low Average Daily Use (m^3)[3]
Addington Highlands	91	259	45	34
Athens	9	26	4	3
Augusta	285	811	142	106
Beckwith	1,931	5,496	962	716
Carleton Place	104	296	52	39
Central Frontenac	1,479	4,209	737	549
Clarence-Rockland	62	176	31	23
Drummond/North Elmsley	2,389	6,799	1,190	886
Edwardsburgh - Cardinal	87	248	43	32
Elizabethtown-Kitley	1,216	3,461	606	451
Greater Madawaska	1	3	1	0.4
Lanark Highlands	1,994	5,675	993	740
Merrickville-Wolford	585	1,665	291	217
Mississippi Mills	2,033	5,786	1,013	754
Montague	1,115	3,173	555	414
North Dundas	19	54	9	7
North Frontenac	1,017	2,894	507	377
North Grenville	2,775	7,898	1,382	1,029
Ottawa Amalgamated	21,457	61,068	10,687	7,960
Perth	85	242	42	32
Rideau Lakes	2,509	7,141	1,250	931
Smiths Falls	94	268	47	35
South Frontenac	551	1,568	274	204
Tay Valley	2,396	6,819	1,193	889
Westport	111	316	55	41
Total	**44,395**	**126,351**	**22,111**	**16,469**

Notes:
1 - Estimated population generated by multiplying the average population per well by the number of wells in the municipality. Average population per well (2.85) determined by using Statistics Canada population and fully enclosed populations within the proposed Mississippi-Rideau Sourcewater Protection Region.
2 - High Average Daily Use calculated from 175 L / per capita / per day (Golder et al., 2003)
3 - Low Average Daily Use calculated from 130 L / per capita / per day. This water usage rate was calculated from the Montague Township water use.

Table 1.7-4

Estimated Agricultural Water Use[1]
Mississippi - Rideau Source Protection Region

Area	Number of Farms	Livestock Water Use (m^3/yr)	Irrigation Water Use (m^3/yr)	Other Water Use (m^3/yr)	Total Water Use (m^3/yr)
Mississippi	557	368,570	231,035	25,555	625,160
Rideau	1,196	952,421	585,971	87,207	1,625,599
Ottawa	466	423,878	457,591	36,699	918,168
TOTAL	**2,219**	**1,744,869**	**1,274,597**	**149,461**	**3,168,927**

Notes: 1 - Adapted from de Loe, 2002 - Agricultural Water Use by Watershed

Table 1.7-5

Large Agricultural Water Users
Mississippi - Rideau Source Protection Region

Permit	Water Source	Purpose	Permitted Use (m^3/day)
0004-5ZMGZC	Groundwater & Surface Water	Tender Fruit	3,814
04-P-4009	Groundwater	Market Gardens / Flowers	191
5611-6AYNPX	Groundwater	Tender Fruit	353
8053-6ARJX9	Surface Water	Tender Fruit	221
03-P-4005	Surface Water	Tender Fruit	164
03-P-4004	Groundwater	Sod Farm	1,635
00-P-4122	Surface Water	Sod Farm	4,582
7228-636RLE	Groundwater	Tender Fruit	295

Notes: Active permits from Ministry of the Environment Permit To Take Water database, Feb. 2008

Table 1.7-6

Large Water Users
Number of Permits to Take Water by Subwatershed
Mississippi - Rideau Source Protection Region

Watershed / Subwatershed	Classification	Agricultural			Commercial				Construction
	Purpose	Market Gardens / Flowers	Sod Farm	Tender Fruit	Aquaculture	Golf Course Irrigation	Other - Commercial	Snowmaking	Other - Construction
Mississippi									
Big Gull									
Buckshot Creek					1				
Clyde River						1			
CP Dam				1		3			
Fall River					1				
High Falls									
Indian River									
Lower Mississippi						1		1	1
Mazinaw									
Upper Mississippi									
Rideau									
Jock River				2	1	5			
Kemptville Creek									
Lower Rideau			2	1		8			
Middle Rideau						2			
Rideau Lakes						1			
Tay River						2	1		
Ottawa Tributaries									
Carp River						2	1		
Ottawa River (MVC)						3			
Ottawa River East		1		1		1	1		
Ottawa River West									
Total MRSPR	**191**	**1**	**2**	**5**	**3**	**29**	**3**	**1**	**1**

Notes:

Table 1.7-6

Large Water Users
Number of Permits to Take Water by Sub
Mississippi - Rideau Source Protection R

Watershed / Subwatershed	Classification	Dewatering			Industrial				Institutional
	Purpose	Construction	Other - Dewatering	Pits and Quarries	Aggregate Washing	Cooling Water	Other - Industrial	Power Production	Other - Institutional
Mississippi									
Big Gull									
Buckshot Creek									
Clyde River									
CP Dam				1			1		
Fall River									
High Falls									
Indian River			1						
Lower Mississippi		1						3	
Mazinaw									
Upper Mississippi									
Rideau									
Jock River		2	2	6	2		1		
Kemptville Creek									
Lower Rideau		3	1		1	1			
Middle Rideau			1	1		2			1
Rideau Lakes									
Tay River							2		
Ottawa Tributaries									
Carp River			1	3					
Ottawa River (MVC)									
Ottawa River East		1	1						
Ottawa River West		5	1			2			
Total MRSPR	**191**	**12**	**8**	**11**	**3**	**5**	**4**	**3**	**1**

Notes:

Table 1.7-6

Large Water Users
Number of Permits to Take Water by Sub
Mississippi - Rideau Source Protection R

Watershed / Subwatershed	Classification	Miscellaneous				Recreational	Remediation	
	Purpose	Heat Pumps	Other - Miscellaneous	Pumping Test	Wildlife Conservation	Aesthetics	Groundwater	Other - Remediation
Mississippi								
Big Gull								
Buckshot Creek								
Clyde River					3			
CP Dam					3			
Fall River								
High Falls								
Indian River					1			
Lower Mississippi			1		2			
Mazinaw								
Upper Mississippi								
Rideau								
Jock River			1	1	4			1
Kemptville Creek				1	3			
Lower Rideau			2	1	8			1
Middle Rideau					7			
Rideau Lakes					4			
Tay River		1			11	1		
Ottawa Tributaries								
Carp River		1			1			1
Ottawa River (MVC)								
Ottawa River East			1					
Ottawa River West			1				2	1
Total MRSPR	**191**	**2**	**6**	**3**	**47**	**1**	**2**	**4**

Notes:

Table 1.7-6

Large Water Users
Number of Permits to Take Water by Sub
Mississippi - Rideau Source Protection R

Watershed / Subwatershed	Classification	Water Supply			
	Purpose	Campgrounds	Communal	Municipal	Other - Water Supply
Mississippi					
Big Gull					
Buckshot Creek					
Clyde River					
CP Dam		2		1	
Fall River		1			
High Falls					
Indian River					
Lower Mississippi				1	1
Mazinaw		1			1
Upper Mississippi					
Rideau					
Jock River			2	2	1
Kemptville Creek				4	
Lower Rideau			1		1
Middle Rideau			1	2	
Rideau Lakes				2	1
Tay River				1	
Ottawa Tributaries					
Carp River		1		1	1
Ottawa River (MVC)					1
Ottawa River East					1
Ottawa River West				2	1
Total MRSPR	**191**	**5**	**4**	**16**	**9**

Notes:

Table 1.7-6b

Large Water Users
Daily Permitted Water Use (Permits to Take Water) by Subwatershed
Mississippi - Rideau Source Protection Region

Watershed / Subwatershed	Classification	Agricultural			Commercial				Construction
	Purpose	Market Gardens / Flowers	Sod Farm	Tender Fruit	Aquaculture	Golf Course Irrigation	Other - Commercial	Snowmaking	Other - Construction
Mississippi									
Big Gull									
Buckshot Creek					4,699,792				
Clyde River						829,645			
CP Dam				163,656		903,557			
Fall River					15,120,000				
High Falls									
Indian River									
Lower Mississippi						1,636,560		5,891,040	454,600
Mazinaw									
Upper Mississippi									
Rideau									
Jock River				4,034,472	1,144,584	14,864,734			
Kemptville Creek									
Lower Rideau			6,217,552	352,770		24,494,710			
Middle Rideau						3,482,164			
Rideau Lakes						600,072			
Tay River						766,872	1,483,000		
Ottawa Tributaries									
Carp River						1,800,376	160,000		
Ottawa River (MVC)						23,683,509			
Ottawa River East		190,932		295,200		346,500	688,400		
Ottawa River West									
Total MRSPR		**190,932**	**6,217,552**	**4,846,098**	**20,964,376**	**73,408,699**	**2,331,400**	**5,891,040**	**454,600**

Notes: All Water Use reported in L/day

Table 1.7-6b

Large Water Users
Daily Permitted Water Use (Permits t
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Dewatering			Industrial				Institutional
	Purpose	Construction	Other - Dewatering	Pits and Quarries	Aggregate Washing	Cooling Water	Other - Industrial	Power Production	Other - Institutional
Mississippi									
Big Gull									
Buckshot Creek									
Clyde River									
CP Dam				8,722,864			454,600		
Fall River									
High Falls									
Indian River			3,600,000						
Lower Mississippi		31,583,200						7,646,243,264	
Mazinaw									
Upper Mississippi									
Rideau									
Jock River		1,900,000	23,976,000	44,065,344	10,046,000		454,600		
Kemptville Creek									
Lower Rideau		819,120	11,100,000		4,546,000	566,841			
Middle Rideau			7,855,488	5,433,379		3,089,360			4,660,922
Rideau Lakes									
Tay River							1,295,520		
Ottawa Tributaries									
Carp River			10,886,400	8,545,008					
Ottawa River (MVC)									
Ottawa River East		380,000	8,623,762						
Ottawa River West		2,069,600	5,718,960			27,904,000			
Total MRSPR		**36,751,920**	**71,760,610**	**66,766,595**	**14,592,000**	**31,560,201**	**2,204,720**	**7,646,243,264**	**4,660,922**

Notes: All Water Use re

Table 1.7-6b

Large Water Users
Daily Permitted Water Use (Permits t
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Miscellaneous				Recreational	Remediation	
	Purpose	Heat Pumps	Other - Miscellaneous	Pumping Test	Wildlife Conservation	Aesthetics	Groundwater	Other - Remediation
Mississippi								
Big Gull								
Buckshot Creek								
Clyde River					101,049,600			
CP Dam					204,516,000			
Fall River								
High Falls								
Indian River					93,938,544			
Lower Mississippi			454,600		864,000			
Mazinaw								
Upper Mississippi								
Rideau								
Jock River			3,456,000	1,703,520	384,833,700			99,990
Kemptville Creek				720,000	401,532,000			
Lower Rideau			431,500,000	300,000	7,971,264,000			99,990
Middle Rideau					2,543,542,796			
Rideau Lakes					710,820,000			
Tay River		1,036,800			1,917,252,000	300,000		
Ottawa Tributaries								
Carp River		91,648			0			5,509,752
Ottawa River (MVC)								
Ottawa River East			1,260,000					
Ottawa River West			130,924				238,262	326,880
Total MRSPR		**1,128,448**	**436,801,524**	**2,723,520**	**14,329,612,640**	**300,000**	**238,262**	**6,036,612**

Notes: All Water Use re

Table 1.7-6b

Large Water Users
Daily Permitted Water Use (Permits t
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Water Supply				Total
	Purpose	Campgrounds	Communal	Municipal	Other - Water Supply	
Mississippi						
Big Gull						
Buckshot Creek						**4,699,792**
Clyde River						**101,879,245**
CP Dam		246,600		12,000,000		**227,007,277**
Fall River		87,840				**15,207,840**
High Falls						
Indian River						**97,538,544**
Lower Mississippi				6,894,720	120,000	**7,694,141,984**
Mazinaw		24,914			270,000	**294,914**
Upper Mississippi						
Rideau						
Jock River			240,016	4,982,000	853,920	**496,654,880**
Kemptville Creek				6,308,800		**408,560,800**
Lower Rideau			2,064,960		851,040	**8,454,176,983**
Middle Rideau			392,776	22,395,061		**2,590,851,946**
Rideau Lakes				1,750,000	54,720	**713,224,792**
Tay River				9,092,000		**1,931,226,192**
Ottawa Tributaries						
Carp River		107,740		2,782,080	5,949,623	**35,832,627**
Ottawa River (MVC)					8,370,186	**32,053,695**
Ottawa River East					2,762,297	**14,547,091**
Ottawa River West				685,000,000	1,366,950	**722,755,576**
Total MRSPR		**467,094**	**2,697,752**	**751,204,661**	**20,598,736**	**23,540,654,178**

Notes: All Water Use re

Table 1.7-6c

Large Water Users
Percentage of Daily Permitted Water Use (Permits to Take Water) by Subwatershed
Mississippi - Rideau Source Protection Region

Watershed / Subwatershed	Classification	Agricultural			Commercial				Construction
	Purpose	Market Gardens / Flowers	Sod Farm	Tender Fruit	Aquaculture	Golf Course Irrigation	Other - Commercial	Snowmaking	Other - Construction
Mississippi									
Big Gull									
Buckshot Creek					100%				
Clyde River						1%			
CP Dam				0%		0%			
Fall River					99%				
High Falls									
Indian River									
Lower Mississippi						0%		0%	0%
Mazinaw									
Upper Mississippi									
Rideau									
Jock River				1%	0%	3%			
Kemptville Creek									
Lower Rideau			0%	0%		0%			
Middle Rideau						0%			
Rideau Lakes						0%			
Tay River						0%	0%		
Ottawa Tributaries									
Carp River						5%	0%		
Ottawa River (MVC)						74%			
Ottawa River East		1%		2%		2%	5%		
Ottawa River West									
Total MRSPR		0.00%	0.03%	0.02%	0.09%	0.31%	0.01%	0.03%	0.00%

Notes: All Water Use reported in L/day

Table 1.7-6c

Large Water Users
Percentage of Daily Permitted Water
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Dewatering			Industrial				Institutional
	Purpose	Construction	Other - Dewatering	Pits and Quarries	Aggregate Washing	Cooling Water	Other - Industrial	Power Production	Other - Institutional
Mississippi									
Big Gull									
Buckshot Creek									
Clyde River									
CP Dam				4%			0%		
Fall River									
High Falls									
Indian River			4%						
Lower Mississippi		0%						99%	
Mazinaw									
Upper Mississippi									
Rideau									
Jock River		0%	5%	9%	2%		0%		
Kemptville Creek									
Lower Rideau		0%	0%		0%	0%			
Middle Rideau			0%	0%		0%			0%
Rideau Lakes									
Tay River							0%		
Ottawa Tributaries									
Carp River			30%	24%					
Ottawa River (MVC)									
Ottawa River East		3%	59%						
Ottawa River West		0%	1%			4%			
Total MRSPR		0.16%	0.30%	0.28%	0.06%	0.13%	0.01%	32.48%	0.02%

Notes: All Water Use re

Table 1.7-6c

Large Water Users
Percentage of Daily Permitted Water
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Miscellaneous				Recreational	Remediation	
	Purpose	Heat Pumps	Other - Miscellaneous	Pumping Test	Wildlife Conservation	Aesthetics	Groundwater	Other - Remediation
Mississippi								
Big Gull								
Buckshot Creek								
Clyde River					99%			
CP Dam					90%			
Fall River								
High Falls								
Indian River					96%			
Lower Mississippi			0%		0%			
Mazinaw								
Upper Mississippi								
Rideau								
Jock River			1%	0%	77%			0%
Kemptville Creek				0%	98%			
Lower Rideau			5%	0%	94%			0%
Middle Rideau					98%			
Rideau Lakes					100%			
Tay River		0%			99%	0%		
Ottawa Tributaries								
Carp River		0%			0%			15%
Ottawa River (MVC)								
Ottawa River East			9%					
Ottawa River West			0%				0%	0%
Total MRSPR		0.00%	1.86%	0.01%	60.87%	0.00%	0.00%	0.03%

Notes: All Water Use re

Table 1.7-6c

Large Water Users
Percentage of Daily Permitted Water
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Water Supply				Total
	Purpose	Campgrounds	Communal	Municipal	Other - Water Supply	
Mississippi						
Big Gull						
Buckshot Creek						**100%**
Clyde River						**100%**
CP Dam		0%		5%		**100%**
Fall River		1%				**100%**
High Falls						
Indian River						**100%**
Lower Mississippi				0%	0%	**100%**
Mazinaw		8%			92%	**100%**
Upper Mississippi						
Rideau						
Jock River			0%	1%	0%	**100%**
Kemptville Creek				2%		**100%**
Lower Rideau			0%		0%	**100%**
Middle Rideau			0%	1%		**100%**
Rideau Lakes				0%	0%	**100%**
Tay River				0%		**100%**
Ottawa Tributaries						
Carp River		0%		8%	17%	**100%**
Ottawa River (MVC)					26%	**100%**
Ottawa River East					19%	**100%**
Ottawa River West				95%	0%	**100%**
Total MRSPR		0.00%	0.01%	3.19%	0.09%	**100%**

Notes: All Water Use re

Table 1.7-6d

Large Water Users
Yearly Permitted Water Use (Permits to Take Water) by Subwatershed
Mississippi - Rideau Source Protection Region

Watershed / Subwatershed	Classification	Agricultural			Commercial				Construction
	Purpose	Market Gardens / Flowers	Sod Farm	Tender Fruit	Aquaculture	Golf Course Irrigation	Other - Commercial	Snowmaking	Other - Construction
Mississippi									
Big Gull									
Buckshot Creek					1,715,424,080				
Clyde River						32,788,025			
CP Dam				12,274,200		89,797,936			
Fall River					5,518,800,000				
High Falls									
Indian River									
Lower Mississippi						245,484,000		365,244,480	50,006,000
Mazinaw									
Upper Mississippi									
Rideau									
Jock River				156,964,860	417,773,160	1,609,441,988			
Kemptville Creek									
Lower Rideau			924,422,904	7,055,400		5,716,125,105			
Middle Rideau						718,052,502			
Rideau Lakes						18,002,160			
Tay River						81,487,200	541,295,000		
Ottawa Tributaries									
Carp River						286,416,236	58,400,000		
Ottawa River (MVC)						5,756,581,785			
Ottawa River East		15,110,904		5,904,000		51,975,000	123,912,000		
Ottawa River West									
Total MRSPR		**15,110,904**	**924,422,904**	**182,198,460**	**7,651,997,240**	**14,606,151,937**	**723,607,000**	**365,244,480**	**50,006,000**

Notes: All Water Use reported in L/year

Table 1.7-6d

Large Water Users
Yearly Permitted Water Use (Permits
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Dewatering			Industrial				Institutional
	Purpose	Construction	Other - Dewatering	Pits and Quarries	Aggregate Washing	Cooling Water	Other - Industrial	Power Production	Other - Institutional
Mississippi									
Big Gull									
Buckshot Creek									
Clyde River									
CP Dam				3,183,845,360			50,006,000		
Fall River									
High Falls									
Indian River			964,800,000						
Lower Mississippi		11,527,868,000						2,790,878,791,360	
Mazinaw									
Upper Mississippi									
Rideau									
Jock River		62,000,000	8,751,240,000	15,401,950,560	2,611,960,000		50,006,000		
Kemptville Creek									
Lower Rideau		83,506,240	4,051,500,000		1,181,960,000	206,896,965			
Middle Rideau			2,867,253,120	1,983,183,335		728,647,120			1,701,236,530
Rideau Lakes									
Tay River							472,864,800		
Ottawa Tributaries									
Carp River			3,973,536,000	2,553,703,920					
Ottawa River (MVC)									
Ottawa River East		11,400,000	3,147,673,130						
Ottawa River West		396,020,000	2,087,420,400			8,096,898,000			
Total MRSPR		**12,080,794,240**	**25,843,422,650**	**23,122,683,175**	**3,793,920,000**	**9,032,442,085**	**572,876,800**	**2,790,878,791,360**	**1,701,236,530**

Notes: All Water Use re

Table 1.7-6d

Large Water Users
Yearly Permitted Water Use (Permits
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Miscellaneous				Recreational	Remediation	
	Purpose	Heat Pumps	Other - Miscellaneous	Pumping Test	Wildlife Conservation	Aesthetics	Groundwater	Other - Remediation
Mississippi								
Big Gull								
Buckshot Creek								
Clyde River					36,883,104,000			
CP Dam					74,648,340,000			
Fall River								
High Falls								
Indian River					25,833,099,600			
Lower Mississippi			50,006,000		315,360,000			
Mazinaw								
Upper Mississippi								
Rideau								
Jock River			1,261,440,000	6,552,000	137,307,846,000			36,496,350
Kemptville Creek				720,000	146,559,180,000			
Lower Rideau			157,497,500,000	4,500,000	2,909,511,360,000			36,496,350
Middle Rideau					928,393,120,540			
Rideau Lakes					259,449,300,000			
Tay River		378,432,000			699,796,980,000	9,000,000		
Ottawa Tributaries								
Carp River		22,912,000			0			2,011,059,480
Ottawa River (MVC)								
Ottawa River East			149,940,000					
Ottawa River West			47,787,260				86,965,630	119,311,200
Total MRSPR		**401,344,000**	**159,006,673,260**	**11,772,000**	**5,218,697,690,140**	**9,000,000**	**86,965,630**	**2,203,363,380**

Notes: All Water Use re

Table 1.7-6d

Large Water Users
Yearly Permitted Water Use (Permits
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Water Supply				Total
	Purpose	Campgrounds	Communal	Municipal	Other - Water Supply	
Mississippi						
Big Gull						
Buckshot Creek						**1,715,424,080**
Clyde River						**36,915,892,025**
CP Dam		74,957,000		4,380,000,000		**82,439,220,496**
Fall River		13,176,000				**5,531,976,000**
High Falls						
Indian River						**26,797,899,600**
Lower Mississippi				2,516,572,800	43,800,000	**2,805,993,132,640**
Mazinaw		2,566,142			98,550,000	**101,116,142**
Upper Mississippi						
Rideau						
Jock River			87,605,840	1,818,430,000	311,680,800	**169,891,387,558**
Kemptville Creek				2,302,712,000		**148,862,612,000**
Lower Rideau			753,710,400		310,629,600	**3,080,285,662,964**
Middle Rideau			143,363,240	8,170,884,140		**944,705,740,527**
Rideau Lakes				638,750,000	19,972,800	**260,126,024,960**
Tay River				3,318,580,000		**704,598,639,000**
Ottawa Tributaries						
Carp River		19,824,160		1,015,459,200	904,914,955	**10,846,225,951**
Ottawa River (MVC)					2,087,598,832	**7,844,180,617**
Ottawa River East					596,688,660	**4,102,603,694**
Ottawa River West				##############	321,370,800	**261,180,773,290**
Total MRSPR		**110,523,302**	**984,679,480**	**##############**	**4,695,206,447**	**8,551,938,511,544**

Notes: All Water Use re

Table 1.7-6e

Large Water Users
Percentage of Yearly Permitted Water Use (Permits to Take Water) by Subwatershed
Mississippi - Rideau Source Protection Region

Watershed / Subwatershed	Classification	Agricultural			Commercial				Construction
	Purpose	Market Gardens / Flowers	Sod Farm	Tender Fruit	Aquaculture	Golf Course Irrigation	Other - Commercial	Snowmaking	Other - Construction
Mississippi									
Big Gull									
Buckshot Creek					100%				
Clyde River						0%			
CP Dam				0%		0%			
Fall River					100%				
High Falls									
Indian River									
Lower Mississippi						0%		0%	0%
Mazinaw									
Upper Mississippi									
Rideau									
Jock River				0%	0%	1%			
Kemptville Creek									
Lower Rideau			0%	0%		0%			
Middle Rideau						0%			
Rideau Lakes						0%			
Tay River						0%	0%		
Ottawa Tributaries									
Carp River						3%	1%		
Ottawa River (MVC)						73%			
Ottawa River East		0%		0%		1%	3%		
Ottawa River West									
Total MRSPR		0.00%	0.01%	0.00%	0.09%	0.17%	0.01%	0.00%	0.00%

Notes: All Water Use reported in L/day

Table 1.7-6e

Large Water Users
Percentage of Yearly Permitted Wate
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Dewatering			Industrial				Institutional
	Purpose	Construction	Other - Dewatering	Pits and Quarries	Aggregate Washing	Cooling Water	Other - Industrial	Power Production	Other - Institutional
Mississippi									
Big Gull									
Buckshot Creek									
Clyde River									
CP Dam				4%			0%		
Fall River									
High Falls									
Indian River			4%						
Lower Mississippi		0%						99%	
Mazinaw									
Upper Mississippi									
Rideau									
Jock River		0%	5%	9%	2%		0%		
Kemptville Creek									
Lower Rideau		0%	0%		0%	0%			
Middle Rideau			0%	0%		0%			0%
Rideau Lakes									
Tay River							0%		
Ottawa Tributaries									
Carp River			37%	24%					
Ottawa River (MVC)									
Ottawa River East		0%	77%						
Ottawa River West		0%	1%			3%			
Total MRSPR		0.14%	0.30%	0.27%	0.04%	0.11%	0.01%	32.63%	0.02%

Notes: All Water Use re

Table 1.7-6e

Large Water Users
Percentage of Yearly Permitted Wate
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Miscellaneous				Recreational	Remediation	
	Purpose	Heat Pumps	Other - Miscellaneous	Pumping Test	Wildlife Conservation	Aesthetics	Groundwater	Other - Remediation
Mississippi								
Big Gull								
Buckshot Creek								
Clyde River					100%			
CP Dam					91%			
Fall River								
High Falls								
Indian River					96%			
Lower Mississippi			0%		0%			
Mazinaw								
Upper Mississippi								
Rideau								
Jock River			1%	0%	81%			0%
Kemptville Creek				0%	98%			
Lower Rideau			5%	0%	94%			0%
Middle Rideau					98%			
Rideau Lakes					100%			
Tay River		0%			99%	0%		
Ottawa Tributaries								
Carp River		0%			0%			19%
Ottawa River (MVC)								
Ottawa River East			4%					
Ottawa River West			0%				0%	0%
Total MRSPR		0.00%	1.86%	0.00%	61.02%	0.00%	0.00%	0.03%

Notes: All Water Use re

Table 1.7-6e

Large Water Users
Percentage of Yearly Permitted Wate
Mississippi - Rideau Source Protecti

Watershed / Subwatershed	Classification	Water Supply				Total
	Purpose	Campgrounds	Communal	Municipal	Other - Water Supply	
Mississippi						
Big Gull						
Buckshot Creek						**100%**
Clyde River						**100%**
CP Dam		0%		5%		**100%**
Fall River		0%				**100%**
High Falls						
Indian River						**100%**
Lower Mississippi				0%	0%	**100%**
Mazinaw		3%			97%	**100%**
Upper Mississippi						
Rideau						
Jock River			0%	1%	0%	**100%**
Kemptville Creek				2%		**100%**
Lower Rideau			0%		0%	**100%**
Middle Rideau			0%	1%		**100%**
Rideau Lakes				0%	0%	**100%**
Tay River				0%		**100%**
Ottawa Tributaries						
Carp River		0%		9%	8%	**100%**
Ottawa River (MVC)					27%	**100%**
Ottawa River East					15%	**100%**
Ottawa River West				96%	0%	**100%**
Total MRSPR		0.00%	0.01%	3.21%	0.05%	**100%**

Notes: All Water Use re

Table 2.1-1

Water Quality Indicator Parameters
Mississippi - Rideau Source Protection Region

Water Source	Parameter Class	Parameter	Chemical Formula
Surface Water	General Chemistry	Ammonia (Un-ionized)	NH_3
		Chloride	Cl
		Nitrate	NO_3
		Nitrite	NO_2
		pH	
		Total Kjedahl Nitrogen (TKN)	
		Total Phosphorus (TP)	
		Total Suspended Solids (TSS)	
	Metals	Copper	Cu
		Lead	Pb
		Zinc	Zn
	Biological	*Escherichia coli (E. coli)*	
Groundwater	General Chemistry	Alkalinity	reported as $CaCO_3$
		Ammonia	NH_3
		Calcium	Ca
		Chloride	Cl
		Conductivity	
		Dissolved Organic Carbon (DOC)	
		Fluoride	F
		Hardness	reported as $CaCO_3$
		Hydrogen Sulphide	H_2S
		Magnesium	Mg
		Nitrate	NO_3
		pH	
		Potassium	K
		Sodium	Na
		Sulphate	SO_4
		Total Dissolved Solids (TDS)	
		Total Kjedahl Nitrogen (TKN)	
		Turbidity	
	Metals	Iron	Fe
	Biological	*Escherichia coli (E. coli)*	
		Total Coliform	

Notes:

Table 2.1-2

Water Quality Criteria
Mississippi - Rideau Source Protection Region

Parameter Class	Parameter	Chemical Formula	Criteria					
			ODWQS	ODWSOG	PWQO		CEQG - Water: Community	CEQG - Water: Aquatic Life
General Chemistry	Alkalinity			30 - 500				
					Narrative[l]			
	Ammonia (un-ionized)	NH_3			0.02			
								0.019
	Ammonia (total)							1.37 - 2.20[k]
	Calcium	Ca						
	Chloride	Cl		250				
								250
	Dissolved Organic Carbon (DOC)			5				
	Fluoride	F	1.5				1.5	
	Hardness			80 - 100				
	Hydrogen Sulphide	H_2S		0.05				
					0.002			
							0.05	
	Nitrate	NO_3	10					
							45	
								Narrative[g]
	Nitrite	NO_2	1					
							3.2	
								0.06[g]
	pH			6.5 - 8.5				
					6.5 - 8.5			
							6.5 - 8.5	
								6.5 - 9.0
	Phosphorus (total)				0.03 (0.02 & 0.01)[b]			
	Potassium	K						
	Sodium	Na		200 (20)[a]				
							200	
	Sulphate	SO_4		500				
							500	
	Total Dissolved Solids (TDS)			500				
							500	
	Total Kjedahl Nitrogen (TKN)					0.1 - 0.5[h]		
	Total Suspended Solids (TSS)					10[i, j]		Narrative

Table 2.1-2

Water Quality Criteria
Mississippi - Rideau Source Protection Region

Parameter Class	Parameter	Chemical Formula	Criteria					
			ODWQS	ODWSOG	PWQO		CEQG - Water: Community	CEQG - Water: Aquatic Life
	Turbidity			5				
					Narrative[m]			
							1	
							5	
								Narrative
Metals	Copper	Cu		1				
					0.005			
					0.001 & 0.005[c]			
							1	
								0.002 - 0.004[g]
	Iron	Fe		0.3				
					0.3			
							0.3	
								0.3[g]
	Lead	Pb	0.01					
					0.005, 0.01, 0.02 & 0.025[d]			
					0.001, 0.003 & 0.005[e]			
							0.01	
								0.001 - 0.007[g]
	Magnesium	Mg						
	Zinc	Zn		5				
					0.03			
					0.02			
							5	
								0.03
Biological	*Escherichia coli* (*E. coli*)		ND					
					100[f]			
							Narrative	
	Total Coliforms		ND					
							Narrative	

Table 2.1-2

Water Quality Criteria
Mississippi - Rideau Source Protection Region

Parameter Class	Parameter	Chemical Formula	Criteria			
			GW Standards - Table 1	GW Standards - Table 2	Units	Qualifier
General Chemistry	Alkalinity				mg/L (as $CaCO_3$)	AO
	Ammonia (un-ionized)	NH_3			mg/L	
					mg/L	
	Ammonia (total)				mg/L	
	Calcium	Ca				
	Chloride	Cl			mg/L	AO
					mg/L	AO
			NV			
				250	mg/L	
	Dissolved Organic Carbon (DOC)				mg/L	AO
	Fluoride	F			mg/L	
	Hardness				mg/L (as $CaCO_3$)	OG
	Hydrogen Sulphide	H_2S			mg/L	AO
					mg/L	
					mg/L	AO
	Nitrate	NO_3			mg/L	MAC
					mg/L	MAC
			NV			
				10	mg/L	
	Nitrite	NO_2			mg/L	MAC
					mg/L	MAC
					mg/L	
			NV			
				1.00	mg/L	
	pH				unitless	OG
					unitless	
					unitless	AO
					unitless	
	Phosphorus (total)				mg/L	Interim PWQO
	Potassium	K				
	Sodium	Na			mg/L	AO
					mg/L	AO
			NV			
				200	mg/L	
	Sulphate	SO_4			mg/L	AO
					mg/L	AO
	Total Dissolved Solids (TDS)				mg/L	AO
					mg/L	AO
	Total Kjedahl Nitrogen (TKN)				mg/L	
	Total Suspended Solids (TSS)				mg/L	

Table 2.1-2

Water Quality Criteria
Mississippi - Rideau Source Protection Region

Parameter Class	Parameter	Chemical Formula	Criteria			
			GW Standards - Table 1	GW Standards - Table 2	Units	Qualifier
	Turbidity				NTU	AO
					NTU	MAC
					NTU	AO
Metals	Copper	Cu			mg/L	AO
					mg/L	
					mg/L	Interim PWQO
					mg/L	AO
					mg/L	
			0.0025		mg/L	
				0.023	mg/L	
	Iron	Fe			mg/L	AO
					mg/L	
					mg/L	AO
					mg/L	
	Lead	Pb			mg/L	MAC
					mg/L	
					mg/L	Interim PWQO
					mg/L	MAC
					mg/L	
			0.001		mg/L	
				0.01	mg/L	
	Magnesium	Mg				
	Zinc	Zn			mg/L	AO
					mg/L	
					mg/L	Interim PWQO
					mg/L	AO
					mg/L	
			0.02		mg/L	
				1.1	mg/L	
Biological	*Escherichia coli* (*E. coli*)				per 100 mL	MAC
					per 100 mL	
	Total Coliforms				per 100 mL	

Table 2.1-2

Water Quality Criteria
Mississippi - Rideau Source Protection Region

Parameter Class	Parameter	Chemical Formula	Criteria					
			ODWQS	ODWSOG	PWQO		CEQG - Water: Community	CEQG - Water: Aquatic Life

Notes: a - Sodium concentrations greater than 20 mg/L must notify Medical Officer of Health (regarding low-sodium diets)

b - Phosphorus 30 µg/L for excessive plant growth, 20 µg/L for nuisance concentrations of algae & 10 µg/L for high level of protection against aesthetic deterioration
c - Copper 1 µg/L for 0 - 20 mg/L of Hardness (as $CaCO_3$) & 5 µg/L for > 20 mg/L of Hardness

d - Lead 5 µg/L for < 20 mg/L of Alkalinity (as $CaCO_3$), 10 µg/L for 20 - 40 mg/L of Alkalinity , 20 µg/L for 40 - 80 mg/L of Alkalinity & 25 µg/L for > 80 mg/L of Alkalinity
e - Lead 1 µg/L for < 30 mg/L of Hardness (as $CaCO_3$), 3 µg/L for 30 - 80 mg/L of Hardness & 5 µg/L for > 80 mg/L of Hardness
f - *E. coli* based on a geometric mean of at least 5 samples
g - refer to *Canadian Water Quality Guidelines* (CCREM, 1987)
h - *Water Quality Sourcebook, A Guide to Water Quality Parameters* , Inland Waters Directorate, Water Quality Branch, Environment Canada, 1979
i - Not to be increased by more than 10 mg/L over existing background values for water with values < 100 mg/L, or not to exceed 10% over existing values for water with values > 100 mg/L
j - Surface Water Quality Objectives, Saskatchewan Environment and Public Safety, 1997
k - Ammonia (total) 1.37 mg/L for pH 8, 10oC and 2.20 for pH 6.5, 10oC
l - Alkalinity should not be decreased by more than 25% of the natural concentration
m - Suspended matter should not be added to surface water in concentrations that will change the natural Secchi disk reading by more than 10%

AO - Aesthetic Objective
CCME - Canadian Council of Ministers of the Environment
CEQG - Canadian Environmental Quality Guidelines, CCME 2002
GW Standards - Ground Water Standards for Use Under Part XV.1 of the *Environmental Protection Act* , MOE 2004
IMAC - Interim Maximum Acceptable Criteria
MAC - Maximum Acceptable Criteria
MOE - Ontario Ministry of the Environment
NTU - Nephelometric Turbidity Unit
NV - No Value
ODWQS - Ontario Drinking Water Quality Standards, MOE Revised 2006
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, MOE Revised 2006
OG - Operational Guildeline
PWQO - Provincial Water Quality Objectives, MOE 1994
Table 1 - Full Depth Background Site Condition Standards
Table 2 - Full Depth Generic Site Condition Standards in a Potable Ground Water Condition

Table 2.2-1

Surface Water - Water Quality Monitoring Programs
Mississippi - Rideau Source Protection Region

Water Source	Parameter Class	Parameter	Number of Locations Monitored				
			MVC WW	Ottawa[1]	PWQMN	RVCA SW	RVCA WW
Surface Water	General Chemistry	Alkalinity		70	21	54	
		Ammonia (Total)		70	21	54	
		Ammonia (Unionized)		70			
		Biochemical Oxygen Demand (5 day) - (BOD)			21		
		Chloride		70	21	54	
		Chlorophyll a	39				
		Conductivity		70	21	54	
		Dissolved Organic Carbon - (DOC)		70		54	41
		Dissolved Oxygen - (DO)	39	70	21	54	41
		Hardness		70	21		
		Nitrate + Nitrite		70	21		
		Nitrate				54	
		Nitrite			21	54	
		pH	39	70	21	54	
		Phosphorus (Reactive) - (RP)		70	21	54	
		Phosphorus (Total) - (TP)	39	70	21	54	41
		Secchi Disk	39	70			41
		Sulphate		70		54	
		Temperature	39	70	21	54	41
		Total Kjedahl Nitrogen - (TKN)		70	21	54	41
		Total Suspended Solids - (TSS)		70	21	54	
		Turbidity			21		
	Metals	Aluminum		70	21	54	
		Antimony		70		54	
		Barium		70	21	54	
		Beryllium		70	21	54	
		Bismuth		70		54	
		Cadmium		70	21	54	
		Calcium		70	21	54	
		Chromium		70	21	54	
		Cobalt		70	21	54	
		Copper		70	21	54	
		Iron		70	21	54	
		Lead		70	21	54	
		Magnesium		70	21	54	
		Manganese		70	21	54	
		Molybdenum		70	21	54	
		Nickel		70	21	54	
		Potassium		70	21	54	
		Silicon		70		54	
		Silver		70			
		Sodium		70	21	54	
		Strontium		70	21	54	
		Thallium		70			
		Tin		70		54	
		Titanium		70	21	54	
		Uranium		70		54	
		Vanadium		70	21	54	
		Zinc		70	21	54	
	Biological	*Escherichia* Coli - (*E.* Coli)		70		54	41
	Total		**6**	**45**	**36**	**41**	**7**

Notes: MVC WW - Mississippi Valley Conservation - Watershed Watch
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
RVCA SW - Rideau Valley Conservation Authority - Surface Water Quality Monitoring
RVCA WW - Rideau Valley Conservation Authority - Watershed Watch

1 - Sample locations within the MRSPR only

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
MVC	Big Gull	19343073001	Big Gull (Clarendon) Lake, East Basin	MVC WW	1999	2004	Active	Seasonal[2]
		19343072901	Big Gull (Clarendon) Lake, Main Basin	MVC WW	1999	2004	Active	Seasonal[2]
		19343072801	Big Gull (Clarendon) Lake, West Basin	MVC WW	1999	2004	Active	Seasonal[2]
	Buckshot Creek	18343077201	Blue Lake	MVC WW	1999	2004	Active	Seasonal[2]
		18343070401	Buckshot (Indian) Lake	MVC WW	1999	2004	Active	Seasonal[2]
		18343070801	Grindstone Lake, North Basin	MVC WW	2000	2005	Active	Seasonal[2]
		18343070901	Grindstone Lake, South Basin	MVC WW	2000	2005	Active	Seasonal[2]
		18343072101	Sand Lake	MVC WW	1999	2004	Active	Seasonal[2]
		18343072201	Shabomeka (Buck) Lake	MVC WW	1998	2003	Active	Seasonal[2]
		19343072301	Shawenegog (McClintock) Lake, North Basin	MVC WW	1999	2004	Active	Seasonal[2]
		19343072401	Shawenegog (McClintock) Lake, South Basin	MVC WW	1999	2004	Active	Seasonal[2]
	Carp River	18337002002	Carp River, Fitzroy St, Bridge E of Fitzroy Harbour	PWQMN	1968	1979	Historic	
		18337010002	Carp River, Craig Side Rd, W of Carp Rd, NW of Carp	PWQMN	1970	1979	Historic	
		18337010102	Carp River, Craig Side Rd, downstream Carp	PWQMN	1983	2005	Active	
		18337012002	Carp River, County Rd 49 (March Rd), E of Carp Rd, SE of Carp	PWQMN	1970	1979	Historic	
		18337012102	Carp River, John Shaw Rd, downstream of Kinburn	PWQMN	1983	2005	Active	
		R010-01	Carp River, at Carp Rd. Bridge (Regional Rd. 5), Fitzroy Harbour	Ottawa		2006	Active	Monthly[1]
		R010-06	Carp River, at Craig Side Rd., downstream of bridge	Ottawa		2006	Active	Monthly[1]
		R010-09	Carp River, at Richardson Side Rd., downstream of bridge	Ottawa		2006	Active	Monthly[1]
		R010-14	Carp River, at John Shaw Rd., N of Kinburn Side Road	Ottawa		2006	Active	Monthly[1]
		CK70-05	Poole Creek, at Stittsville Main St., upstream of culvert	Ottawa		2006	Active	Monthly[1]
	Clyde River	18343052002	At dam, downstream of Lanark	PWQMN	1970	2005	Active	
		18343053002	Kerr Lake outlet, upstream of Lanark	PWQMN	1970	2005	Active	
		18343057002	Sunday Creek, Dam at Canonto Lake Outlet, NE of Canonto	PWQMN	1970	2000	Historic	
		18343057202	Canonto Lake, Canonto Lake Inlet Dam, Arcol Rd, SW of Canonto	PWQMN	1976	1979	Historic	
		18343070501	Canonto Lake (North & South Basins)	MVC WW	2000	2005	Active	Seasonal[2]
		19343074901	Clyde Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343075001	Flower Round Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343076001	Horne Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343076401	Joes Lake	MVC WW	2002	2002	Active	Seasonal[2]
		18343074301	Palmerston Lake (North & South Basins)	MVC WW	2000	2005	Active	Seasonal[2]
		19343076501	Paddys Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343075901	Upper Park Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343070101	Robertson Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343003601	Sunday Lake	MVC WW	2000	2005	Active	Seasonal[2]
		19343076301	Widow Lake	MVC WW	2002	2002	Active	Seasonal[2]
	CP Dam	18343007002	Mississippi River, Near Joseph St, SW of Bridge St, Carleton Place	PWQMN	1970	1979	Historic	

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		18343010001	Mississippi Lake, W of Lake Park	PWQMN	1970	1979	Historic	
		18343015002	Mississippi River, Hwy 7, Innisville	PWQMN	1976	1979	Historic	
		18343017502	Mississippi River, Dalhousie Lake outlet, Lanark County Rd 8	PWQMN	1970	2005	Active	
		19343073401	Dalhousie Lake	MVC WW	2001	2001	Active	Seasonal[2]
		19343073501	Mississippi Lake, Big Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343001401	Mississippi Lake, Second Lake	MVC WW	2002	2002	Active	Seasonal[2]
		18343075301	Patterson Lake	MVC WW	2001	2001	Active	Seasonal[2]
	Fall River	18343061002	Fall River, Bennett Lake outlet, upstream of Fallbrook	PWQMN	1979	2005	Active	
		18343063001	Sharbot Lake, Hwy 38	PWQMN	1970	1979	Historic	
		18343072701	Bennett Lake (North & South Basins)	MVC WW	2001	2001	Active	Seasonal[2]
		Unknown	Black Lake	MVC WW	2001	2001	Active	Seasonal[2]
		18343074801	Clear Lake	MVC WW	2001	2001	Active	Seasonal[2]
		18343073601	Sharbot Lake, East Basin	MVC WW	2001	2001	Active	Seasonal[2]
		18343072501	Sharbot Lake, Main Basin	MVC WW	2001	2001	Active	Seasonal[2]
		18343074501	Sharbot Lake, South-West Basin	MVC WW	2001	2001	Active	Seasonal[2]
		18343074401	Sharbot Lake, West Basin	MVC WW	2001	2001	Active	Seasonal[2]
		18343072601	Silver Lake	MVC WW	2000	2005	Active	Seasonal[2]
		18343074601	White Lake	MVC WW	2000	2005	Active	Seasonal[2]
	High Falls	18343018502	Mississippi River, County Rd 509, N of Mississippi Station	PWQMN	1976	1979	Historic	
		18343019502	Mississippi River, Crotch Lake Outlet, Fish Creek Rd, SW of Donaldson	PWQMN	1970	1975	Historic	
	Indian River	18343025002	Indian Creek, Clayton Lake Outlet, (Tatlock) County Rd 9, Clayton	PWQMN	1970	1979	Historic	
		19343073101	Clayton Lake	MVC WW	2002	2002	Active	Seasonal[2]
		19343077101	Taylor Lake	MVC WW	2002	2002	Active	Seasonal[2]
	Lower Mississippi	18343003002	Mississippi River, Railroad Trestle, Galetta	PWQMN	1966	2005	Active	
		18343003402	Mississippi River, At dam, downstream of Pakenham	PWQMN	1970	2005	Active	
		18343003602	Mississippi River, At CPR Bridge, E of County Rd 29, Pakenham	PWQMN	1970	1979	Historic	
		18343004002	Mississippi River, Almonte St, Almonte	PWQMN	1970	2005	Active	
		18343005002	Mississippi River, Queen St, SE of Main St, Almonte	PWQMN	1970	1979	Historic	
		18343006002	Mississippi River, Near Lake Ave, E of McNeely, NE of Carleton Place	PWQMN	1970	1982	Historic	
		18343006102	Mississippi River, Lanark Cnty Rd 11, Appleton	PWQMN	1983	2005	Active	
		CK3-01	Cody Creek, at Hansen Side Rd.	Ottawa		2006	Active	Monthly[1]
		CK3-03	Cody Creek, at Highway 44, E of Road 10	Ottawa		2006	Active	Monthly[1]
		CK3-04	Cody Creek, March Rd.	Ottawa		2006	Active	Monthly[1]
		R9-01	Mississippi River, at Galetta Side Rd Bridge (Regional Rd. 22)	Ottawa		2006	Active	Monthly[1]
	Mazinaw	18343023002	Mississippi River, Mazinaw Lake outlet, Smarts Rd, E of Hwy 41	PWQMN	1970	2005	Active	
		18343023402	Mississippi River, Mazinaw Lake Inlet, E of Hwy 41, SE of Massanoga	PWQMN	1970	1979	Historic	
		18343071101	Kishkebus Lake	MVC WW	1998	2003	Active	Seasonal[2]
		18343073901	Mackavoy Lake	MVC WW	1998	2003	Active	Seasonal[2]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		18343071401	Marble Lake	MVC WW	1998	2003	Active	Seasonal[2]
		19343074101	Mazinaw Lake, North Basin	MVC WW	1998	2003	Active	Seasonal[2]
		19343073701	Mazinaw Lake, South Basin	MVC WW	1998	2003	Active	Seasonal[2]
		Unknown	McCausland Lake	MVC WW	1998	2003	Active	Seasonal[2]
		19343071601	Mississagagon Lake, East Basin	MVC WW	1998	2003	Active	Seasonal[2]
		19343071501	Mississagagon Lake, West Basin	MVC WW	1998	2003	Active	Seasonal[2]
	Upper Mississippi	18343021002	Mississippi River, Kashwakamak Lake Outlet, SE of Fernleigh	PWQMN	1970	1979	Historic	
		18343070201	Ardoch (Green) Lake	MVC WW	1999	2004	Active	Seasonal[2]
		18343073301	Crotch (Cross) Lake, North Basin	MVC WW	2000	2005	Active	Seasonal[2]
		18343073201	Crotch (Cross) Lake, South Basin	MVC WW	2000	2005	Active	Seasonal[2]
		18343070701	Fawn Lake	MVC WW	2000	2005	Active	Seasonal[2]
		19343071001	Kashwakamak Lake, East Basin	MVC WW	1998	2003	Active	Seasonal[2]
		19343073801	Kashwakamak Lake, West Basin	MVC WW	1998	2003	Active	Seasonal[2]
		18343071301	Malcolm Lake	MVC WW	1999	2004	Active	Seasonal[2]
		18343071901	Mosque Lake (North, South & West Basins)	MVC WW	2000	2005	Active	Seasonal[2]
		18343072001	Pine Lake	MVC WW	1999	2004	Active	Seasonal[2]
Ottawa	MVC - Ottawa	18297001002	Watts Creek, Shirley Blvd, Shirleys Bay, NE of Kanata	PWQMN	1968	1976	Historic	
		CK4-02	Constance Creek, at Vances Side Rd.	Ottawa		2006	Active	Monthly[1]
		CK5-01	Shirley's Brook, at Fourth Line Rd., near 1375 Fourth Line Rd.	Ottawa		2006	Active	Monthly[1]
		CK5-07	Shirley's Brook, at Hines Rd., N of Solandt, upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK6-001	Watts Creek, at Shirley Blvd.	Ottawa		2006	Active	Monthly[1]
		CK6-312	Watts Creek, at Corkstown Rd. W, near March Rd. (Regional Rd. 49)	Ottawa		2006	Active	Monthly[1]
		CK64-02	Casey Creek, at Dunrobin Rd., near Thomas Dolan Parkway	Ottawa		2006	Active	Monthly[1]
		CK65-04	Harwood Creek, at Dunrobin Rd., near River Rd.	Ottawa		2006	Active	Monthly[1]
		CLL-01	Constance Lake, deepest point, approximately 0.5 km from boat launch	Ottawa		2006	Active	Monthly[1]
	RVCA - Ottawa East	18259002002	Greens Creek, at Hwy 417, E of Rockcliffe Park	PWQMN	1970	1980	Historic	
		CK21-002	Greens Creek, at Montreal Rd. Bridge (Regional Rd. 34), upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK21-003	Greens Creek, at Innes Rd. bridge (Regional Rd. 30), upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK21-009	Ramsay Creek, at Baseline Rd., 1 km S of Ridge Rd.	Ottawa		2006	Active	Monthly[1]
		CK21-502	Black Creek (Mer Bleue Tributary), at Anderson Rd., 1 km S of Renaud Rd.	Ottawa		2006	Active	Monthly[1]
		CK22-001	Bilberry Creek, 0.25 km downstream of dead end of Bilberry Dr. N	Ottawa		2006	Active	Monthly[1]
		CK23-001	Taylor Creek, at North Service Rd. (Jeanne D'Arc Extension), upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK24-002	Cardinal Creek, Old Montreal Rd.	Ottawa		2006	Active	Monthly[1]
		CK25-001	Beckets Creek, at Highway 17 (Regional Rd. 174), upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK35-004	Voyager Creek, at Youville Dr., downstream of culvert	Ottawa		2006	Active	Monthly[1]
		MKL-01	MacKay Lake, deepest basin, NW portion of lake	Ottawa		2006	Active	Monthly[1]
	RVCA - Ottawa West	CK7-01	Stillwater Creek, Carling Ave.	Ottawa		2006	Active	Monthly[1]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		CK8-01	Graham Creek, at Carling Ave. westbound lane, downstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK8-35	Graham Creek, at Siskin Court (formerly Knoxdale Rd.)	Ottawa		2006	Active	Monthly[1]
		CK9-I	Pinecrest Creek, at Ottawa River Parkway, westbound lane, midstream	Ottawa		2006	Active	Monthly[1]
		MUDLK-03	Mud Lake, W part of lake, 170 m S of N shore	Ottawa		2006	Active	Monthly[1]
		CRS-101A	Rideau Canal, at Rideau St. bridge, 0.4 km upstream of Ottawa River	Ottawa		2006	Active	Monthly[1]
		CRS-105B	Rideau Canal, at Bronson St. bridge, 5.4 km upstream	Ottawa		2006	Active	Monthly[1]
	Ottawa River	18000017002	Ottawa River, Chats Falls	PWQMN	1966	2005	Active	
		ORS-100.20	Woolsey Narrows / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-210.10	Deschenes Rapids / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-210.30	Deschenes Rapids / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-210.40	Deschenes Rapids / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-430.10	Upper Duck Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-430.30	Upper Duck Island / Kettle Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-430.60	Kettle Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-430.70	Kettle Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-450.10	Hiawatha / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-450.20	Hiawatha / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-450.30	Hiawatha / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-450.40	Hiawatha / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-500.10	Petrie Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-500.20	Petrie Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
		ORS-500.50	Petrie Island / Ottawa River	Ottawa		2006	Active	Monthly[1]
RVCA	Jock River	18003301602	Jock River, Eagleson Rd (County Rd 49) NE of Richmond	PWQMN	1968	1983	Historic	
		18003301702	Jock River, at McBean Street, Richmond	PWQMN	1968	1984	Historic	
		18003303602	Jock River, Moodie Dr., W of Hwy 416	PWQMN	1980	2005	Active	
		CK67-001	Flowing Creek, at Perth Rd., 50 m upstream of confluence with Jock River, Richmond	Ottawa		2006	Active	Monthly[1]
		JR-01	Jock River, at Prince of Wales Dr. (Regional Rd. 73)	Ottawa		2006	Active	Monthly[1]
		JR-02	Jock River, at Jockvale Rd.	Ottawa		2006	Active	Monthly[1]
		JR-05	Jock River, at Moodie Dr.	Ottawa		2006	Active	Monthly[1]
		JR-12	Jock River, at Ottawa St., Richmond	Ottawa		2006	Active	Monthly[1]
		JR-20	Jock River, at Bleeks Side Rd.	Ottawa		2006	Active	Monthly[1]
	Kemptville Creek	18003300302	Kemptville Creek, Leeds and Grenville County Rd. 43, Kemptville	PWQMN	1964	2005	Active	
		BRN-03	Barnes Creek @ Van Buren Street (Kemptville)	RVCA SW	1997	2005	Active	Monthly[1]
		CK53-06	Kemptville Creek, at Prescott St. (Kemptville)	Ottawa		2006	Active	Monthly[1]
		KEM-01	Kemptville Creek @ Hwy. 43 (Kemptville)	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-02	Kemptville Creek @ Bridge Street	RVCA SW	1998	2005	Active	Monthly[1]
		KEM-03	Kemptville Creek @ Prescott Street	RVCA SW	2005	2005	Active	Monthly[1]
		KEM-04	Kemptville Creek @ Hurd Street (Kemptville)	RVCA SW	1997	2005	Active	Monthly[1]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		KEM-06	Kemptville Creek @ County Road 18 d/s Oxford Mills	RVCA SW	2000	2005	Active	Monthly[1]
		KEM-07	Kemptville Creek @ Oxford Mills	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-08	Kemptville Creek @ Pattersons Corners	RVCA SW	2003	2005	Active	Monthly[1]
		KEM-09	Kemptville Creek @ County Road 20	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-10	Kemptville Creek @ Limerick Road	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-11	Kemptville Creek @ Garretton	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-14	Kemptville Creek @ Kyle Road	RVCA SW	1997	2005	Active	Monthly[1]
		KEM-16	Kemptville Creek u/s N. Augusta	RVCA SW	1997	2005	Active	Monthly[1]
		NKE-02	North Kemptville Creek @ Bishops Mills	RVCA SW	1997	2005	Active	Monthly[1]
		NKE-06	North Kemptville Creek @ County Road 15 d/s Cranberry Lake	RVCA SW	1997	2005	Active	Monthly[1]
	Lower Rideau	18003300102	Rideau River, Sussex Drive E, Ottawa	PWQMN	1966	1971	Historic	
		18003300202	Rideau River, At Sussex Drive W, Ottawa	PWQMN	1966	1971	Historic	
		18003301202	Rideau River, At Dam in Black Rapids, Cedardale	PWQMN	1968	1980	Historic	
		18003301302	Manotick Creek, E. of Prince of Wales Dr, W. of River Road	PWQMN	1968	1970	Historic	
		18003301402	Rideau River, South of Manotick, East of Rideau Valley Dr.	PWQMN	1968	1970	Historic	
		18003301502	Rideau River, At Bridge, Kars	PWQMN	1968	1970	Historic	
		18003301802	Rideau River, Dwyer Hill Rd., Burritt Rapids Bridge	PWQMN	1968	1983	Historic	
		18003302802	Rideau River, W of River Rd, Downstream from Confluence with Jock River	PWQMN	1970	1986	Historic	
		18003302902	Rideau River, Roger Stevens Rd, Regional Rd 6, downstream of Kars	PWQMN	1970	2005	Active	
		18003303102	Rideau River, Hogs Back Rd, Ottawa	PWQMN	1972	2005	Active	
		18003303402	Rideau River, St. Patrick St, Ottawa	PWQMN	1969	2005	Active	
		18003303702	Rideau River, Long Island gauging station, downstream of Manotick	PWQMN	1980	2005	Active	
		18003400102	Rideau Canal, At Lock No. 1, Ottawa	PWQMN	1966	1971	Historic	
		18003400202	Rideau Canal, E of CNN Railway, S of Carling Ave	PWQMN	1970	1971	Historic	
		ARC-01	Arcand Drain @ County Road 19	RVCA SW	2000	2005	Active	Monthly[1]
		BRA-01	Brassils Creek @ Donnelly Drive	RVCA SW	2000	2005	Active	Monthly[1]
		CK13-01	Black Rapids Creek, 0.23 km upstream from confluence with Rideau River	Ottawa		2006	Active	Monthly[1]
		CK14-14	Nepean Creek, 30 m downstream of Fisher Glen STF by-pass outlet	Ottawa		2006	Active	Monthly[1]
		CK18-03-00	Sawmill Creek, NE tributary at Lester and Albion Rds.	Ottawa		2006	Active	Monthly[1]
		CK18-J	Sawmill Creek, at Johnston Rd. (4.45 km upstream of confluence)	Ottawa		2006	Active	Monthly[1]
		CK18-M	Sawmill Creek, 100 m W of Brookfield Rd. and Junction Ave.	Ottawa		2006	Active	Monthly[1]
		CK18-Q	Sawmill Creek, at Riverside Dr., westbound lane (downstream)	Ottawa		2006	Active	Monthly[1]
		CK18-S	Sawmill Creek, Walkley Rd. onramp & Airport Pkwy.	Ottawa		2006	Active	Monthly[1]
		CK19-01	Hunt Club Creek, 200 m downstream of Riverside Dr.	Ottawa		2006	Active	Monthly[1]
		CK19-10	Hunt Club Creek, at Country Club Rd.	Ottawa		2006	Active	Monthly[1]
		CK19-12	Hunt Club Creek, at DeNiverville Dr. (Uplands System)	Ottawa		2006	Active	Monthly[1]
		CK20-10	Mosquito Creek, at Leitrim Rd., 0.5 km upstream from Rideau River	Ottawa		2006	Active	Monthly[1]
		CK20-16	Mosquito Creek, at Limebank Rd., 4 km upstream from Rideau River	Ottawa		2006	Active	Monthly[1]
		CK20-22	Mosquito Creek, at Rideau Rd. (9th Line) and Downey Rd., downstream	Ottawa		2006	Active	Monthly[1]
		CK41-01	Mud Creek, at Bankfield Rd., upstream of culverts	Ottawa		2006	Active	Monthly[1]
		CK42-04	Stevens Creek, at Church St. weir, North Gower	Ottawa		2006	Active	Monthly[1]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		CK42-05-03	Taylor Drain, at Fourth Line Rd. (Regional Rd. 5) between Roger Stevens Rd. & Phelan W	Ottawa		2006	Active	Monthly[1]
		CK42-06	Stevens Creek, at Second Line Rd. S, between Roger Stevens Rd. and Phelan E	Ottawa		2006	Active	Monthly[1]
		CK42-07	Stevens Creek, at Roger Stevens Rd. (Regional Rd. 6), at exit of Marlborough Forest	Ottawa		2006	Active	Monthly[1]
		CK43-02	Cranberry Creek, at Third Line Rd. S, S of Highway 416, upstream of culvert	Ottawa		2006	Active	Monthly[1]
		CK44-02	Brassils Creek, at Dwyer Hill Rd., near Donnelly Rd.	Ottawa		2006	Active	Monthly[1]
		MCD-02	McDermott Drain @ County Road 19	RVCA SW	2000	2005	Active	Monthly[1]
		MCD-03	McDermott Drain @ County Road 19	RVCA SW	2003	2005	Active	Monthly[1]
		MUR-01	Murphy Drain @ County Road 22	RVCA SW	2000	2005	Active	Monthly[1]
		RRS-103C	Rideau River, at St. Patrick St. (1.8 km upstream from Ottawa River)	Ottawa		2006	Active	Monthly[1]
		RRS-108C	Rideau River, at Bank St. (7.9 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-118A	Rideau River, Black Rapids Dam, open dam channel (16.25 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-118B	Rideau River, Black Rapids Dam, centre sluice (16.25 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-119B	Rideau River, Long Island Locks (26 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-119C	Rideau River, at Barnsdale Rd. (26 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-121C	Rideau River, at Roger Stevens Rd. (36.3 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-124B	Rideau River, N shore at Burritts Rapids Bridge (66 km upstream)	Ottawa		2006	Active	Monthly[1]
		RRS-167B	Rideau River, Mooney's Bay (11.6 km upstream)	Ottawa		2006	Active	Monthly[1]
	Middle Rideau	18003300402	Rideau River, S of County Rd. 43, N of County Rd. 17	PWQMN	1964	1971	Historic	
		18003300502	Rideau River, Old Sly Locks, Smith Falls	PWQMN	1966	1980	Historic	
		18003301002	Rideau River, At CPR Bridge, Merrickville	PWQMN	1968	1971	Historic	
		18003301102	Rideau River, County Road 43, Merrickville	PWQMN	1968	1980	Historic	
		18003302602	Rideau River, Rawley Rd, at dam, Kilmarnock	PWQMN	1970	2005	Active	
		18003302702	Rideau River, At Kilmarnock	PWQMN	1970	1971	Historic	
		18003303502	Rideau River, Nicholsons Lock, Andrewsville	PWQMN	1980	2005	Active	
		BAR-01	Barbers Creek @ County Road 16	RVCA SW	1999	2005	Active	Monthly[1]
		COC-02	Cockburn Creek @ Hwy. 43	RVCA SW	2000	2005	Active	Monthly[1]
		DAL-01	Dales Creek @ County Road 23	RVCA SW	2000	2005	Active	Monthly[1]
		HUT-02	Hutton Creek @ Townline Road	RVCA SW	2000	2005	Active	Monthly[1]
		IRI-02	Irish Creek @ County Road 15 (Jasper)	RVCA SW	2000	2005	Active	Monthly[1]
		OTT-01	Otter Creek @ Hwy. 29 south of Smiths Falls	RVCA SW	2000	2005	Active	Monthly[1]
		RCK-01	Rideau Creek @ Donnelly Drive	RVCA SW	2000	2005	Active	Monthly[1]
		ROS-01	Rosedale Creek @ Hwy. 43	RVCA SW	2000	2005	Active	Monthly[1]
		RVL-26	Otter Lake	RVCA WW	2003	2003	Active	Seasonal[2]
	Rideau Lakes	18003300702	Rideau River, Narrows Lock Bridge (County Rd. 14), N of Crosby	PWQMN	1966	1980	Historic	
		18003301902	Rideau River, County Rd 1, Bridge in Rideau Ferry	PWQMN	1968	1980	Historic	
		18003302002	Rideau River, E of Elm Grove Rd, Rockey Narrows, Rideau Lake	PWQMN	1968	1980	Historic	
		18003302102	Big Rideau Lake, At Portland	PWQMN	1968	1983	Historic	
		18003302202	Upper Rideau Lake, County Rd 10 at Westport Bridge	PWQMN	1968	1971	Historic	
		ADR-01	Adrains Creek near County Road 42	RVCA SW	2003	2005	Active	Monthly[1]
		BLA-01	Black Creek in Murphys Pt. Prov. Park	RVCA SW	2003	2005	Active	Monthly[1]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		RVL-11	Black Lake	RVCA WW	2002	2005	Active	Seasonal[2]
		RVL-12	Burridge Lake	RVCA WW	2002	2002	Active	Seasonal[2]
		RVL-13	Long Lake (East)	RVCA WW	2002	2002	Active	Seasonal[2]
		RVL-14	Westport Sand Lake	RVCA WW	2002	2002	Active	Seasonal[2]
		RVL-27	Wolfe Lake	RVCA WW	2002	2005	Active	Seasonal[2]
		RVL-32	Adam Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-33	Round Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-34	Loon Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-35	Bass Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-36	Big Rideau Lake, Hoggs Bay	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-37	Upper Rideau Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-38	Lower Rideau Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-39	Big Rideau Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-40	Spectacle Lake	RVCA WW			Active	Seasonal[2]
		RVL-41	Tommy Lake	RVCA WW			Active	Seasonal[2]
		RVL-47	Long Pond Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		SHE-01	Sheldons Creek @ Old Kingston Road	RVCA SW	2003	2005	Active	Monthly[1]
		WES-01	Westport Dam	RVCA SW	2003	2005	Active	Monthly[1]
	Tay River	18003300602	Tay River, Rathwell Road, SE of Perth	PWQMN	1964	1971	Historic	
		18003300802	Tay River, 1.5km downstream of Perth lagoons	PWQMN	1967	2005	Active	
		18003300902	Tay River, Rogers Road, Perth	PWQMN	1967	1980	Historic	
		18003302302	Tay River, Bolingbroke Station Rd, at dam, Bolingbroke	PWQMN	1968	2005	Active	
		18003302402	Crow Lake Inlet, Community of Crow Lake	PWQMN	1968	1980	Historic	
		18003302501	Bobs Lake, End of Road to Timmermans Island	PWQMN	1968	1980	Historic	
		EAG-01	Eagle Creek u/s Bobs Lake	RVCA SW	2003	2005	Active	Monthly[1]
		FIS-03	Fish Creek @ County Road 38	RVCA SW	2003	2005	Active	Monthly[1]
		FIS-A	Fish Creek u/s Bobs Lake	RVCA SW	2003	2005	Active	Monthly[1]
		GRT-01	Grants Creek @ Glen Tay Road	RVCA SW	1998	2005	Active	Monthly[1]
		GRT-02	Grants Creek @ Upper Scotch Line	RVCA SW	1998	2005	Active	Monthly[1]
		GRT-03	Grants Creek @ County Road 10	RVCA SW	1998	2005	Active	Monthly[1]
		GRT-04	Grants Creek @ Pike Lake Dam	RVCA SW	1998	2005	Active	Monthly[1]
		GRT-05	Grants Creek d/s Upper Scotch Line	RVCA SW	2003	2005	Active	Monthly[1]
		JEB-01	Jebbs Creek @ County Road 1	RVCA SW	1998	2005	Active	Monthly[1]
		RUD-01	Ruddsdale Creek @ Christie Lake Road	RVCA SW	1998	2005	Active	Monthly[1]
		RVL-01	Pike Lake	RVCA WW	2001	2005	Active	Seasonal[2]
		RVL-02	O'Brien Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-03	Farren Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-04	Crosby Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-05	Little Crosby Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-06	Davern Lake	RVCA WW	2001	2001	Active	Seasonal[2]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency
		RVL-07	Little Silver Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-08	Rainbow Lake	RVCA WW	2001	2001	Active	Seasonal[2]
		RVL-09	Eagle Lake	RVCA WW	2002	2002	Active	Seasonal[2]
		RVL-10	Otty Lake	RVCA WW	2002	2002	Active	Seasonal[2]
		RVL-16	Bob's Lake, Buck Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-17	Bob's Lake, Green Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-18	Bob's Lake, West Basin	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-19	Bob's Lake, Mud Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-20	Bob's Lake, Norris Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-21	Bob's Lake, E. Basin, Long Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-22	Bob's Lake, C. Narrows	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-23	Bob's Lake, Mill Bay	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-24	Crow Lake	RVCA WW	2003	2003	Active	Seasonal[2]
		RVL-25	Christie Lake	RVCA WW	2003	2005	Active	Seasonal[2]
		RVL-28	Leggatt Lake	RVCA WW	2004	2004	Active	Seasonal[2]
		RVL-29	Long Lake (West)	RVCA WW	2004	2004	Active	Seasonal[2]
		RVL-30	Elbow Lake	RVCA WW	2004	2005	Active	Seasonal[2]
		RVL-31	Carnahan Lake	RVCA WW	2004	2004	Active	Seasonal[2]
		RVL-42	Butterill Lake	RVCA WW			Active	Seasonal[2]
		RVL-43	Duncan Lake	RVCA WW			Active	Seasonal[2]
		RVL-44	Green Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-45	Rock Lake	RVCA WW			Active	Seasonal[2]
		RVL-46	Fermoy Lake	RVCA WW	2005	2005	Active	Seasonal[2]
		RVL-48	Grady Lake	RVCA WW			Active	Seasonal[2]
		RVL-49	O'Conto Lake	RVCA WW			Active	Seasonal[2]
		RVL-50	McLaren Lake	RVCA WW			Active	Seasonal[2]
		SNY-03	Scotts Snye @ Upper Scotch Line	RVCA SW	2003	2005	Active	Monthly[1]
		STU-01	Stub Creek @ Babcock Road u/s Long Lake	RVCA SW	2003	2005	Active	Monthly[1]
		TAY-01	Tay River @ Port Elmsley	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-04	Tay River @ Rogers Road (Perth)	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-05	Tay River @ Glen Tay	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-08	Tay River @ Gore Street (Perth)	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-09	Tay River @ Adams Pond	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-11	Tay River u/s of Tay Marsh	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-15	Tay River d/s of Christie Lake	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-16	Tay River @ Bolingbroke	RVCA SW	1998	2005	Active	Monthly[1]
		TAY-19	Tay River @ Craig St. (Perth)	RVCA SW	1998	2005	Active	Monthly[1]
		UEN-01	Uens Creek @ Babcock Road u/s Long Lake	RVCA SW	2003	2005	Active	Monthly[1]

Table 2.2-2

Surface Water - Water Quality Stations
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Station Type	First Year	Last Year	Status	Sampling Frequency

Notes: MVC WW - Mississippi Valley Conservation - Watershed Watch
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
RVCA SW - Rideau Valley Conservation Authority - Surface Water Quality Monitoring
RVCA WW - Rideau Valley Conservation Authority - Watershed Watch

1 - Samples Collected from April to November (8 per year)
2 - Samples collected in Spring, Summer & Fall (3 samples per monitoring year)

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
MVC	Big Gull	19343073001	Big Gull (Clarendon) Lake, East Basin					Excellent	
		19343072901	Big Gull (Clarendon) Lake, Main Basin					Excellent	
		19343072801	Big Gull (Clarendon) Lake, West Basin					Excellent	
	Buckshot Creek	18343077201	Blue Lake					Excellent	
		18343070401	Buckshot (Indian) Lake					Excellent	
		18343070801	Grindstone Lake, North Basin					Fair	
		18343070901	Grindstone Lake, South Basin					Excellent	
		18343072101	Sand Lake					Excellent	
		18343072201	Shabomeka (Buck) Lake					Excellent	
		19343072301	Shawenegog (McClintock) Lake, North Basin					Excellent	
		19343072401	Shawenegog (McClintock) Lake, South Basin					Excellent	
	Carp River	18337010102	Carp River, Craig Side Rd, downstream Carp	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		18337012102	Carp River, John Shaw Rd, downstream of Kinburn	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		R010-01	Carp River, at Carp Rd. Bridge (Regional Rd. 5), Fitzroy Harbour	Excellent	Excellent	Excellent	Poor	Fair	Poor
		R010-06	Carp River, at Craig Side Rd., downstream of bridge	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		R010-09	Carp River, at Richardson Side Rd., downstream of bridge	Excellent	Good	Excellent	Poor	Excellent	Poor
		R010-14	Carp River, at John Shaw Rd., N of Kinburn Side Road	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		CK70-05	Poole Creek, Stittsville Main St	Excellent	Excellent	Excellent	Poor	Excellent	Poor
	Clyde River	18343052002	At dam, downstream of Lanark	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		18343053002	Kerr Lake outlet, upstream of Lanark	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		18343070501	Canonto Lake (North & South Basins)					Marginal	
		19343074901	Clyde Lake					Fair	
		19343075001	Flower Round Lake					Excellent	
		19343076001	Horne Lake					Excellent	
		19343076401	Joes Lake					Good	
		18343074301	Palmerston Lake (North & South Basins)					Fair	
		19343076501	Paddys Lake					Excellent	
		19343075901	Upper Park Lake					Good	
		19343070101	Robertson Lake					Marginal	
		19343003601	Sunday Lake					Excellent	
		19343076301	Widow Lake					Fair	
	CP Dam	18343017502	Mississippi River, Dalhousie Lake outlet, Lanark County Rd 8	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		19343073401	Dalhousie Lake					Marginal	
		19343073501	Mississippi Lake, Big Lake					Excellent	
		19343001401	Mississippi Lake, Second Lake					Excellent	
		18343075301	Patterson Lake					Fair	
	Fall River	18343061002	Fall River, Bennett Lake outlet, upstream of Fallbrook	Excellent	Excellent	Excellent	Excellent	Excellent	Marginal
		18343072701	Bennett Lake (North & South Basins)					Good	
		Unknown	Black Lake					Good	
		18343074801	Clear Lake					Fair	
		18343073601	Sharbot Lake, East Basin					Marginal	

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
		18343072501	Sharbot Lake, Main Basin					Fair	
		18343074501	Sharbot Lake, South-West Basin					Marginal	
		18343074401	Sharbot Lake, West Basin					Marginal	
		18343072601	Silver Lake					Fair	
		18343074601	White Lake					Poor	
	Indian River	19343073101	Clayton Lake					Marginal	
		19343077101	Taylor Lake					Fair	
	Lower Mississippi	18343003002	Mississippi River, Railroad Trestle, Galetta	Excellent	Excellent	Excellent	Excellent	Excellent	Marginal
		18343003402	Mississippi River, At dam, downstream of Pakenham	Excellent	Excellent	Excellent	Excellent	Excellent	Marginal
		18343004002	Mississippi River, Almonte St, Almonte	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		18343006102	Mississippi River, Lanark Cnty Rd 11, Appleton	Excellent	Excellent	Excellent	Excellent	Good	Good
		CK3-01	Cody Creek, at Hansen Side Rd.	Excellent	Excellent	Excellent	Fair	Excellent	Poor
		CK3-03	Cody Creek, at Highway 44, E of Road 10	Excellent	Excellent			Excellent	Poor
		CK3-04	Cody Creek, March Rd.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		R9-01	Mississippi River, at Galetta Side Rd Bridge (Regional Rd. 22)	Excellent	Excellent	Excellent	Excellent	Excellent	Marginal
	Mazinaw	18343023002	Mississippi River, Mazinaw Lake outlet, Smarts Rd, E of Hwy 41	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		18343071101	Kishkebus Lake					Excellent	
		18343073901	Mackavoy Lake					Excellent	
		18343071401	Marble Lake					Fair	
		19343074101	Mazinaw Lake, North Basin					Excellent	
		19343073701	Mazinaw Lake, South Basin					Excellent	
		Unknown	McCausland Lake					Excellent	
		19343071601	Mississagagon Lake, East Basin					Fair	
		19343071501	Mississagagon Lake, West Basin					Fair	
	Upper Mississippi	18343070201	Ardoch (Green) Lake					Excellent	
		18343073301	Crotch (Cross) Lake, North Basin					Excellent	
		18343073201	Crotch (Cross) Lake, South Basin					Excellent	
		18343070701	Fawn Lake					Fair	
		19343071001	Kashwakamak Lake, East Basin					Excellent	
		19343073801	Kashwakamak Lake, West Basin					Excellent	
		18343071301	Malcolm Lake					Fair	
		18343071901	Mosque Lake (North, South & West Basins)					Good	
		18343072001	Pine Lake					Excellent	
Ottawa	MVC - Ottawa	CK4-02	Constance Creek, at Vances Side Rd.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK5-01	Shirley's Brook, at Fourth Line Rd., near 1375 Fourth Line Rd.	Excellent	Excellent	Excellent	Poor	Excellent	Marginal
		CK5-07	Shirley's Brook, at Hines Rd., N of Solandt, upstream of culvert	Excellent	Excellent	Excellent	Fair	Excellent	Fair
		CK6-001	Watts Creek, at Shirley Blvd.	Excellent	Fair	Excellent	Poor	Good	Poor
		CK6-312	Watts Creek, at Corkstown Rd. W, near March Rd. (Regional Rd. 49)	Excellent	Poor	Excellent	Poor	Excellent	Fair
		CK64-02	Casey Creek, at Dunrobin Rd., near Thomas Dolan Parkway	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK65-04	Harwood Creek, at Dunrobin Rd., near River Rd.	Excellent	Good	Excellent	Fair	Excellent	Marginal
		CLL-01	Constance Lake, deepest point, approximately 0.5 km from boat launch	Excellent	Excellent	Excellent	Excellent	Fair	Poor

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
	RVCA - Ottawa East	CK21-002	Greens Creek, at Montreal Rd. Bridge (Regional Rd. 34), upstream of culv	Excellent	Marginal	Excellent	Poor	Excellent	Poor
		CK21-003	Greens Creek, at Innes Rd. bridge (Regional Rd. 30), upstream of culvert	Excellent	Poor	Excellent	Poor	Excellent	Poor
		CK21-009	Ramsay Creek, at Baseline Rd., 1 km S of Ridge Rd.	Excellent	Good	Excellent	Fair	Excellent	Poor
		CK21-502	Black Creek (Mer Bleue Tributary), at Anderson Rd., 1 km S of Renaud R	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK22-001	Bilberry Creek, 0.25 km downstream of dead end of Bilberry Dr. N	Excellent	Poor	Excellent	Poor	Excellent	Poor
		CK23-001	Taylor Creek, at North Service Rd. (Jeanne D'Arc Extension), upstream of	Excellent	Marginal	Excellent	Poor	Excellent	Marginal
		CK24-002	Cardinal Creek, Old Montreal Rd.	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		CK25-001	Beckets Creek, at Highway 17 (Regional Rd. 174), upstream of culvert	Excellent	Excellent	Excellent	Excellent	Good	Poor
		CK35-004	Voyager Creek, at Youville Dr., downstream of culvert	Excellent	Marginal	Excellent	Poor	Excellent	Poor
		MKL-01	MacKay Lake, deepest basin, NW portion of lake	Excellent	Excellent	Excellent	Excellent	Good	Poor
	RVCA - Ottawa West	CK7-01	Stillwater Creek, Carling Ave.	Excellent	Fair	Excellent	Poor	Excellent	Poor
		CK8-01	Graham Creek, at Carling Ave. westbound lane, downstream of culvert	Excellent	Marginal	Excellent	Poor	Excellent	Fair
		CK8-35	Graham Creek, at Siskin Court (formerly Knoxdale Rd.)	Excellent	Good	Excellent	Poor	Excellent	Marginal
		CK9-I	Pinecrest Creek, at Ottawa River Parkway, westbound lane, midstream	Excellent	Poor	Excellent	Poor	Excellent	Fair
		MUDLK-03	Mud Lake, W part of lake, 170 m S of N shore	Excellent	Excellent	Excellent	Excellent	Fair	Poor
		CRS-101A	Rideau Canal, at Rideau St. bridge, 0.4 km upstream of Ottawa River	Excellent	Excellent	Excellent	Good	Good	Poor
		CRS-105B	Rideau Canal, at Bronson St. Bridge, 5.4 km upstream	Excellent	Excellent	Excellent	Fair	Good	Poor
	Ottawa River	18000017002	Ottawa River, Chats Falls	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-100.20	Woolsey Narrows/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-210.10	Deschenes Rapids/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-210.30	Deschenes Rapids/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-210.40	Deschenes Rapids/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-430.10	Upper Duck Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-430.30	Upper Duck Island/Kettle Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-430.60	Kettle Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-430.70	Kettle Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-450.10	Hiawatha/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		ORS-450.20	Hiawatha/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		ORS-450.30	Hiawatha/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-450.40	Hiawatha/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		ORS-500.10	Petrie Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		ORS-500.20	Petrie Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-500.50	Petrie Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
RVCA	Jock River	18003303602	Jock River, Moodie Dr., W of Hwy 416	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK67-001	Flowing Creek, at Perth Rd., 50 m upstream of confluence with Jock River	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		JR-01	Jock River, at Prince of Wales Dr. (Regional Rd. 73)	Excellent	Excellent	Excellent	Good	Excellent	Poor
		JR-02	Jock River, at Jockvale Rd.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		JR-05	Jock River, at Moodie Dr.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		JR-12	Jock River, at Ottawa St., Richmond	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		JR-20	Jock River, at Bleeks Side Rd.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
	Kemptville Creek	18003300302	Kemptville Creek, Leeds and Grenville County Rd. 43, Kemptville	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		BRN-03	Barnes Creek @ Van Buren Street (Kemptville)	Good	Excellent	Excellent		Excellent	Poor
		CK53-06	Kemptville Creek, at Prescott St. (Kemptville)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
		KEM-01	Kemptville Creek @ Hwy. 43 (Kemptville)	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-04	Kemptville Creek @ Hurd Street (Kemptville)	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-06	Kemptville Creek @ County Road 18 d/s Oxford Mills	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-07	Kemptville Creek @ Oxford Mills	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-08	Kemptville Creek @ Pattersons Corners	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-09	Kemptville Creek @ County Road 20	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-10	Kemptville Creek @ Limerick Road	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-11	Kemptville Creek @ Garretton	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-14	Kemptville Creek @ Kyle Road	Excellent	Excellent	Excellent		Excellent	Poor
		KEM-16	Kemptville Creek u/s N. Augusta	Excellent	Excellent	Excellent		Excellent	Poor
		NKE-02	North Kemptville Creek @ Bishops Mills	Excellent	Excellent	Excellent		Excellent	Poor
		NKE-06	North Kemptville Creek @ County Road 15 d/s Cranberry Lake	Excellent	Excellent	Excellent		Excellent	Poor
	Lower Rideau	18003302902	Rideau River, Roger Stevens Rd, Regional Rd 6, downstream of Kars	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		18003303102	Rideau River, Hogs Back Rd, Ottawa	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		18003303402	Rideau River, St. Patrick St, Ottawa	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		18003303702	Rideau River, Long Island gauging station, downstream of Manotick	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		ARC-01	Arcand Drain @ County Road 19	Excellent	Excellent	Excellent		Excellent	Poor
		BRA-01	Brassils Creek @ Donnelly Drive	Excellent	Excellent	Excellent		Excellent	Poor
		CK13-01	Black Rapids Creek, 0.23 km upstream from confluence with Rideau Rive	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		CK14-14	Nepean Creek, 30 m downstream of Fisher Glen STF by-pass outlet	Excellent	Marginal	Excellent	Poor	Excellent	Poor
		CK18-03-00	Sawmill Creek, NE tributary at Lester and Albion Rds.	Excellent	Good	Excellent	Poor	Excellent	Poor
		CK18-J	Sawmill Creek, at Johnston Rd. (4.45 km upstream of confluence)	Excellent	Fair	Excellent	Poor	Excellent	Poor
		CK18-M	Sawmill Creek, 100 m W of Brookfield Rd. and Junction Ave.	Excellent	Marginal	Excellent	Poor	Excellent	Poor
		CK18-Q	Sawmill Creek, at Riverside Dr., westbound lane (downstream)	Excellent	Marginal	Excellent	Poor	Excellent	Poor
		CK18-S	Sawmill Creek, Walkley Rd. onramp & Airport Pkwy.	Excellent	Fair	Excellent	Poor	Excellent	Poor
		CK19-01	Hunt Club Creek, 200 m downstream of Riverside Dr.	Excellent	Good	Excellent	Poor	Excellent	Poor
		CK19-10	Hunt Club Creek, at Country Club Rd.	Excellent	Excellent	Excellent	Poor	Excellent	Marginal
		CK19-12	Hunt Club Creek, at DeNiverville Dr. (Uplands System)	Excellent	Good	Excellent	Poor	Excellent	Excellent
		CK20-10	Mosquito Creek, at Leitrim Rd., 0.5 km upstream from Rideau River	Excellent	Excellent			Excellent	Poor
		CK20-16	Mosquito Creek, at Limebank Rd., 4 km upstream from Rideau River	Excellent	Excellent	Excellent	Marginal	Excellent	Poor
		CK20-22	Mosquito Creek, at Rideau Rd. (9th Line) and Downey Rd., downstream	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		CK41-01	Mud Creek, at Bankfield Rd., upstream of culverts	Excellent	Excellent	Excellent	Poor	Excellent	Poor
		CK42-04	Stevens Creek, at Church St. weir, North Gower	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK42-05-03	Taylor Drain, at Fourth Line Rd. (Regional Rd. 5) between Roger Stevens	Excellent	Excellent	Excellent	Good	Excellent	Poor
		CK42-06	Stevens Creek, at Second Line Rd. S, between Roger Stevens Rd. and P	Excellent	Excellent	Excellent	Good	Excellent	Poor
		CK42-07	Stevens Creek, at Roger Stevens Rd. (Regional Rd. 6), at exit of Marlbord	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		CK43-02	Cranberry Creek, at Third Line Rd. S, S of Highway 416, upstream of culv	Excellent	Excellent	Excellent	Good	Excellent	Poor
		CK44-02	Brassils Creek, at Dwyer Hill Rd., near Donnelly Rd.	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		MCD-02	McDermott Drain @ County Road 19	Excellent	Excellent	Excellent		Excellent	Poor
		MCD-03	McDermott Drain @ County Road 19	Excellent	Excellent	Excellent		Excellent	Poor
		MUR-01	Murphy Drain @ County Road 22	Excellent	Excellent	Excellent		Excellent	Poor
		RRS-103C	Rideau River, at St. Patrick St. (1.8 km upstream from Ottawa River)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-108C	Rideau River, at Bank St. (7.9 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-118A	Rideau River, Black Rapids Dam, open dam channel (16.25 km upstream	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-118B	Rideau River, Black Rapids Dam, centre sluice (16.25 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-119B	Rideau River, Long Island Locks (26 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
		RRS-119C	Rideau River, at Barnsdale Rd. (26 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-121C	Rideau River, at Roger Stevens Rd. (36.3 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-124B	Rideau River, N shore at Burritts Rapids Bridge (66 km upstream)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		RRS-167B	Rideau River, Mooney's Bay (11.6 km upstream)	Excellent	Excellent	Excellent	Good	Excellent	Poor
	Middle Rideau	18003302602	Rideau River, Rawley Rd, at dam, Kilmarnock	Excellent	Excellent	Excellent	Excellent	Fair	Poor
		18003303502	Rideau River, Nicholsons Lock, Andrewsville	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		BAR-01	Barbers Creek @ County Road 16	Excellent	Excellent	Excellent		Excellent	Poor
		COC-02	Cockburn Creek @ Hwy. 43	Excellent	Excellent	Excellent		Excellent	Poor
		DAL-01	Dales Creek @ County Road 23	Excellent	Excellent	Excellent		Excellent	Poor
		HUT-02	Hutton Creek @ Townline Road	Excellent	Excellent	Excellent		Excellent	Poor
		IRI-02	Irish Creek @ County Road 15 (Jasper)	Excellent	Excellent	Excellent		Excellent	Poor
		OTT-01	Otter Creek @ Hwy. 29 south of Smiths Falls	Excellent	Excellent	Excellent		Excellent	Poor
		RCK-01	Rideau Creek @ Donnelly Drive	Excellent	Excellent	Excellent		Excellent	Poor
		ROS-01	Rosedale Creek @ Hwy. 43	Excellent	Excellent	Excellent		Excellent	Poor
		RVL-26	Otter Lake						Good
	Rideau Lakes	ADR-01	Adrians Creek near County Road 42	Excellent	Excellent	Excellent		Excellent	Poor
		BLA-01	Black Creek in Murphys Pt. Prov. Park	Excellent	Excellent	Excellent		Excellent	Poor
		RVL-11	Black Lake						Poor
		RVL-12	Burridge Lake						Good
		RVL-13	Long Lake (East)						Excellent
		RVL-14	Westport Sand Lake						Fair
		RVL-27	Wolfe Lake						Excellent
		RVL-32	Adam Lake						Good
		RVL-33	Round Lake						Excellent
		RVL-34	Loon Lake						Poor
		RVL-35	Bass Lake						Good
		RVL-36	Big Rideau Lake, Hoggs Bay						Fair
		RVL-37	Upper Rideau Lake						Fair
		RVL-38	Lower Rideau Lake						Good
		RVL-39	Big Rideau Lake						Good
		SHE-01	Sheldons Creek @ Old Kingston Road	Excellent	Excellent	Excellent		Excellent	Poor
		WES-01	Westport Dam	Excellent	Excellent	Excellent		Good	Marginal
	Tay River	18003300802	Tay River, 1.5km downstream of Perth lagoons	Excellent	Excellent	Excellent	Excellent	Excellent	Poor
		18003302302	Tay River, Bolingbroke Station Rd, at dam, Bolingbroke	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		EAG-01	Eagle Creek u/s Bobs Lake	Excellent	Excellent	Excellent		Excellent	Marginal
		FIS-01	Fish Creek	Excellent	Excellent	Excellent		Excellent	Poor
		FIS-03	Fish Creek @ County Road 38	Excellent	Excellent	Excellent		Excellent	Poor
		FIS-A	Fish Creek u/s Bobs Lake	Excellent	Excellent	Excellent		Excellent	Poor
		GRT-01	Grants Creek @ Glen Tay Road	Excellent	Excellent	Excellent		Excellent	Poor
		GRT-02	Grants Creek @ Upper Scotch Line	Excellent	Excellent	Excellent		Excellent	Poor
		GRT-03	Grants Creek @ County Road 10	Excellent	Excellent	Excellent		Excellent	Marginal
		GRT-04	Grants Creek @ Pike Lake Dam	Excellent	Excellent	Excellent		Excellent	Fair
		GRT-05	Grants Creek d/s Upper Scotch Line	Excellent	Excellent	Excellent		Excellent	Poor
		JEB-01	Jebbs Creek @ County Road 1	Excellent	Excellent	Excellent		Excellent	Poor

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Un-Ionized Ammonia	Chloride	Nitrate	Nitrite	pH	TKN
		RUD-01	Ruddsdale Creek @ Christie Lake Road	Excellent	Excellent	Excellent		Excellent	Poor
		RVL-01	Pike Lake						Fair
		RVL-02	O'Brien Lake						Marginal
		RVL-03	Farren Lake						Excellent
		RVL-04	Crosby Lake						Good
		RVL-05	Little Crosby Lake						Good
		RVL-06	Davern Lake						Good
		RVL-07	Little Silver Lake						Good
		RVL-08	Rainbow Lake						Poor
		RVL-09	Eagle Lake						Excellent
		RVL-10	Otty Lake						Poor
		RVL-16	Bob's Lake, Buck Bay						Good
		RVL-17	Bob's Lake, Green Bay						Good
		RVL-18	Bob's Lake, West Basin						Good
		RVL-19	Bob's Lake, Mud Bay						Good
		RVL-20	Bob's Lake, Norris Bay						Good
		RVL-21	Bob's Lake, E. Basin, Long Bay						Good
		RVL-22	Bob's Lake, C. Narrows						Excellent
		RVL-23	Bob's Lake, Mill Bay						Poor
		RVL-24	Crow Lake						Excellent
		RVL-25	Christie Lake						Excellent
		RVL-28	Leggatt Lake						Excellent
		RVL-29	Long Lake (West)						Poor
		RVL-30	Elbow Lake						Poor
		RVL-31	Carnahan Lake						Poor
		SNY-03	Scotts Snye @ Upper Scotch Line	Excellent	Excellent	Excellent		Excellent	Good
		STU-01	Stub Creek @ Babcock Road u/s Long Lake	Excellent	Excellent	Excellent		Excellent	Marginal
		TAY-01	Tay River @ Port Elmsley	Excellent	Excellent	Excellent		Excellent	Poor
		TAY-04	Tay River @ Rogers Road (Perth)	Excellent	Excellent	Excellent		Excellent	Marginal
		TAY-05	Tay River @ Glen Tay	Excellent	Excellent	Excellent		Excellent	Fair
		TAY-08	Tay River @ Gore Street (Perth)	Excellent	Excellent	Excellent		Excellent	Fair
		TAY-09	Tay River @ Adams Pond	Excellent	Excellent	Excellent		Excellent	Excellent
		TAY-11	Tay River u/s of Tay Marsh	Excellent	Excellent	Excellent		Good	Poor
		TAY-15	Tay River d/s of Christie Lake	Excellent	Excellent	Excellent		Excellent	Excellent
		TAY-16	Tay River @ Bolingbroke	Excellent	Excellent	Excellent		Excellent	Excellent
		TAY-19	Tay River @ Craig St. (Perth)	Excellent	Excellent	Excellent		Excellent	Marginal
		UEN-01	Uens Creek @ Babcock Road u/s Long Lake	Excellent	Excellent	Excellent		Excellent	Poor

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
MVC	Big Gull	19343073001	Big Gull (Clarendon) Lake, East Basin	Excellent					
		19343072901	Big Gull (Clarendon) Lake, Main Basin	Excellent					
		19343072801	Big Gull (Clarendon) Lake, West Basin	Excellent					
	Buckshot Creek	18343077201	Blue Lake	Excellent					
		18343070401	Buckshot (Indian) Lake	Excellent					
		18343070801	Grindstone Lake, North Basin	Good					
		18343070901	Grindstone Lake, South Basin	Good					
		18343072101	Sand Lake	Excellent					
		18343072201	Shabomeka (Buck) Lake						
		19343072301	Shawenegog (McClintock) Lake, North Basin	Excellent					
		19343072401	Shawenegog (McClintock) Lake, South Basin	Excellent					
	Carp River	18337010102	Carp River, Craig Side Rd, downstream Carp	Poor	Good	Excellent	Excellent	Excellent	
		18337012102	Carp River, John Shaw Rd, downstream of Kinburn	Poor	Fair	Excellent	Excellent	Excellent	
		R010-01	Carp River, at Carp Rd. Bridge (Regional Rd. 5), Fitzroy Harbour	Poor	Good	Good	Excellent	Excellent	Marginal
		R010-06	Carp River, at Craig Side Rd., downstream of bridge	Poor	Good	Good	Excellent	Excellent	Poor
		R010-09	Carp River, at Richardson Side Rd., downstream of bridge	Poor	Fair	Good	Excellent	Excellent	Marginal
		R010-14	Carp River, at John Shaw Rd., N of Kinburn Side Road	Poor	Fair	Good	Excellent	Excellent	Fair
		CK70-05	Poole Creek, Stittsville Main St	Marginal	Fair	Fair	Excellent	Excellent	Poor
	Clyde River	18343052002	At dam, downstream of Lanark	Excellent	Excellent	Excellent	Excellent	Excellent	
		18343053002	Kerr Lake outlet, upstream of Lanark	Excellent	Excellent	Excellent	Excellent	Excellent	
		18343070501	Canonto Lake (North & South Basins)	Excellent					
		19343074901	Clyde Lake	Excellent					
		19343075001	Flower Round Lake	Good					
		19343076001	Horne Lake	Excellent					
		19343076401	Joes Lake	Excellent					
		18343074301	Palmerston Lake (North & South Basins)	Good					
		19343076501	Paddys Lake	Marginal					
		19343075901	Upper Park Lake	Good					
		19343070101	Robertson Lake	Good					
		19343003601	Sunday Lake	Fair					
		19343076301	Widow Lake	Excellent					
	CP Dam	18343017502	Mississippi River, Dalhousie Lake outlet, Lanark County Rd 8	Excellent	Excellent	Excellent	Excellent	Excellent	
		19343073401	Dalhousie Lake	Excellent					
		19343073501	Mississippi Lake, Big Lake						
		19343001401	Mississippi Lake, Second Lake						
		18343075301	Patterson Lake	Excellent					
	Fall River	18343061002	Fall River, Bennett Lake outlet, upstream of Fallbrook	Excellent	Excellent	Excellent	Excellent	Excellent	
		18343072701	Bennett Lake (North & South Basins)	Good					
		Unknown	Black Lake	Excellent					
		18343074801	Clear Lake	Excellent					
		18343073601	Sharbot Lake, East Basin	Excellent					

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
		18343072501	Sharbot Lake, Main Basin	Excellent					
		18343074501	Sharbot Lake, South-West Basin	Excellent					
		18343074401	Sharbot Lake, West Basin	Excellent					
		18343072601	Silver Lake	Excellent					
		18343074601	White Lake	Excellent					
	Indian River	19343073101	Clayton Lake	Excellent					
		19343077101	Taylor Lake	Excellent					
	Lower Mississippi	18343003002	Mississippi River, Railroad Trestle, Galetta	Good	Excellent	Excellent	Excellent	Excellent	
		18343003402	Mississippi River, At dam, downstream of Pakenham	Excellent	Excellent	Excellent	Excellent	Excellent	
		18343004002	Mississippi River, Almonte St, Almonte	Excellent	Excellent	Excellent	Excellent	Excellent	
		18343006102	Mississippi River, Lanark Cnty Rd 11, Appleton	Excellent	Excellent	Excellent	Excellent	Excellent	
		CK3-01	Cody Creek, at Hansen Side Rd.	Poor	Marginal	Good	Excellent	Excellent	Poor
		CK3-03	Cody Creek, at Highway 44, E of Road 10	Fair	Excellent	Good	Excellent	Excellent	Excellent
		CK3-04	Cody Creek, March Rd.	Excellent	Excellent	Good	Excellent	Excellent	Fair
		R9-01	Mississippi River, at Galetta Side Rd Bridge (Regional Rd. 22)	Good	Excellent	Excellent	Excellent	Excellent	Good
	Mazinaw	18343023002	Mississippi River, Mazinaw Lake outlet, Smarts Rd, E of Hwy 41	Good	Excellent	Excellent	Excellent	Excellent	
		18343071101	Kishkebus Lake						
		18343073901	Mackavoy Lake						
		18343071401	Marble Lake						
		19343074101	Mazinaw Lake, North Basin	Excellent					
		19343073701	Mazinaw Lake, South Basin	Excellent					
		Unknown	McCausland Lake						
		19343071601	Mississagagon Lake, East Basin						
		19343071501	Mississagagon Lake, West Basin						
	Upper Mississippi	18343070201	Ardoch (Green) Lake	Excellent					
		18343073301	Crotch (Cross) Lake, North Basin	Fair					
		18343073201	Crotch (Cross) Lake, South Basin	Good					
		18343070701	Fawn Lake	Good					
		19343071001	Kashwakamak Lake, East Basin						
		19343073801	Kashwakamak Lake, West Basin						
		18343071301	Malcolm Lake	Excellent					
		18343071901	Mosque Lake (North, South & West Basins)	Good					
		18343072001	Pine Lake	Excellent					
Ottawa	MVC - Ottawa	CK4-02	Constance Creek, at Vances Side Rd.	Poor	Excellent	Excellent	Excellent	Excellent	Fair
		CK5-01	Shirley's Brook, at Fourth Line Rd., near 1375 Fourth Line Rd.	Poor	Marginal	Good	Excellent	Excellent	Poor
		CK5-07	Shirley's Brook, at Hines Rd., N of Solandt, upstream of culvert	Poor	Marginal	Good	Excellent	Excellent	Poor
		CK6-001	Watts Creek, at Shirley Blvd.	Poor	Poor	Marginal	Excellent	Good	Poor
		CK6-312	Watts Creek, at Corkstown Rd. W, near March Rd. (Regional Rd. 49)	Poor	Marginal	Marginal	Excellent	Good	Poor
		CK64-02	Casey Creek, at Dunrobin Rd., near Thomas Dolan Parkway	Poor	Poor	Good	Excellent	Excellent	Poor
		CK65-04	Harwood Creek, at Dunrobin Rd., near River Rd.	Poor	Good	Good	Excellent	Excellent	Marginal
		CLL-01	Constance Lake, deepest point, approximately 0.5 km from boat launch	Marginal	Excellent	Good	Excellent	Excellent	Excellent

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
	RVCA - Ottawa East	CK21-002	Greens Creek, at Montreal Rd. Bridge (Regional Rd. 34), upstream of culv	Poor	Poor	Poor	Excellent	Good	Poor
		CK21-003	Greens Creek, at Innes Rd. bridge (Regional Rd. 30), upstream of culvert	Poor	Marginal	Marginal	Excellent	Good	Poor
		CK21-009	Ramsay Creek, at Baseline Rd., 1 km S of Ridge Rd.	Poor	Poor	Poor	Excellent	Excellent	Poor
		CK21-502	Black Creek (Mer Bleue Tributary), at Anderson Rd., 1 km S of Renaud R	Poor	Good	Good	Excellent	Excellent	Fair
		CK22-001	Bilberry Creek, 0.25 km downstream of dead end of Bilberry Dr. N	Poor	Poor	Marginal	Excellent	Good	Poor
		CK23-001	Taylor Creek, at North Service Rd. (Jeanne D'Arc Extension), upstream of	Poor	Marginal	Marginal	Excellent	Excellent	Poor
		CK24-002	Cardinal Creek, Old Montreal Rd.	Poor	Poor	Marginal	Excellent	Excellent	Marginal
		CK25-001	Beckets Creek, at Highway 17 (Regional Rd. 174), upstream of culvert	Poor	Marginal	Marginal	Excellent	Excellent	Fair
		CK35-004	Voyager Creek, at Youville Dr., downstream of culvert	Poor	Poor	Marginal	Excellent	Good	Poor
		MKL-01	MacKay Lake, deepest basin, NW portion of lake	Good	Excellent	Good	Excellent	Excellent	Excellent
	RVCA - Ottawa West	CK7-01	Stillwater Creek, Carling Ave.	Poor	Marginal	Fair	Excellent	Excellent	Poor
		CK8-01	Graham Creek, at Carling Ave. westbound lane, downstream of culvert	Poor	Marginal	Fair	Excellent	Good	Poor
		CK8-35	Graham Creek, at Siskin Court (formerly Knoxdale Rd.)	Poor	Poor	Fair	Excellent	Excellent	Poor
		CK9-I	Pinecrest Creek, at Ottawa River Parkway, westbound lane, midstream	Marginal	Fair	Fair	Excellent	Good	Poor
		MUDLK-03	Mud Lake, W part of lake, 170 m S of N shore	Poor	Good	Good	Excellent	Excellent	Good
		CRS-101A	Rideau Canal, at Rideau St. bridge, 0.4 km upstream of Ottawa River	Poor	Excellent	Good	Excellent	Excellent	Fair
		CRS-105B	Rideau Canal, at Bronson St. Bridge, 5.4 km upstream	Poor	Excellent	Excellent	Excellent	Excellent	Excellent
	Ottawa River	18000017002	Ottawa River, Chats Falls	Excellent	Excellent	Excellent	Excellent	Excellent	
		ORS-100.20	Woolsey Narrows/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Excellent
		ORS-210.10	Deschenes Rapids/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Good
		ORS-210.30	Deschenes Rapids/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-210.40	Deschenes Rapids/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		ORS-430.10	Upper Duck Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		ORS-430.30	Upper Duck Island/Kettle Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		ORS-430.60	Kettle Island/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Fair
		ORS-430.70	Kettle Island/Ottawa River	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		ORS-450.10	Hiawatha/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Fair
		ORS-450.20	Hiawatha/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Marginal
		ORS-450.30	Hiawatha/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Marginal
		ORS-450.40	Hiawatha/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Poor
		ORS-500.10	Petrie Island/Ottawa River	Good	Excellent	Good	Excellent	Excellent	Good
		ORS-500.20	Petrie Island/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Good
		ORS-500.50	Petrie Island/Ottawa River	Excellent	Excellent	Good	Excellent	Excellent	Poor
RVCA	Jock River	18003303602	Jock River, Moodie Dr., W of Hwy 416	Poor	Good	Excellent	Excellent	Excellent	Marginal
		CK67-001	Flowing Creek, at Perth Rd., 50 m upstream of confluence with Jock River	Poor	Poor	Good	Excellent	Excellent	Poor
		JR-01	Jock River, at Prince of Wales Dr. (Regional Rd. 73)	Poor	Good	Good	Excellent	Excellent	Fair
		JR-02	Jock River, at Jockvale Rd.	Poor	Excellent	Good	Excellent	Excellent	Good
		JR-05	Jock River, at Moodie Dr.	Poor	Good	Good	Excellent	Excellent	Fair
		JR-12	Jock River, at Ottawa St., Richmond	Marginal	Excellent	Excellent	Excellent	Excellent	Fair
		JR-20	Jock River, at Bleeks Side Rd.	Marginal	Good	Good	Excellent	Excellent	Marginal
	Kemptville Creek	18003300302	Kemptville Creek, Leeds and Grenville County Rd. 43, Kemptville	Marginal	Excellent	Excellent	Excellent	Excellent	Good
		BRN-03	Barnes Creek @ Van Buren Street (Kemptville)	Poor	Poor	Fair	Excellent	Good	Poor
		CK53-06	Kemptville Creek, at Prescott St. (Kemptville)	Good	Excellent	Good	Excellent	Excellent	Fair

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
		KEM-01	Kemptville Creek @ Hwy. 43 (Kemptville)	Marginal	Excellent	Good	Excellent	Excellent	Marginal
		KEM-04	Kemptville Creek @ Hurd Street (Kemptville)	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		KEM-06	Kemptville Creek @ County Road 18 d/s Oxford Mills	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		KEM-07	Kemptville Creek @ Oxford Mills	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		KEM-08	Kemptville Creek @ Pattersons Corners	Good	Excellent	Excellent	Excellent	Excellent	Good
		KEM-09	Kemptville Creek @ County Road 20	Fair	Good	Excellent	Excellent	Excellent	Good
		KEM-10	Kemptville Creek @ Limerick Road	Marginal	Excellent	Excellent	Excellent	Excellent	Good
		KEM-11	Kemptville Creek @ Garretton	Marginal	Excellent	Excellent	Excellent	Good	Good
		KEM-14	Kemptville Creek @ Kyle Road	Marginal	Excellent	Good	Excellent	Excellent	Fair
		KEM-16	Kemptville Creek u/s N. Augusta	Good	Excellent	Excellent	Excellent	Excellent	Fair
		NKE-02	North Kemptville Creek @ Bishops Mills	Excellent	Good	Excellent	Excellent	Excellent	Marginal
		NKE-06	North Kemptville Creek @ County Road 15 d/s Cranberry Lake	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
	Lower Rideau	18003302902	Rideau River, Roger Stevens Rd, Regional Rd 6, downstream of Kars	Marginal	Excellent	Excellent	Excellent	Excellent	Excellent
		18003303102	Rideau River, Hogs Back Rd, Ottawa	Marginal	Excellent	Excellent	Excellent	Excellent	Fair
		18003303402	Rideau River, St. Patrick St, Ottawa	Marginal	Excellent	Excellent	Excellent	Excellent	Fair
		18003303702	Rideau River, Long Island gauging station, downstream of Manotick	Marginal	Excellent	Excellent	Excellent	Excellent	Good
		ARC-01	Arcand Drain @ County Road 19	Poor	Marginal	Fair	Excellent	Excellent	Fair
		BRA-01	Brassils Creek @ Donnelly Drive	Good	Excellent	Good	Excellent	Excellent	Good
		CK13-01	Black Rapids Creek, 0.23 km upstream from confluence with Rideau Rive	Poor	Marginal	Good	Excellent	Excellent	Marginal
		CK14-14	Nepean Creek, 30 m downstream of Fisher Glen STF by-pass outlet	Poor	Poor	Marginal	Excellent	Good	Marginal
		CK18-03-00	Sawmill Creek, NE tributary at Lester and Albion Rds.	Fair	Fair	Good	Excellent	Excellent	Fair
		CK18-J	Sawmill Creek, at Johnston Rd. (4.45 km upstream of confluence)	Poor	Poor	Fair	Excellent	Good	Poor
		CK18-M	Sawmill Creek, 100 m W of Brookfield Rd. and Junction Ave.	Poor	Poor	Marginal	Excellent	Good	Poor
		CK18-Q	Sawmill Creek, at Riverside Dr., westbound lane (downstream)	Poor	Poor	Marginal	Excellent	Good	Poor
		CK18-S	Sawmill Creek, Walkley Rd. onramp & Airport Pkwy.	Poor	Fair	Fair	Excellent	Good	Poor
		CK19-01	Hunt Club Creek, 200 m downstream of Riverside Dr.	Poor	Fair	Fair	Excellent	Excellent	Poor
		CK19-10	Hunt Club Creek, at Country Club Rd.	Poor	Good	Fair	Excellent	Good	Marginal
		CK19-12	Hunt Club Creek, at DeNiverville Dr. (Uplands System)	Good	Good	Fair	Excellent	Good	Fair
		CK20-10	Mosquito Creek, at Leitrim Rd., 0.5 km upstream from Rideau River	Poor	Fair	Good	Excellent	Excellent	Marginal
		CK20-16	Mosquito Creek, at Limebank Rd., 4 km upstream from Rideau River	Poor	Fair	Good	Excellent	Excellent	Fair
		CK20-22	Mosquito Creek, at Rideau Rd. (9th Line) and Downey Rd., downstream	Poor	Fair	Good	Excellent	Excellent	Poor
		CK41-01	Mud Creek, at Bankfield Rd., upstream of culverts	Poor	Good	Good	Excellent	Excellent	Marginal
		CK42-04	Stevens Creek, at Church St. weir, North Gower	Poor	Fair	Good	Excellent	Excellent	Poor
		CK42-05-03	Taylor Drain, at Fourth Line Rd. (Regional Rd. 5) between Roger Stevens	Poor	Marginal	Fair	Excellent	Excellent	Marginal
		CK42-06	Stevens Creek, at Second Line Rd. S, between Roger Stevens Rd. and P	Poor	Fair	Good	Excellent	Excellent	Fair
		CK42-07	Stevens Creek, at Roger Stevens Rd. (Regional Rd. 6), at exit of Marlbord	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		CK43-02	Cranberry Creek, at Third Line Rd. S, S of Highway 416, upstream of culv	Poor	Good	Good	Excellent	Excellent	Fair
		CK44-02	Brassils Creek, at Dwyer Hill Rd., near Donnelly Rd.	Excellent	Excellent	Good	Excellent	Excellent	Good
		MCD-02	McDermott Drain @ County Road 19	Poor	Fair	Good	Excellent	Excellent	Marginal
		MCD-03	McDermott Drain @ County Road 19	Poor	Fair	Good	Excellent	Excellent	Marginal
		MUR-01	Murphy Drain @ County Road 22	Poor	Good	Good	Excellent	Excellent	Marginal
		RRS-103C	Rideau River, at St. Patrick St. (1.8 km upstream from Ottawa River)	Poor	Good	Good	Excellent	Excellent	Good
		RRS-108C	Rideau River, at Bank St. (7.9 km upstream)	Poor	Good	Good	Excellent	Excellent	Good
		RRS-118A	Rideau River, Black Rapids Dam, open dam channel (16.25 km upstream	Poor	Good	Good	Excellent	Excellent	Good
		RRS-118B	Rideau River, Black Rapids Dam, centre sluice (16.25 km upstream)	Poor	Good	Good	Excellent	Excellent	Good
		RRS-119B	Rideau River, Long Island Locks (26 km upstream)	Poor	Excellent	Good	Excellent	Excellent	Excellent

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
		RRS-119C	Rideau River, at Barnsdale Rd. (26 km upstream)	Marginal	Good	Good	Excellent	Excellent	Good
		RRS-121C	Rideau River, at Roger Stevens Rd. (36.3 km upstream)	Marginal	Excellent	Good	Excellent	Excellent	Excellent
		RRS-124B	Rideau River, N shore at Burritts Rapids Bridge (66 km upstream)	Good	Excellent	Good	Excellent	Excellent	Excellent
		RRS-167B	Rideau River, Mooney's Bay (11.6 km upstream)	Poor	Good	Good	Excellent	Good	Good
	Middle Rideau	18003302602	Rideau River, Rawley Rd, at dam, Kilmarnock	Good	Good	Excellent	Excellent	Excellent	Excellent
		18003303502	Rideau River, Nicholsons Lock, Andrewsville	Good	Excellent	Excellent	Good	Excellent	Excellent
		BAR-01	Barbers Creek @ County Road 16	Poor	Good	Good	Excellent	Excellent	Poor
		COC-02	Cockburn Creek @ Hwy. 43	Poor	Excellent	Fair	Excellent	Excellent	Marginal
		DAL-01	Dales Creek @ County Road 23	Fair	Excellent	Good	Excellent	Excellent	Poor
		HUT-02	Hutton Creek @ Townline Road	Poor	Good	Good	Excellent	Excellent	Poor
		IRI-02	Irish Creek @ County Road 15 (Jasper)	Good	Excellent	Excellent	Excellent	Excellent	Excellent
		OTT-01	Otter Creek @ Hwy. 29 south of Smiths Falls	Poor	Good	Excellent	Excellent	Excellent	Poor
		RCK-01	Rideau Creek @ Donnelly Drive	Good	Excellent	Good	Excellent	Excellent	Marginal
		ROS-01	Rosedale Creek @ Hwy. 43	Poor	Poor	Fair	Excellent	Excellent	Poor
		RVL-26	Otter Lake	Excellent					Excellent
	Rideau Lakes	ADR-01	Adrians Creek near County Road 42	Poor	Marginal	Good	Excellent	Excellent	Poor
		BLA-01	Black Creek in Murphys Pt. Prov. Park	Marginal	Excellent	Excellent	Excellent	Excellent	Good
		RVL-11	Black Lake	Excellent					Excellent
		RVL-12	Burridge Lake	Excellent					Excellent
		RVL-13	Long Lake (East)	Excellent					Excellent
		RVL-14	Westport Sand Lake	Excellent					Excellent
		RVL-27	Wolfe Lake	Excellent					Excellent
		RVL-32	Adam Lake	Excellent					Excellent
		RVL-33	Round Lake	Excellent					Excellent
		RVL-34	Loon Lake	Good					Excellent
		RVL-35	Bass Lake	Excellent					Good
		RVL-36	Big Rideau Lake, Hoggs Bay	Good					Excellent
		RVL-37	Upper Rideau Lake	Fair					Excellent
		RVL-38	Lower Rideau Lake	Excellent					Excellent
		RVL-39	Big Rideau Lake	Excellent					Excellent
		SHE-01	Sheldons Creek @ Old Kingston Road	Poor	Good	Good	Excellent	Excellent	Fair
		WES-01	Westport Dam	Good	Good	Good	Excellent	Excellent	Excellent
	Tay River	18003300802	Tay River, 1.5km downstream of Perth lagoons	Good	Excellent	Excellent	Excellent	Excellent	Fair
		18003302302	Tay River, Bolingbroke Station Rd, at dam, Bolingbroke	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		EAG-01	Eagle Creek u/s Bobs Lake	Marginal	Excellent	Excellent	Excellent	Excellent	Good
		FIS-01	Fish Creek	Fair	Excellent	Good	Excellent	Excellent	Marginal
		FIS-03	Fish Creek @ County Road 38	Poor	Excellent	Excellent	Excellent	Excellent	Marginal
		FIS-A	Fish Creek u/s Bobs Lake	Fair	Excellent	Excellent	Excellent	Excellent	Good
		GRT-01	Grants Creek @ Glen Tay Road	Poor	Fair	Good	Excellent	Excellent	Fair
		GRT-02	Grants Creek @ Upper Scotch Line	Marginal	Excellent	Excellent	Excellent	Excellent	Poor
		GRT-03	Grants Creek @ County Road 10	Good	Excellent	Excellent	Excellent	Excellent	Good
		GRT-04	Grants Creek @ Pike Lake Dam	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		GRT-05	Grants Creek d/s Upper Scotch Line	Marginal	Good	Good	Excellent	Excellent	Poor
		JEB-01	Jebbs Creek @ County Road 1	Good	Excellent	Excellent	Excellent	Excellent	Good

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location	Total Phosphorus	TSS	Copper	Lead	Zinc	*E. coli*
		RUD-01	Ruddsdale Creek @ Christie Lake Road	Marginal	Excellent	Excellent	Excellent	Excellent	Fair
		RVL-01	Pike Lake	Excellent					Excellent
		RVL-02	O'Brien Lake	Excellent					Excellent
		RVL-03	Farren Lake	Excellent					Excellent
		RVL-04	Crosby Lake	Excellent					Excellent
		RVL-05	Little Crosby Lake	Good					Excellent
		RVL-06	Davern Lake	Excellent					Excellent
		RVL-07	Little Silver Lake	Excellent					Excellent
		RVL-08	Rainbow Lake	Good					Excellent
		RVL-09	Eagle Lake	Excellent					Excellent
		RVL-10	Otty Lake	Excellent					Excellent
		RVL-16	Bob's Lake, Buck Bay	Excellent					Excellent
		RVL-17	Bob's Lake, Green Bay	Excellent					Excellent
		RVL-18	Bob's Lake, West Basin	Excellent					Excellent
		RVL-19	Bob's Lake, Mud Bay	Excellent					Excellent
		RVL-20	Bob's Lake, Norris Bay	Excellent					Excellent
		RVL-21	Bob's Lake, E. Basin, Long Bay	Excellent					Excellent
		RVL-22	Bob's Lake, C. Narrows	Excellent					Excellent
		RVL-23	Bob's Lake, Mill Bay	Good					Excellent
		RVL-24	Crow Lake	Excellent					Excellent
		RVL-25	Christie Lake	Excellent					Excellent
		RVL-28	Leggatt Lake	Excellent					Excellent
		RVL-29	Long Lake (West)	Good					Excellent
		RVL-30	Elbow Lake	Good					Excellent
		RVL-31	Carnahan Lake	Good					Excellent
		SNY-03	Scotts Snye @ Upper Scotch Line	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		STU-01	Stub Creek @ Babcock Road u/s Long Lake	Fair	Excellent	Excellent	Excellent	Excellent	Good
		TAY-01	Tay River @ Port Elmsley	Good	Excellent	Excellent	Excellent	Excellent	Good
		TAY-04	Tay River @ Rogers Road (Perth)	Excellent	Excellent	Excellent	Excellent	Excellent	Fair
		TAY-05	Tay River @ Glen Tay	Excellent	Excellent	Good	Excellent	Excellent	Good
		TAY-08	Tay River @ Gore Street (Perth)	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		TAY-09	Tay River @ Adams Pond	Excellent	Excellent	Good	Excellent	Excellent	Good
		TAY-11	Tay River u/s of Tay Marsh	Good	Excellent	Excellent	Excellent	Excellent	Fair
		TAY-15	Tay River d/s of Christie Lake	Excellent	Excellent	Excellent	Excellent	Excellent	Good
		TAY-16	Tay River @ Bolingbroke	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
		TAY-19	Tay River @ Craig St. (Perth)	Excellent	Excellent	Excellent	Excellent	Excellent	Marginal
		UEN-01	Uens Creek @ Babcock Road u/s Long Lake	Marginal	Excellent	Good	Excellent	Excellent	Excellent

Table 2.2-3

Surface Water - CCME Water Quality Score
Mississippi - Rideau Source Protection Region

Watershed	Subwatershed	Station ID	Station Location

Notes: CCME - Canadian Council of Ministers of the Environment
CCME Water Quality Scoring System
MVC - Mississippi Valley Conservation
RVCA - Rideau Valley Conservation Authority
Excellent Water Quality - 95-100% of the samples in compliance with criterion
Good Water Quality - 80-94% of the samples in compliance with criterion
Fair Water Quality - 65-79% of the samples in compliance with criterion
Marginal Water Quality - 45-64% of the samples in compliance with criterion
Poor Water Quality - 0-44% of the samples in compliance with criterion

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
1	Munster Beckers		251		0.018		76		691.5				0.7		**283**				0.01
2	Munster School / Community Centre																		
3	1						**690**								**175**				
4	10						80		827.0				0.3		**260**				0.12
5	100						206								**576**				
6	1000-1				0.120		48											<	0.1
7	1000-2		249		0.160		79		744.0		0.3		0.6		**257**		0.01	<	0.1
8	1000-3				0.070		116											<	0.1
9	100-1 (TW1)		239	<	0.020		71		743.0		0.3		0.2		**396**		0.01		0.81
10	100-2				0.090		86											<	0.1
11	100-3				0.040		78											<	0.1
12	100-4				0.030		45											<	0.1
13	101						106								**386**				0.1
14	102				0.100		2		383.0				0.3		**173**				0.1
15	103						23												0.1
16	104						8								**267**				
17	105						3								**242**				0.1
18	106						196								**454**				1.0
19	107						86												0.4
20	108						185								**391**				0.1
21	109						96												0.2
22	11						**2410**								**904**				
23	1-1		357		1.550		40		766.0		4.2		1.4		98		**0.06**		0.05
24	110						1												0.1
25	1100-1			<	0.020		22											<	0.1
26	1100-2		219		0.220		194		1040.0		0.3		0.8		**266**		0.03	<	0.1
27	1100-3			<	0.020		24											<	0.1
28	1100-4				0.160		97											<	0.1
29	1100-5				0.030		112											<	0.1
30	1100-6		254		0.040		43		707.0		0.3		0.2		**315**		0.05	<	0.1
31	1100-7				0.100		74											<	0.1
32	1100-8				0.430		147											<	0.1
33	1100-8 dup				0.720		148											<	0.1
34	111						3												0.68
35	11-1		193		0.130		129		861.0		0.3		0.5		**236**		**0.11**		0.05
36	112						0												
37	11-2		314		0.160		92		934.0		1.8		0.2		**352**		0.05		0.05
38	113			<	0.100		1								**140**				0.1
39	11-3		281		0.070		106		916.0		1.3		0.1		**376**		0.01		0.62
40	114				0.080		1		307.0				0.1		**150**				
41	115						0												
42	116						40								**137**				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
43	117						88								**429**				0.1
44	118						28								**230**				**18.1**
45	119						2								86				
46	12						8								83				
47	1-2		182		0.150		12		432.0		0.9		0.4		**179**		0.03		0.05
48	120						3								**142**				
49	1200-1				0.110		180											<	0.1
50	1200-10				0.070		168												0.16
51	1200-11			<	0.020		138											<	0.1
52	1200-12		314		0.150		80		940.0		2.2		0.5		**427**		0.01	<	0.1
53	1200-12 dup		313						940.0		2.0		0.5		**375**	<	0.01		
54	1200-14				0.060		91												0.62
55	1200-15				0.070		105											<	0.1
56	1200-16				0.090		62											<	0.1
57	1200-19		288		0.270		90		889.0		0.7		0.5		**395**	<	0.01	<	0.1
58	1200-2		237		0.070		132		962.0		0.5		0.5	<	**1**		0.01	<	0.1
59	1200-3		271		0.180		94		902.0		0.6		0.5		**344**		**0.06**	<	0.1
60	1200-4			<	0.020		**416**												3.96
61	1200-5				0.140		221											<	0.1
62	1200-6				0.220		93											<	0.1
63	1200-7		282		0.100		114		966.0		1.0		0.3		**405**		0.01	<	0.1
64	1200-8				0.040		189											<	0.1
65	1200-8 dup				0.040		185											<	0.1
66	1200-9				0.190		49											<	0.1
67	121						4								**115**				
68	122						2								**307**				2.20
69	123						2								**158**				
70	124						188								**870**				8.90
71	125						68								**254**				0.1
72	126						31								**150**				
73	127						16								**296**				1.34
74	128				0.040		26		720.0				0.1		**348**				
75	129				0.100		1		210.0				0.2						0.1
76	12a-1		243		0.160		48		628.0		1.6		0.3		**289**		0.02		0.05
77	12b-1		275		0.280		**546**		2090.0		1.4		0.5		**587**		0.02		0.05
78	13				2.210		278		3000.0				0.1		**213**				0.05
79	1-3		192		0.080		13		451.0		0.9		0.4		**183**		0.05		0.05
80	130						20								**389**				1.41
81	131						2												0.1
82	132				0.100		1		320.0				0.2		**140**				0.1
83	133						31								**294**				
84	134				0.050		22		590.0				0.1		**252**				0.05
85	135						3								**117**				0.82

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
86	136						0								**119**				0.1
87	137						2												0.1
88	138						82								**312**				
89	139						218								**400**				0.02
90	14				0.100		127		1660.0				0.1		**242**				0.05
91	1-4		198		0.120		28		529.0		1.1		0.5		**199**		**1.02**		0.05
92	140						14								**124**				0.02
93	141			<	0.100		155								**447**				0.1
94	142						2								**269**				
95	143						31								88				
96	144				0.100		11		460.0				0.5		**198**				0.1
97	145						192								**178**				
98	146						15												0.1
99	147						46								**292**				0.17
100	148						46								**345**				0.69
101	149						21								**198**				0.1
102	15						7								**275**				
103	1-5		200		0.040		139		872.0		0.9		0.1		**193**		0.01		2.84
104	150						0												
105	151						1								**281**				1.21
106	152						85								**256**				1.80
107	153						2								**265**				
108	154						49												0.38
109	155						6								**258**				0.14
110	156						8								**102**				0.5
111	157						49								**240**				0.1
112	158						1								**293**				0.18
113	159						13								**6.2**				0.19
114	16						186								**170**				0.05
115	1-6		355		0.070		139		1110.0		1.4		0.1		**534**		0.01		0.05
116	1-6 dup		354		0.080		137		1100.0		1.8		0.1		**534**		0.01		0.05
117	160						16								**236**				2.59
118	161						63								**267**				0.18
119	162						1								**334**				0.14
120	163						0								**251**				0.21
121	164						128								**404**				0.72
122	165						223								**581**				0.28
123	166						**275**								**498**				0.13
124	167						16								**237**				0.48
125	168						**708**								**382**				0.08
126	169						**363**								**507**				
127	17						**351**								**193**				
128	1-7		313		1.910		17		585.0		2.1		0.8		**125**		0.01		0.05

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
129	17 Channonhouse (K.P.2D)																		
130	170						9								**139**				0.21
131	171						0								79				
132	172						2								**240**				0.32
133	173						19								**290**				
134	174						19								**294**				8.01
135	175						8								**137**				5.40
136	176						35								**267**				
137	177						26								**338**				
138	178						18								**325**				
139	179						26								**316**				0.44
140	18						28								**413**				
141	180						17								**286**				
142	181						18								**217**				0.1
143	182						14								**204**				
144	183						1								**225**				0.1
145	184						25								**204**				0.1
146	185						13								**257**				
147	186						7								**297**				
148	187						6								**230**				
149	188						125								**418**				1.96
150	189						1								**225**				
151	19						**280**								**275**				
152	190						4								**203**				
153	191						4								**275**				0.22
154	192						44								**254**				0.1
155	193						4								**155**				0.1
156	194						7								**164**				0.1
157	195						72								**279**				2.04
158	196			<	0.100		1								**205**				0.1
159	197						8								**254**				0.1
160	198						0												
161	199						152								**439**				0.1
162	2						98								**75**				
163	20						6								**413**				
164	200						11								**215**				0.23
165	200-1				0.030		60											<	0.1
166	200-2		280		0.080		97		907.0		1.0		0.3		**405**		0.04	<	0.1
167	200-3				0.230		102											<	0.1
168	200-4				0.270		51											<	0.1
169	201						5								**201**				
170	202						6								**200**				
171	203						25								**218**				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
172	204						7								**198**				0.07
173	205						44								**290**				7.55
174	206						35								**309**				0.34
175	207						23								**101**				
176	208						19								**210**				
177	209						58								**364**				
178	21						2								**231**				
179	2-1		246		0.080		10		575.0		0.8		0.4		**273**		0.01		0.05
180	210						10								**185**				
181	211						32								**264**				
182	212						26								**310**				
183	213						32								**246**				0.01
184	214						9								**312**				3.66
185	215						18								**229**				0.06
186	216						129								**263**	<	0.01		0.1
187	217						48								**323**				
188	218						137								**433**				2.48
189	219						**748**								**462**				
190	22						26								**215**				
191	2-2		253		0.230		11		520.0		1.2		0.7		**103**		**0.20**		0.05
192	220						13								**216**				0.78
193	221						10								**136**				
194	222						**2056**								**752**				
195	223						130								**236**				0.1
196	224						61								**338**				0.71
197	225						**625**								**566**				4
198	226						**253**								**575**				1.02
199	227						168								**421**				10
200	228						194								**452**				6.2
201	229						160								**444**				8
202	23						244								**265**				
203	2-3		200		0.100		43		554.0		0.7		0.9		**184**		**0.33**		0.05
204	230						62								**391**				5
205	231						30								**266**				0.54
206	232						17								**320**				1.14
207	233						0												
208	234				1.100		21						0.3		**298**				0.1
209	235						0												
210	236						0												
211	237						30								**266**				0.54
212	238						26								**169**				0.1
213	239				0.010		17		623.0				0.9		**304**				
214	24						**890**								**332**				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
215	2-4		197		0.110		43		537.0		0.9		0.9		**170**		**0.06**		0.05
216	240				0.250		12		510.0				0.6		**148**				0.1
217	241				0.120		16						0.3		**283**				0.1
218	242						34								**312**				0.1
219	243						23								**280**				
220	244						79								**47.6**				0.1
221	245				0.120		14		525.0				0.5		**219**				0.1
222	246				0.160		0		670.0				0.1		**288**				0.1
223	247				0.080		1		520.0				0.1		**260**				0.1
224	248						12								**285**				
225	249						11								**337**				0.52
226	25						1								**241**				0.1
227	2-5		267		0.090		41		686.0		1.8		0.2		**317**		0.01		0.05
228	250						100								**396**				0.05
229	251						26								**333**				3.95
230	252						**301**								**64**				0.1
231	253						204								**732**				
232	254				0.020		11		629.0				0.2		**378**				1.03
233	255						55								**544**				1.29
234	256						75								**621**				0.1
235	257				0.030		6		647.0				0.1		**337**				2.30
236	258						66								**438**				0.18
237	259						47								**258**				0.1
238	26						94								**315**				0.1
239	2-6		289		0.020		146		1120.0		2.1		0.3		**5**		**0.07**		0.05
240	260				2.200		14		719.0				0.1		**360**				
241	261						1								**220**				0.4
242	262						13								**337**				2.3
243	263						27								**280**				
244	264						116								**387**				
245	265						49								**277**				0.1
246	266						40								**371**				1.6
247	267						0								**273**				
248	268						13								**238**				0.01
249	269				0.100		122						0.5		**474**				0.1
250	27						69								**455**				
251	270						86								**422**				0.2
252	271						**421**								**518**				**11.39**
253	272						26								**299**				0.25
254	273						50								**346**				0.3
255	274						0												0.34
256	275						0												0.25
257	276						0												0.2

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
258	277						0												0.2
259	278						87								**307**				
260	279						50								**341**				0.1
261	28						73								**1**				0.1
262	280						144								**244**				0.2
263	281				0.100		10		553.0				0.1						0.1
264	282						29								98				0.1
265	283						3								**272**				0.1
266	284						3								**246**				0.1
267	285						17								**263**				0.1
268	286						67								**292**				0.2
269	287						56								**262**				0.53
270	288						**281**								97				3.81
271	289						25								**381**				0.89
272	29						41								**234**				
273	290						6								**285**				1.0
274	291						34								**55**				0.1
275	292						53								**135**				
276	293						75								**330**				0.1
277	294						4								**178**				0.1
278	295						8								**237**				0.58
279	296						1								**178**				0.19
280	297						74												0.3
281	298						4								**747**				0.58
282	299						4												0.04
283	3						12								**31**				
284	30						16								95				
285	300						7								**157**				0.2
286	300-1				0.300		48											<	0.1
287	300-2				0.340		94											<	0.1
288	301						77								**311**				0.08
289	302						3								**273**				0.1
290	303						5								**242**				0.1
291	304						14								**326**				0.1
292	305						2								**205**				
293	306						17								**260**				0.2
294	307						30								**232**				0.1
295	308						10								**262**				0.55
296	309						1								**239**				0.1
297	31						6								**234**				
298	3-1		151		0.050		148		859.0		0.3		0.2		**334**		0.01		0.37
299	310						2												0.1
300	3-10		237		0.760		**582**		2390.0		2.5		0.4		**698**		**0.35**		0.05

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
301	311						11								**172**				1.14
302	3-11		238		0.050		9		477.0		0.9		0.2		**234**		0.01		0.05
303	312						3												0.15
304	313						16								**324**				0.1
305	314						**509**								**242**				
306	315						28								**176**				**14.0**
307	316			<	0.100		77								96				1.2
308	317						86								**252**				0.1
309	318						16								**330**				0.46
310	319						1								**334**				
311	32						2								**117**				0.1
312	3-2		192		0.780		2		358.0		1.7		0.8		**33**		**0.14**		0.05
313	3-2 dup		190		0.800		2		361.0		1.6		0.8		**33**		**0.17**		0.05
314	320						16								**330**				0.46
315	321						54								**277**				0.1
316	322						185								**500**				1.2
317	323						13								**228**				1.52
318	324						32								**141**				
319	325						48								**261**				0.17
320	326						16								**280**				0.2
321	327						20								**269**				
322	328						23								**269**				
323	329						9								**268**				
324	33						22								**258**				0.18
325	3-3		231		0.040		33		557.0		1.5		0.7		**215**		0.01		0.05
326	330				0.100		11						0.2		**326**				5.19
327	331				0.100		78		950.0				0.1		**366**				1.8
328	332						10												
329	333						11												0.02
330	334						11												
331	335						9								**314**				
332	336						178								**858**				0.02
333	337						135								**374**				
334	338						178								**239**				0.1
335	339						16								**440**				1.0
336	34						68								**135**				
337	3-4		238		0.210		48		625.0		1.3		0.9		**198**		**0.82**		0.05
338	340						169								**37**				0.1
339	341						**1685**								**118**				
340	342						1								**256**				0.34
341	343						20								97				
342	344						48								95				0.1
343	345						7								**240**				0.14

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
344	346				0.180		2		370.0						**225**				0.01
345	347						1								**134**				0.1
346	348						2								**210**				0.01
347	349						41								**23**				0.31
348	35						11								**155**				0.1
349	3-5		319		0.210		176		1160.0		3.1		0.3		**472**		0.03		0.05
350	350						3								**160**				0.1
351	351						7								**235**				0.1
352	352				0.190		6		510.0				0.3		**249**				0.1
353	353						0												
354	354						34								**15.7**				0.1
355	355						35								**194**				0.24
356	356						**363**	+	1999.0						**617**				9.08
357	357				0.000		21		586.0				0.1		**294**				0.82
358	358						19								**263**				0.1
359	359						1								**210**				0.44
360	36						**337**								**24**				0.36
361	3-6		253		0.070		222		1270.0		0.7		0.2		**451**		0.01		1.32
362	360						11								**193**				
363	361						122								**296**				2.04
364	362						10								**170**				
365	363				0.100		3						0.1		**276**				0.1
366	364				0.100		1		436.0				0.1		**231**				0.42
367	365				0.000		9		529.0				0.0		**258**				1.7
368	366				0.100		3		450.0				0.1		**234**				0.87
369	367						6								**276**				0.1
370	368						70								**348**				0.38
371	369				0.100		10		588.0				0.1		**308**				0.1
372	37						21								**172**				0.1
373	3-7		317		0.170		**252**		1540.0		3.6		0.2		**532**		0.04		0.05
374	370				0.080		44						0.1		**396**				1.96
375	371				0.030		14		680.0				0.1		**305**				0.35
376	372						6								**252**				0.78
377	373						6								**311**				0.1
378	374						**272**								**352**				6.8
379	375						36								**175**				0.1
380	376						**272**								**352**				6.8
381	377				0.100		2						0.1		**247**				0.1
382	378				0.100		2						0.6		**259**				0.1
383	379				0.100		12		628.0				0.1						0.3
384	38						5								**27**				
385	3-8		353		0.100		54		1020.0		3.1		0.1		**368**		0.01		5.93
386	380				0.100		4		460.0				0.3						

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
387	381						135								**570**				6.11
388	382						23								**340**				0.69
389	383				0.100		11		595.0				0.1		**312**				0.81
390	384						2								**155**				0.1
391	385						28								**291**				1.23
392	386						10								**262**				0.1
393	387						177								**220**				0.1
394	388						92								**294**				0.1
395	389						164								**546**				0.1
396	39				0.170		6		400.0				**1.7**						0.1
397	3-9		208		0.800		27		452.0		2.2		0.6		**65**		0.05		0.05
398	390						28								**291**				1.23
399	391						9								**298**				0.75
400	392						69								**332**				0.15
401	393						122								**144**				0.1
402	394						5						0.2						0.14
403	395						2								82				
404	396						2		377.0				1.0		**193**				
405	397				0.140		14		720.0				0.1		**309**				0.52
406	398			<	0.050		68								**337**				4.10
407	399				0.540		1		490.0				0.5						0.1
408	4						**420**								**180**				
409	40						12												0.1
410	400						182								**422**				
411	400-1				0.240		135											<	0.1
412	400-2		271		0.100		147		1060.0		0.3		0.3		**445**		0.01		1.35
413	400-3				0.060		152												0.31
414	400-4			<	0.020		163												0.45
415	401						2												0.1
416	402						14												0.31
417	403				0.100		16						0.1		**351**				0.39
418	404						31								**419**				1.52
419	405						**347**								**385**				2.12
420	406						36								**410**				0.1
421	407						5								**326**				0.18
422	408						1												0.1
423	409						0												
424	41						19								**375**				
425	4-1		174		0.120		53		583.0		0.7		0.3		**237**		0.05		0.05
426	410						4								**266**				0.37
427	411						34								**262**				0.1
428	412						60								**346**				
429	413						161								**344**	<	0.01		0.1

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
430	414				0.080		5		500.0				0.8		**172**				0.1
431	415				0.090		7		650.0				0.2		**322**				1.69
432	416				0.030		30		759.0				1.1		**220**				0.4
433	417						43			<	0.5				**360**				0.21
434	418						104								**317**				3.23
435	419						30								**270**				1.2
436	42						7								**207**				
437	4-2		188		0.020		54		626.0		0.8		0.3		**0.5**		0.01		0.05
438	4-2 dup		188		0.060		53		620.0		0.9		0.3		**0.5**		0.01		0.05
439	420				0.190		83		1148.0				1.5		**112**				0.1
440	421						66												1.1
441	422						6												0.16
442	423						58												0.97
443	424						32												0.44
444	425						0												
445	426						139								**325**				
446	427						2						0.4						0.2
447	428				0.000		1		527.0				0.1		**283**				
448	429				0.310		15		853.0				0.7		**165**				
449	43						193												0.1
450	430				0.100		13		433.0				0.4		**248**				
451	431						7								**270**				
452	432				0.050		3		620.0				0.1		**307**				0.05
453	433				0.100		20		567.0				0.1		**281**				9.61
454	434				0.100		2		465.0				0.2						0.14
455	435						**427**								**598**				0.1
456	436				0.070		1		670.0				0.2		**407**				0.05
457	437						7								**681**				
458	438						109								**298**				2.55
459	439				0.050		14		595.0				0.0		**293**				0.05
460	44						9												
461	440				0.100		1		399.0				0.7		**278**				0.1
462	441				0.100		4		500.0				0.1		**273**				0.36
463	442				0.100		2		500.0						**280**				0.89
464	443				0.100		1		485.0				0.1		**229**				1.26
465	444				0.100		4		637.0				0.7		**267**				0.14
466	445				0.100		2		377.0				0.8		81				
467	446						1		506.0						**268**				0.1
468	447						7								**355**				
469	448						8		7.5				0.1		**381**				0.01
470	449				0.100		1		484.0				0.1		**203**				0.1
471	45						15								**188**				
472	4-5		262		0.070		104		863.0		1.8		0.2		**355**		0.01		0.05

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
473	450				0.100		1		397.0				0.1		**152**				0.21
474	451						157								**560**				**11.9**
475	452						**288**								**621**				4.8
476	453						40								**1379**	<	0.01		0.1
477	454						**773**	+	1999.0						**590**				5.84
478	455						16								**391**				**12.0**
479	456						8								**56**				0.1
480	457				0.210		7		478.0						**191**				
481	458				0.100		2		160.0				0.0		**59**				
482	459				0.170		0		388.0				0.8		**173**				
483	46						73								**37**				
484	4-6		209		0.080		10		444.0		3.7		0.2		**209**		0.02		0.05
485	460				0.190		0		398.0				0.9		**195**				
486	461				0.240		0		386.0				0.9		**185**				
487	462						182												0.24
488	463						**2040**	+	1999.0			<	0.1		**1118**				1.05
489	464				0.050		2		441.0				0.2		**221**				
490	465						2						0.1						0.2
491	466				0.080		5		629.0				**1.9**		**188**				
492	467				0.080		0		433.0						**151**				0.1
493	468				0.060		11		569.0						82				0.1
494	469						1								**145**				0.1
495	47						177								**588**				
496	4-7		275		0.290		170		1140.0		1.0		0.4		**298**		0.03		0.05
497	470				0.060		1		231.0				0.5		**112**				
498	471						42	+	1999.0						**1553**				0.1
499	472						13								**256**				6.02
500	473						3								**22**				0.1
501	474				0.050		1		230.0				0.0		83				0.1
502	475				0.140		1		539.0				0.3		**144**				
503	476				0.120		42		482.0				0.2		**184**				0.1
504	477				0.100		4		306.0				0.1		**126**				2.23
505	478						1								**117**				0.12
506	479				0.100		1		265.0				0.1		**121**				0.1
507	48						82								**228**				
508	4-8		191		0.040		162		866.0		1.2		0.1		**223**		0.01		1.46
509	480				0.100		96		925.0				0.6		**373**				
510	481				0.100		11		548.0				1.5		**54**				0.1
511	482						3		278.0						**21**				0.1
512	483						2		176.0						**49**				0.1
513	484				0.100		8		381.0				0.1		**156**				0.6
514	485						134								**133**				2.74
515	486				0.100		4												0.1

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
516	487						64			<	0.5				95.5				4.04
517	488				0.050		2		207.0										
518	489						150								**283**				0.61
519	49						67								**242**				
520	4-9		293		0.210		57		768.0		1.3		0.4		**299**		**0.15**		0.05
521	490						16		130.0										
522	491						3								**72.3**				0.48
523	492						1								**156**				0.1
524	493				0.100		1		82.0						**27.1**				0.31
525	494						9								**56**				
526	495						8		292.0						**128**				
527	496						95								**681**				0.1
528	497						66								**281**				0.1
529	498				0.070		3								**34**				0.1
530	499						5								**54**				0.4
531	5				0.000		9		509.0				0.9		**134**				
532	50						**358**								**111**				
533	500						5								**154**				0.1
534	500-1				0.060		18											<	0.1
535	500-2		281	<	0.020		108		968.0		0.5		0.2		**438**		0.01	<	0.1
536	500-3			<	0.020		42												0.33
537	500-4				0.260		184												0.53
538	500-4 dup				0.340		51												0.53
539	501						36								87.5				
540	502						35			<	0.5				87.5	<	0.01		
541	503				0.020		5		180.0						**12**				0.1
542	504				0.100		2		201.0				0.6		84				0.1
543	505						0								**78**	<	0.01		0.1
544	506				0.100		3		98.0				0.1		**30**				0.35
545	507				0.100		3		164.0				0.7		**42**				
546	508						2		140.0										
547	509						**771**	+	1999.0			<	0.1		**517**				2.27
548	51						10								**191**				
549	5-1		252		0.200		**615**		2440.0		0.3		0.2		**529**		0.01		1.37
550	52						32								**16**				0.1
551	5-2		284		0.080		235		1330.0		1.8		0.2		**376**		0.05		0.72
552	53						145								**320**				
553	5-3		260		0.190		201		1180.0		1.5		0.5		**421**		**2.20**		0.05
554	54						10								**176**				
555	5-4		318		0.070		**453**		2000.0		1.5		0.1		**554**		0.05		3.01
556	55				0.190		14						**262.0**		**397**				0.11
557	5-5		258		0.130		68		752.0		1.5		0.3		**348**		0.03		0.05
558	56						0												

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
559	5-6		232		0.190		74		725.0		1.2		0.4		**317**		**0.09**		0.05
560	57				0.100		9		584.0				0.3		**261**				0.1
561	5-7		285		0.060		**269**		1570.0		1.6		0.2		**0.5**		0.02		0.05
562	5-7 dup		284		0.050		**269**		1580.0		1.8		0.2		**0.5**		0.02		0.05
563	58						**311**								**467**				0.05
564	5-8		280		0.090		**285**		1440.0		2.0		0.2		**540**		0.05		0.05
565	59						**315**								**563**				0.14
566	6						52								**333**				
567	60						0								**776**				2.98
568	600-1				0.030		17											<	0.1
569	600-2		305		0.050		**354**		1730.0		0.3		0.1		**680**		0.01	<	0.1
570	600-3			<	0.020		165												7.88
571	600-4			<	0.020		154												0.61
572	61				0.100		1		400.0				0.0						0.1
573	6-1		334		0.570		**479**		2170.0		2.4		0.4		**544**		**0.11**		0.05
574	62				0.160		38		930.0				0.1		**357**				0.05
575	6-2		430		0.570		**387**		2100.0		**10.6**		0.6		**563**		**1.22**		0.05
576	63				0.660		2		630.0				0.1		**305**				0.05
577	64						79								**284**				
578	6-4		328		0.510		**372**		1850.0		1.8		0.5		**586**		**0.14**		0.05
579	65						21												0.1
580	66						2								**269**				
581	67						27								**310**				0.01
582	6-7		182		0.500		**409**		1820.0		0.3		1.2		**372**		0.05		0.05
583	68						4		340.0				0.6		**133**				0.1
584	69						33								**283**				0.1
585	7				0.310		53		950.0				0.2		**293**				0.47
586	70						20								**258**				
587	700-1				0.100		54											<	0.1
588	700-2		244		0.080		43		643.0		0.9		0.4		**297**		0.03	<	0.1
589	700-3				0.040		162											<	0.1
590	700-4								18.0						**0.2**			<	0.02
591	71						47								**276**				0.1
592	7-1		315		0.050		**530**		2350.0		3.2		0.1		**551**		0.01		1.34
593	72						5								**303**				
594	73						33								**373**				1.37
595	74						2								**131**				
596	7-4		240		0.080		109		845.0		0.7		0.2		**407**		0.01		0.05
597	7-4 dup		240		0.090		112		866.0		0.7		0.2		**407**		0.01		0.05
598	75						10								**349**				
599	7-5		219		0.040		80		729.0		0.3		0.1		**324**		0.01		0.16
600	7-5 dup		220		0.030		82		708.0		0.3		0.1		**324**		0.01		0.21
601	76						1								**180**				0.14

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
602	77						14								**232**				
603	78						68								**492**				
604	79						30								**280**				0.22
605	8						4								**121**				
606	80						80								**318**				0.68
607	800-1				0.070		113												0.53
608	800-2		239		0.220		149		998.0		0.6		0.5		**418**		0.01	<	0.1
609	800-3				0.210		200												2.58
610	800-4				0.040		46												0.65
611	81						42								**273**				1.25
612	82						78								**312**				
613	83				0.100		11		593.0						**328**				2.6
614	84						8								**240**				0.11
615	85						4								**242**				
616	86						17								**260**				
617	87						8								**229**				1.0
618	88						8								**113**				0.1
619	89						53								**225**				0.1
620	9						4								**266**				
621	90						0								**147**				
622	900-1			<	0.020		47											<	0.1
623	900-2				0.040		86											<	0.1
624	900-3				0.170		79											<	0.1
625	900-4		209		0.100		38		590.0		0.7		0.5		**198**		0.02	<	0.1
626	91			<	0.030		10								**209**				0.05
627	92						5								**229**				0.1
628	93						24								**182**				
629	94						25								**126**				
630	95						1								**125**				
631	96						28								**424**				0.66
632	97				0.100		12		560.0				1.1						0.1
633	98						103								**382**				0.24
634	99						163								**471**				0.68
635	9a-5		161		0.090		5		364.0		1.3		0.3		**166**		0.02		0.50
636	A-1		118		0.040		69		566.0		2.1		0.1		**146**	<	0.01		1.13
637	A-10				0.060		23												5.32
638	A-11				0.050		94												2.45
639	A-12				0.150		32												1.55
640	A-13				0.100		33												7.47
641	A-13 dup				0.100		33												7.47
642	A-15		156		0.080		183		1080.0		2.5		0.1		**312**	<	0.01		1.64
643	A-2		120		0.120		63		527.0		1.8		0.1		**154**	<	0.01		2.5
644	A-3				0.030		3												2.07

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
645	A-4				0.030		7												2.02
646	A-5				2.870		56												**46.6**
647	A-6		115		0.050		49		424.0		0.5		0.1		**194**		0.02	<	0.1
648	A-7			<	0.020		8												1.53
649	A-8				0.140		114												1.01
650	A-9				0.120		50												0.5
651	B-1				0.020		106												3.76
652	B-10				0.040		92												6.93
653	B-11				0.040		26												1.82
654	B-12				0.040		43											<	0.1
655	B-13		72	<	0.020		166		730.0	<	0.5	<	0.1		**296**	<	0.01		8.35
656	B-13 dup				0.030		163												8.59
657	B-2		76		0.020	<	1		159.0		0.6	<	0.1		**76**	<	0.01		0.85
658	B-3			<	0.020		154												**23.2**
659	B-4		81		0.020		1		174.0		0.6	<	0.1		84	<	0.01		0.47
660	B-5			<	0.020		78												**11.2**
661	B-6				0.040		64												4.14
662	B-7			<	0.020		27											<	0.1
663	B-8			<	0.020		41												1.52
664	B-9				0.030		5											<	0.1
665	C-1			<	0.020		1											<	0.1
666	C-3		192	<	0.020		194		1040.0		1.1		0.1		**311**	<	0.01		0.53
667	Carleton Lodge 3rd Floor (dist # 2)				0.012		43												0.01
668	Carleton Lodge Kitchen (dist #1)		239		0.022		45		674.7				0.2		**57.7**				
669	Carleton Lodge #4 Well		237		0.028		44		583.9		0.0		0.1		**334**				
670	Carleton Lodge #5 Well		250		0.087		44		658.7		1.4		0.2		**330**				
671	Carp #1 Well		230		0.197		49		630.1		1.9		0.7		**178**				
672	Carp #2 Well		216		0.122		53		638.4		1.4		0.5		**213**				
673	Carp Arena				0.017														
674	Carp School / Video (dist #1)				0.026		59						0.5						0.01
675	Carp School/Medical Centre				0.020		64												
676	D-1		**24**		0.050		12		233.0		1.1	<	0.1		87	<	0.01		3.08
677	D-10			<	0.020		6												0.44
678	D-11			<	0.020		8												1.34
679	D-12		31	<	0.020		46		331.0	<	0.5		0.1		96	<	0.01		7.75
680	D-13			<	0.020		47												1.19
681	D-14		85	<	0.020		12		227.0		0.8		0.1		96	<	0.01	<	0.1
682	D-14 dup			<	0.020		11											<	0.1
683	D-2				0.050		12												3.78
684	D-3				0.020		18												2.21
685	D-4			<	0.020		127												2.40
686	D-5			<	0.020		19												3.41
687	D-6				0.060		79												1.43

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
688	D-7		82	<	0.020		42		440.0		1.5	<	0.1		**124**	<	0.01		**13.3**
689	D-8			<	0.020		32												2.24
690	D-9			<	0.020		8												0.22
691	Dist 17 Channonhouse (K.P.1D.)																		
692	E-1			<	0.020		41												1.23
693	E-10				0.030		**321**												3.97
694	E-11				0.020		149												0.20
695	E-12			<	0.020		98												**16.7**
696	E-13		**805**		1.510		**1340**		5120.0		**7.9**		**3.4**		**147**		0.02	<	0.1
697	E-13 dup		**809**		1.490		**1320**		5120.0		**5.5**		**3.4**		**155**		0.02	<	0.1
698	E-15				0.040		**350**												**14.4**
699	E-2				0.370		**297**												0.1
700	E-3				0.480		**467**											<	0.1
701	E-4				1.210		**402**											<	0.1
702	E-5		106	<	0.020		4		256.0		0.5		0.1		**125**	<	0.01	<	0.1
703	E-6			<	0.020		**353**												6.84
704	E-7		203	<	0.020		**273**		1220.0		1.3		0.2		**332**	<	0.01		0.16
705	E-8				0.030		**257**												**15.1**
706	E-9			<	0.020		190												0.2
707	F-1			<	0.020		11												**15.7**
708	F-10				0.030		156												**22.6**
709	F-12		214		0.360		121		862.0		4.5		0.2		**226**	<	0.01	<	0.1
710	F-13		161	<	0.020		**445**		1850.0		0.7		0.1		**310**	<	0.01		4.63
711	F-13 dup		163	<	0.020		**442**		1780.0		0.5		0.1		**293**	<	0.01		4.60
712	F-2			<	0.020		69												9.29
713	F-3			<	0.020		83												1.28
714	F-4			<	0.020		99												9.43
715	F-5				0.050		**277**												**21.5**
716	F-6				0.060		142												**10.4**
717	F-7			<	0.020		55												0.79
718	F-8				0.050		101												**12.5**
719	F-9		170	<	0.020		105		798.0		1.3		0.1		**227**	<	0.01		**11.3**
720	GAC #1																		
721	GAC #2																		
722	K.P#2		271		0.073		138		1027.0				0.4		**350**				5.52
723	K.P. Dist#1		264		0.023		140		989.0				0.5		**319**				
724	K.P. Dist#2		274		0.017		142		910.8				0.5		**354**				0.01
725	K.P.#1		248		0.056		139		949.3				0.5		**289**				
726	King's Park #1 Dist		260		0.023		139		916.5				0.4		**308**				
727	King's Park #1 Well		256		0.073		135		898.2		1.1		0.4		**296**				
728	King's Park #2 Dist		274		0.020		147		961.4				0.4		**357**				0.01
729	King's Park #2 Well		273		0.063		142		951.3		1.1		0.4		**354**				0.01
730	KP #1 Dist - 17 Channonhouse & Mc Storey																		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Alkalinity (mg/L)		Ammonia (mg/L)		Chloride (mg/L)		Conductivity (uS/cm)		Dissolved Organic Carbon (mg/L)		Fluoride (mg/L)		Hardness (mg/L as $CaCO_3$)		Hydrogen Sulphide (mg/L)		Nitrate (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
731	KP #2 Dist - 17 Channonhouse and Mc Storey																		
732	Munster #1 Well		238		0.106		70		787.2		1.2		0.7		**248**				0.02
733	Munster #2 Well		257		0.102		62		772.3		0.0		0.6		**293**				
734	Munster Beckers/Mac's (dist #1)		256		0.016		71		817.2				0.7		**253**				0.02
735	Munster School				0.020		74												0.01
736	Munster School/23 Dogwood (dist #2, Dogwood in summer)				0.017		68						0.7						0.01
737	Munster School/Community Centre-in summer				0.010														
738	Raw Water Sample Line																		
739	Rideau Valley		224				101		837.6		2.2		0.4		**252**				
740	Vars #1 Well		194		0.127		30		451.6		2.8		0.2		**166**				
741	Vars #2 Well		155		0.188		22		382.4		**212.9**		0.3		**193**				8.64
742	Vars Grocery		197		0.506		28		467.9		0.0		0.1		**175**				
743	Vars Grocery (Dist #1)		201		0.028		32		489.3				0.1		**193**				0.01
744	Vars School / Restaurant																		
745	Vars School / Restaurant (Dist #2)				0.029		33												0.01
746	Vars School/Restaurant				0.018		32												
747	W.C.Lodge (dist #2)		227		0.048		56		652.0				0.5		**192**				0.01
748	West Carleton Lodge		217		0.017		62		658.5				0.5		**213**				
749	MVC 1		271	<	0.02		12		565						**304**	<	0.01		0.25
750	MVC 2		226	<	0.02		35		573						**256**	<	0.01		2.24
751	MVC 3		189	<	0.02		18		541					<	**1**	<	0.01		0.74
752	MVC 4		236	<	0.02		8		466						**242**	<	0.01		0.64
753	MVC 5		235	<	0.02	<	1		480						**265**	<	0.01		0.18
754	MVC 6		158	<	0.02		1		329						**158**	<	0.01		0.23
755	MVC 7		236	<	0.02		7		484						**240**	<	0.01		0.58
756	MVC 8		61	<	0.02		5		187						81	<	0.01		2.51
757	MVC 9		313	<	0.02		19		681						**344**	<	0.01		1.56
758	MVC 10		203	<	0.02		7		452						**214**	<	0.01		1.73
759	MVC 11		62	<	0.02		1		146						**66**	<	0.01		0.1
760	MVC 12		200		0.03		5		404						**188**	<	0.01		0.16
761	MVC 13		365	<	0.02		5		692						**385**	<	0.01		0.2
762	MVC 15		398	<	0.02		248		1580						**519**	<	0.01		7.77
763	MVC 16		344	<	0.02		116		1030						**432**	<	0.01		1.83
764	MVC 17 (MVC 3 Dup)		225		0.04		27		619						**39**	<	0.01	<	0.1

Notes: 1400 Criterion exceeded for this parameter, see Table 2.1-2 for criteria

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
1	Munster Beckers				72.8		452		0.07		0.72				0.245				
2	Munster School / Community Centre										0.49								
3	1				6.1								17.7		0.290		31.8		24.5
4	10		8.21												**0.580**				
5	100				180								125		0.200		64		16
6	1000-1								0.12										
7	1000-2				39		484		0.18				47		0.140		34		7
8	1000-3								0.06										
9	100-1 (TW1)				74		483	<	0.05				86		0.120		44		2
10	100-2								0.2										
11	100-3								0.11										
12	100-4							<	0.05										
13	101				43														
14	102		7.98												0.170				
15	103				28														
16	104												40				41		4
17	105				37								45				32		1.5
18	106				107								109				44		5
19	107				24														
20	108				71														
21	109				16														
22	11				303								118		**0.800**		148		46.9
23	1-1				2		498		1.94				8		0.070		19		16
24	110												42				18		2
25	1100-1								0.1										
26	1100-2				51		**676**		0.31				47		**0.450**		36		11
27	1100-3							<	0.05										
28	1100-4								0.2										
29	1100-5							<	0.05										
30	1100-6				58		460		0.1				65		**1.350**		37		2
31	1100-7																		
32	1100-8								0.49										
33	1100-8 dup								0.46										
34	111				24														1
35	11-1				48		**560**		0.29				65		0.300		18		4
36	112																		
37	11-2				49		**607**		0.34				108		0.020		20		4
38	113				25														
39	11-3				48		**595**		0.11				129		0.005		13		3
40	114		**2.19**												0.130				
41	115																		
42	116												23.1				19.2		6.7

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
43	117				83														
44	118																		
45	119				5								13				13		3
46	12				19.3								19.7		0.050		8.1		6.6
47	1-2				29		281		0.29				47		**1.240**		15		3
48	120				2.11								18.7				13.5		3.45
49	1200-1								0.17										
50	1200-10								0.11										
51	1200-11							<	0.05										
52	1200-12				88		**611**		0.22				82		**0.590**		54		6
53	1200-12 dup				86		**611**						84		**0.610**		56		6
54	1200-14								0.12										
55	1200-15								0.07										
56	1200-16								0.13										
57	1200-19				72		**578**		0.32				74		**2.840**		51		6
58	1200-2				64		**625**		0.1			<	1		0.010	<	1	<	1
59	1200-3				69		**586**		0.26				65		**0.860**		44		5
60	1200-4								0.08										
61	1200-5								0.3										
62	1200-6								0.3										
63	1200-7				87		**628**		0.12				78		0.380		51		5
64	1200-8								0.1										
65	1200-8 dup								0.1										
66	1200-9								0.27										
67	121				3.1								21.2				14		5.37
68	122				55								65				35		1
69	123				23								32				19		2
70	124				170								152				119		170
71	125				36								62				24		3
72	126				31								32		**1.100**		17		4.2
73	127				123														
74	128		7.43												0.210				
75	129		8.29												0.050				
76	12a-1				34		408		0.33				76		0.170		24		3
77	12b-1				52		**1360**		0.4				67		0.090		102		8
78	13		**8.67**												0.239				
79	1-3				32		293		0.47				52		**0.640**		13		2
80	130				77														
81	131				25														
82	132		8.04												0.150				
83	133												51.2				40.5		6.1
84	134		7.71												0.070				
85	135				40														

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
86	136				21														
87	137				10														
88	138				34								67				35		
89	139				45								90				43		
90	14		8.05												0.224				
91	1-4				37		344		0.36				55		0.010		15		3
92	140				26														
93	141				62								113				40		4
94	142				38								60				29		2
95	143				0.7								10.6				13.4		5.6
96	144		7.87												0.140				
97	145				39.8								28.1				11.4		12.3
98	146				26														5
99	147				44														5
100	148				55.5								76				37.7		3.35
101	149				23								43				22		
102	15				39.7								77.1		0.040		20		3.5
103	1-5				24		500		0.39				56		0.005		13		3
104	150																		
105	151																		
106	152				25								70				19		5.3
107	153				40														
108	154												71				2		
109	155				16								62				25		
110	156				10														
111	157				51								45				31		7
112	158				12.5								56				27		
113	159												0.9				1		0.3
114	16				145								33.1				22.6		12.2
115	1-6				39		**722**		0.12				184		0.005		18		2
116	1-6 dup				38		**715**		0.09				184		0.005		18		2
117	160												51.6				26		1.2
118	161				45								59				29		4
119	162				17														
120	163				8								56				27		
121	164				40								88				45		
122	165				54								134				60		
123	166				50								115				51		
124	167				34								54				25		
125	168				65.3								85.2				32.5		
126	169				56								121.8				49.2		
127	17				66								26				31		15
128	1-7				2		380		1.97				9		0.080		25		18

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
129	17 Channonhouse (K.P.2D)										0.30				**0.320**				
130	170				10								21				21		6
131	171				4								10				13		4
132	172				16														
133	173												63.7				30		1.5
134	174												69.7				29		1.1
135	175												33.4				13		0.4
136	176				26.5								86.2				30		2.4
137	177				29								72				38		
138	178				29.2								75.8				34		1
139	179				55								72				33		2
140	18				19.2								106		**8.200**		37.2		5.4
141	180				33								60				33		3
142	181				41								54				20		
143	182				26								37				27		7
144	183				34								49				25		6
145	184				38								42				24		1
146	185				28								52				31		
147	186				43								63				34		
148	187				26								46				28		
149	188				58								90				47		
150	189				34								49				25		6
151	19				49								56.7		**0.610**		32.4		13.3
152	190				35								45				22		5
153	191				35								68				26		4
154	192				18														
155	193				27														
156	194				36														
157	195				17														
158	196				27														
159	197				50												30		2
160	198																		
161	199				54								95				49		2
162	2				14.2								14.8		**4.600**		9.3		12.2
163	20				27.2								94.6		**2.900**		42.9		4.4
164	200				37								43				26		1
165	200-1								0.14										
166	200-2				75		**590**		0.17				70		**1.020**		56		6
167	200-3								0.24										
168	200-4								0.28										
169	201												55				16		
170	202												66				7		
171	203												63.5				14		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
172	204												69				6.9		
173	205												72.5				13		
174	206												101.4				13.5		
175	207												70				8.3		
176	208												65				12.5		
177	209												120				15.6		
178	21				27.5								61.5				18.9		15.2
179	2-1				53		374		0.36				63		0.170		28		4
180	210												59				9.4		
181	211												84.5				13		
182	212												64.5				36.1		2.7
183	213				12.3								85.3				8.0		
184	214				41								95				17.9		
185	215				22.5								101.4				20.5		
186	216				50								51				33		7
187	217				51														
188	218				57								114				36		2
189	219												9.6				15.3		
190	22				33.6								65.9		**1.000**		12.2		7.6
191	2-2				14		338		0.66				18		0.050		14		5
192	220				18.8														
193	221				38.7								1.8				0.4		
194	222												16.9				50.4		
195	223				47														
196	224				47								86				30		1
197	225												141				52		2.3
198	226												133				59		2.2
199	227												99				42		1.6
200	228												110				43		11.2
201	229												104				45		5
202	23												50				34		
203	2-3				20		360		0.41				44		0.060		18		4
204	230												95				38		12.7
205	231				28								61.2				27.4		3.35
206	232				14								59				42		
207	233																		
208	234		7.84												0.300				
209	235																		
210	236																		
211	237				28								61.2				27.4		3.35
212	238				19.9								29.7				23.1		
213	239		7.92												0.090				
214	24				38								58.3		0.090		45.3		24

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
215	2-4				19		349		0.28				40		0.350		17		3
216	240		8.40												**0.720**				
217	241		8.11												0.210				
218	242				32.6														
219	243				30								71				25		3
220	244				118								1				11		4
221	245		**8.69**												0.250				
222	246		7.74												0.230				
223	247		7.01												**1.120**				
224	248				23								76				23		1
225	249				67								54				49		1
226	25				19								85				7		2
227	2-5				42		446		0.37				99		**0.610**		17		1
228	250				52								94.4				38.8		16.1
229	251				44								82				31		3
230	252				177								14				7		6
231	253				117								232				37.4		57
232	254		7.45												0.020				
233	255				408														
234	256				**508**								153				58		6
235	257		7.10												0.060				
236	258				63														
237	259				52														6
238	26				93								80				28		6
239	2-6				58		**728**		0.42				2		0.040		0.5		0.5
240	260		7.06		0										0.040				
241	261				16												16		
242	262				0.01								75.6				36		
243	263				48.2								66.7				27.6		13.6
244	264				51								99				34		4
245	265				40														
246	266				48.9								96.3				31.8		3.1
247	267				45														
248	268																		
249	269		7.65												**1.360**				
250	27				120								93				54		4
251	270												94.2				45.4		5.45
252	271												141				40.4		8.45
253	272												73.6				28.1		2.3
254	273												85.8				32		2.35
255	274																		
256	275																		
257	276																		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
258	277																		
259	278				33								75				29		2
260	279				165														
261	28				100								1				1		2
262	280				22												9		
263	281		7.25												0.060				
264	282				28														
265	283				36								74				22		2
266	284				28														
267	285				63														
268	286																		
269	287				31								67				23		1
270	288				277														
271	289				289								88				39		3
272	29				35.4								67.9		**0.810**		15.7		5.9
273	290				52														
274	291				40														
275	292				202														3
276	293				22														
277	294				11								61				7		
278	295				28														
279	296				41														
280	297				33														
281	298																		
282	299				15								45				2.4		3.7
283	3				1.7								9.5		**0.990**		1.8		12.5
284	30				25.6								18.9		0.150		11.6		11
285	300				33														
286	300-1								0.47										
287	300-2								0.37										
288	301												77.9				28.2		3.2
289	302				11														
290	303				20								72				15		2
291	304				51.6														
292	305				22								54				17		2
293	306				35														
294	307																		
295	308				35								67				23		3
296	309				45														
297	31				29.6								59.9				24.7		
298	3-1				52		**558**		0.25				96		0.005		23		2
299	310				2														
300	3-10				149		**1550**		1				126		0.050		93		9

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
301	311				27														
302	3-11				21		310		0.38				64		0.010		18		1
303	312				25														
304	313				38								82				29		5
305	314				97								54				26		0.4
306	315				14														
307	316				63														
308	317				36														
309	318				28								58				31		8.5
310	319																		
311	32																12		5
312	3-2				5		233		0.82				5		0.030		5		13
313	3-2 dup				5		235		0.82				5		0.020		5		13
314	320				28								58				31		8.5
315	321				3														
316	322																		
317	323																		
318	324				34.6								32.2				14.7		27.7
319	325				76														
320	326				44														
321	327												65				26		
322	328												68				24		
323	329												57				30		
324	33				19														
325	3-3				18		362		0.09				48		0.800		23		6
326	330		8.36												0.050				
327	331		7.00												0.050				
328	332				42														
329	333				35												0.1		
330	334				32												0.2		
331	335				38								93				20		
332	336				18								258				52		
333	337												111.5				23		
334	338				100														
335	339				275														
336	34				26								31				14		6
337	3-4				18		406		0.31				53		**0.590**		16		5
338	340				87														
339	341																		
340	342				17								66				22		1
341	343				16														
342	344				52														
343	345				30								74				13		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
344	346		7.80												0.010				
345	347				36												12		2
346	348				1														
347	349				4								6				2		5
348	35				17														
349	3-5				64		**754**		0.38				138		**2.320**		31		2
350	350				42														
351	351				21								26				51		5
352	352		7.53												0.230				
353	353																		
354	354				7								3	<	0.010		2		2
355	355				14								53				15		
356	356				118								163	<	0.010		51		10
357	357		8.04		0										0.070				
358	358				35								74	<	0.010		19		4
359	359				22.1														
360	36				3														
361	3-6				47		**825**		0.19				128		0.005		32		3
362	360				33.6								73.8				2.7		1.3
363	361				28														
364	362				31.6								41				16.4		10.5
365	363		**1.00**												**1.610**				
366	364		7.71												0.050				
367	365		7.40												0.000				
368	366		7.50												0.050				
369	367				41														
370	368																		
371	369		7.20												**0.740**				
372	37				20								11						5
373	3-7				98		**1000**		0.33				172		**3.200**		25		2
374	370														0.010				
375	371		7.71												0.030				
376	372				21														3
377	373				25														
378	374				30								102				23.3		22
379	375				101												16		
380	376				30								102				23.3		2.2
381	377		7.80												0.260				
382	378		7.83												**1.220**				
383	379		8.19												0.050				
384	38				17.6								8.3		**0.570**		1.5		13.8
385	3-8				89		**663**		0.56				116		0.005		19		43
386	380		7.85												0.130				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
387	381												152				45.6		2.6
388	382												91.4				27.2		
389	383		7.87												0.060				
390	384				29.8								53				5.5		2.1
391	385				15								77				24		
392	386				30														
393	387																		
394	388				138								78				24		
395	389				51														
396	39		**9.00**												0.210				
397	3-9				2		294		0.82				11		0.150		9		11
398	390				15								77				24		
399	391				14								78				25		
400	392				31								90				26		2
401	393				36														
402	394														0.040				
403	395				16.4								20.9				1.5		
404	396		7.67												**0.550**				
405	397		7.26												0.052				
406	398				37														
407	399		7.55												**2.420**				
408	4				7.4								43.3		0.090		17.5		17.5
409	40				7								3				2		2
410	400												26.1				53.1		
411	400-1								0.26										
412	400-2				81		**689**		0.22				71		0.380		65		5
413	400-3								0.18										
414	400-4								0.13										
415	401																		
416	402				35								78				23		
417	403		8.06												0.080				
418	404				141														
419	405												122				19.3		22.2
420	406				33.5								108				34.1		1.33
421	407				102								94				22		3
422	408				6														
423	409																		
424	41				22.8								122		**2.800**		17.1		26.9
425	4-1				48		379		0.19				57		0.060		23		4
426	410				44								90	<	0.010		10		2
427	411				111								82				14		3
428	412				248.6								134.7				69.8		
429	413				48								59				48		5

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
430	414		8.50												0.110				
431	415		7.30												0.190				
432	416		7.12												0.010				
433	417				42								85				36		2
434	418				22								89				23		1
435	419												79				18		
436	42				15.2								50.4		**0.730**		19.7		6.8
437	4-2				57		407		0.38				0.5		0.005		0.5		1
438	4-2 dup				57		403		0.15				0.5		0.005		0.5		1
439	420		8.20												0.050				
440	421				64														
441	422				62														
442	423				83														
443	424				50														
444	425													<	6.000				
445	426				29								87				0.26		2
446	427														0.150				
447	428		7.50												0.010				
448	429		7.99												0.090				
449	43				80								84				38		5
450	430		8.25												0.180				
451	431				44.2								81.7				16.1		5.6
452	432		7.17		0										0.020				
453	433		7.42												0.080				
454	434		8.10												**0.310**				
455	435				19								118				74		4
456	436		7.04												0.252				
457	437				724								238				21		3
458	438				34								80	<	0.010		24		6
459	439		7.60												0.020				
460	44				38								56				12		6
461	440		8.22												0.150				
462	441		7.00												0.010				
463	442		8.00												0.100				
464	443		7.70												0.090				
465	444		7.37												**0.550**				
466	445		8.86												0.050				
467	446		**1.00**												**5.880**				
468	447														**0.570**				
469	448														**0.480**				
470	449		7.30												**1.640**				
471	45				54.7								61.5		0.080		15.4		4.4
472	4-5				54		**561**		0.025				101		0.220		25		7

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
473	450		**6.40**												0.050				
474	451				66								170	<	0.010		33		8
475	452				101								196	<	0.010		32		9
476	453				**1210**								504				29		5
477	454				54								200				22		4
478	455				18								104	<	0.010		32		2
479	456				16								14				5		4
480	457		8.05												0.020				
481	458		7.20												0.050				
482	459		7.80												0.050				
483	46				4.4								9.9		0.220		2.9		10.7
484	4-6				17		289		0.17				64		**0.720**		12		2
485	460		7.74												0.210				
486	461		7.72												0.190				
487	462														0.070				
488	463				71								352				58		13
489	464		8.00												0.040				
490	465														0.110				
491	466		8.04												0.090				
492	467		**8.56**												**0.680**				
493	468		8.09												0.080				
494	469				5								25				20		5
495	47				59								118		0.050		71		4.7
496	4-7				50		**741**		0.45				65		0.250		33		8
497	470		8.26												0.030				
498	471				**1198**								495				77		8
499	472				8								86	<	0.010		10		2
500	473				5								4				3		3
501	474		**6.21**												**1.200**				
502	475		8.23												0.070				
503	476		**8.95**												0.270				
504	477		8.10												0.010				
505	478														0.050				
506	479		7.80												0.010				
507	48				29.6								50		**2.800**		25.1		12.1
508	4-8				21		**563**		0.27				68		0.020		13		3
509	480		8.02																
510	481		8.46												0.050				
511	482		**8.58**												0.310				
512	483		8.30												0.190				
513	484		**6.40**												0.020				
514	485				16								45				5		4
515	486																		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
516	487				7								30				5		
517	488		8.30												0.210				
518	489				57								82	<	0.010		19		6
519	49				47.8								14.2				11.3		
520	4-9				54		499		0.37				67		**0.510**		32		7
521	490		**5.70**												0.230				
522	491				6								24	<	0.010		3		
523	492				32								36				16		2
524	493		6.80												**0.360**				
525	494		6.68												0.080				
526	495		7.35												0.060				
527	496				362								225				29		4
528	497				60								78				21		6
529	498		**6.20**												**6.120**				
530	499		8.13												**1.550**				
531	5		8.04												0.200				
532	50				117								31.5		0.170		7.9		17.6
533	500				29								50				7		2
534	500-1								0.16										
535	500-2				101		**629**		0.14				78		0.250		59		3
536	500-3								0.11										
537	500-4								0.58										
538	500-4 dup								0.71										
539	501				27								36				5		2
540	502				24								35				5		2
541	503		7.80												0.060				
542	504		8.34												**0.850**				
543	505				10								23				5		2
544	506		6.88												**0.590**				
545	507		8.07												0.090				
546	508		6.60												**4.340**				
547	509				23								128				48		7
548	51				19.8								38.9		**0.360**		22.8		4.5
549	5-1				74		**1590**		0.31				151		0.040		37		6
550	52				8														
551	5-2				72		**865**		0.51				121		0.040		18		2
552	53				41.2								75.6		**0.330**		31.9		11.9
553	5-3				36		**767**		0.4				119		0.080		30		5
554	54				51.8								35.6		0.100		21.2		3.5
555	5-4				77		**1300**		0.24				174		0.030		29		9
556	55														**0.400**				
557	5-5				51		489		0.38				95		**0.830**		27		4
558	56																		

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
559	5-6				45		471		0.28				89		**0.350**		23		3
560	57		6.65												0.050				
561	5-7				72		**1020**		0.24				0.5		0.005		0.5		1
562	5-7 dup				72		**1030**		0.21				0.5		0.010		0.5		1
563	58				56.5								155				71.9		7.2
564	5-8				50		**936**		0.19				190		0.180		16		3
565	59				117												57		6
566	6				44.6								132		**3.000**		18.3		15
567	60																96.1		8.3
568	600-1							<	0.05										
569	600-2				70		**1120**		0.06				129		0.780		87		3
570	600-3								0.24										
571	600-4							<	0.05										
572	61		7.78												0.250				
573	6-1				125		**1410**		0.64				127		0.140		55		10
574	62		7.49												0.006				
575	6-2				158		**1370**		1.3				110		0.030		70		9
576	63		7.70												**0.322**				
577	64				92								66		0.150		29		15
578	6-4				110		**1200**		0.62				124		0.070		67		10
579	65												10						
580	66				19.1								60.8		0.050		28.5		0.8
581	67				43								68				34		6
582	6-7				135		**1180**		0.57				73		0.030		46		8
583	68		7.40												0.090				
584	69				58								59				33		9
585	7		7.30												0.080				
586	70				45								62				25		6
587	700-1								0.13										
588	700-2				40		418		0.33				48		0.220		43		4
589	700-3							<	0.05										
590	700-4			<	0.1										**11.00**				
591	71				87														6
592	7-1				113		**1530**		2.66				186		0.040		21		4
593	72				52.8								72.3				38.8		1.0
594	73				75.9														
595	74				20.6								39.1				7		
596	7-4				48		**549**		0.025				115		**0.540**		29		2
597	7-4 dup				49		**563**		0.025				115		0.560		29		2
598	75				49.3								79.8				41.7		0.8
599	7-5				39		474		0.28				100		0.030		18		2
600	7-5 dup				39		460		0.025				100		0.020		18		2
601	76				36.1														

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
602	77				98								48.3		**0.370**		27.1		2.6
603	78				120								141		0.050		34		2.9
604	79				49														
605	8				3.9								25.2		0.150		14.1		8.5
606	80				32														
607	800-1								0.15										
608	800-2				64		**649**		0.25				70		0.160		59		7
609	800-3								0.21										
610	800-4								0.1										
611	81				47								78				19		3
612	82				38								88		0.050		22		2
613	83		8.42												**27.70**				
614	84				36														
615	85				46								54				26		2
616	86				24								76		**5.000**		17		1.4
617	87				35														
618	88				15								22				14		7
619	89				38								47				26		7
620	9				23.7								89		0.210		15		1.7
621	90				0.14								26				20		4
622	900-1							<	0.05										
623	900-2								0.06										
624	900-3								0.18										
625	900-4				39		384		0.26				33		0.240		28		6
626	91				26.8								53.6				16.2		2.1
627	92				40								62				18		3
628	93				18								56		0.040		10		1.8
629	94				19.7								29.9		0.390		12.5		4.8
630	95												22				17		4
631	96												72				60		
632	97		7.70												0.050				
633	98				82														
634	99												95				57		14.5
635	9a-5				28		237		0.18				50		0.130		10		2
636	A-1				52		368		0.14				42		0.100		10		1
637	A-10								1										
638	A-11								0.12										
639	A-12								0.28										
640	A-13								0.51										
641	A-13 dup								0.53										
642	A-15				113		**702**		0.26				92		**2.150**		20		3
643	A-2				34		343		0.21				45		0.280		10		2
644	A-3								0.08										

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
645	A-4								0.09										
646	A-5								3.21										
647	A-6				23		276	<	0.05				48		**2.850**		18		2
648	A-7							<	0.05										
649	A-8								0.22										
650	A-9								0.31										
651	B-1								0.14										
652	B-10								0.31										
653	B-11							<	0.05										
654	B-12								0.09										
655	B-13				19		475		0.19				79	<	0.030		24		2
656	B-13 dup								0.14										
657	B-2				8		103		0.1				19	<	0.030		7	<	1
658	B-3								0.18										
659	B-4				13		113		0.2				22	<	0.030		7	<	1
660	B-5								0.21										
661	B-6								0.09										
662	B-7							<	0.05										
663	B-8								0.11										
664	B-9							<	0.05										
665	C-1								0.07										
666	C-3				34		**676**	<	0.05				80	<	0.030		27		2
667	Carleton Lodge 3rd Floor (dist # 2)				39				0.05		0.23				0.110				
668	Carleton Lodge Kitchen (dist #1)		7.70		39		362		0.07		0.23				**1.060**				
669	Carleton Lodge #4 Well		7.65		43		314		0.07		0.31				**0.400**				
670	Carleton Lodge #5 Well		7.66		38		343		0.23		0.26				**0.374**				
671	Carp #1 Well		8.09		19		329		0.47		0.25				**0.436**				
672	Carp #2 Well		7.97		31		354		0.31		0.25				0.020				
673	Carp Arena																		
674	Carp School / Video (dist #1)				28				0.30		0.28								
675	Carp School/Medical Centre				31				0.11		0.45								
676	D-1				64		151		0.17				25		0.230		6		1
677	D-10								0.13										
678	D-11							<	0.05										
679	D-12				30		215		0.29				22		0.250		10		3
680	D-13							<	0.05										
681	D-14				17		148	<	0.05				27	<	0.030		7		2
682	D-14 dup							<	0.05										
683	D-2								0.31										
684	D-3								0.19										
685	D-4								0.17										
686	D-5							<	0.05										
687	D-6								0.3										

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
688	D-7				24		286		0.26				35	<	0.030		9		3
689	D-8								0.08										
690	D-9							<	0.05										
691	Dist 17 Channonhouse (K.P.1D.)										0.29								
692	E-1							<	0.05										
693	E-10								0.07										
694	E-11							<	0.05										
695	E-12							<	0.05										
696	E-13				88		**3330**		1.77				11		**7.030**		29		29
697	E-13 dup				88		**3330**		1.77				11		**10.40**		31		31
698	E-15								0.08										
699	E-2								0.75										
700	E-3								0.89										
701	E-4								1.37										
702	E-5				25		166	<	0.05				32	<	0.030		11		1
703	E-6							<	0.05										
704	E-7				21		**793**		0.07				80	<	0.030		32		3
705	E-8								0.29										
706	E-9								0.22										
707	F-1							<	0.05										
708	F-10								0.23										
709	F-12				30		**560**		0.5				56		**1.880**		21		3
710	F-13				42		**1200**		0.16				91		0.040		20		2
711	F-13 dup				42		**1160**		0.11				86		0.040		19		2
712	F-2								0.11										
713	F-3								0.09										
714	F-4							<	0.05										
715	F-5								0.2										
716	F-6								0.12										
717	F-7							<	0.05										
718	F-8								0.13										
719	F-9				34		**519**		0.12				63	<	0.030		17		4
720	GAC #1										0.27								
721	GAC #2										0.23								
722	K.P#2		7.53		55		**506**		2.25		0.39				**0.370**				
723	K.P. Dist#1				52		459		0.07		0.30				0.233				
724	K.P. Dist#2				57		425		0.07		0.32				0.240				
725	K.P.#1		7.62		52		**513**		0.17		0.17				**0.351**				
726	King's Park #1 Dist		7.45		52		496		0.08		0.27				0.231				
727	King's Park #1 Well		7.60		52		486		0.20		0.19				**0.357**				
728	King's Park #2 Dist		7.45		56		**537**		0.09		0.27				0.225				
729	King's Park #2 Well		7.49		57		**512**		0.18		0.21				**0.403**				
730	KP #1 Dist - 17 Channonhouse & Mc Storey										0.42								

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	pH (unitless)		Sulphate (mg/L)		Total Dissolved Solids (mg/L)		TKN (mg/L)		Turbidity (NTU)		Calcium (mg/L)		Iron (mg/L)		Magnesium (mg/L)		Potassium (mg/L)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
731	KP #2 Dist - 17 Channonhouse and Mc Storey										0.40								
732	Munster #1 Well		7.68		69		442		0.28		0.29				**0.176**				
733	Munster #2 Well		7.59		70		442		0.28		0.73				**0.366**				
734	Munster Beckers/Mac's (dist #1)		7.65		69		442		0.12		0.33				**0.217**				
735	Munster School				71				0.08		0.40				**0.150**				
736	Munster School/23 Dogwood (dist #2, Dogwood in				70				0.19		0.33				**0.160**				
737	Munster School/Community Centre-in summer										0.32								
738	Raw Water Sample Line										1.60								
739	Rideau Valley		7.80		40		487		0.22				63.8		**611.3**		20.5		3.7
740	Vars #1 Well		7.75		2.3		244		0.34		0.28				**1.308**				
741	Vars #2 Well		7.65		5.2		249		2.88		0.38				**0.950**				
742	Vars Grocery				9.1		259		0.05		0.43								
743	Vars Grocery (Dist #1)				3.5		249		0.06		0.40				0.028				
744	Vars School / Restaurant										0.69								
745	Vars School / Restaurant (Dist #2)				3.6				0.07		0.31								
746	Vars School/Restaurant				6.3				0.04		0.47				0.093				
747	W.C.Lodge (dist #2)		8.00		26		304		0.25		0.27				0.010				
748	West Carleton Lodge				31		356		0.10		0.49				**0.408**				
749	MVC 1		7.86		21		367	<	0.01				84	<	0.03		23		4
750	MVC 2		7.8		17		372		0.24				81	<	0.03		13		3
751	MVC 3		8.05		57		352	<	0.01			<	1	<	0.03	<	1	<	1
752	MVC 4		7.89		6		303		0.14				64	<	0.03		20		2
753	MVC 5		7.84		23		312		0.27				78	<	0.03		17		2
754	MVC 6		7.86		11		214	<	0.01				50	<	0.03		8		4
755	MVC 7		7.81		11		315		0.22				50	<	0.03		28		3
756	MVC 8		7.31		13		122		0.11				24	<	0.03		5	<	1
757	MVC 9		7.77		20		443	<	0.01				98	<	0.03		24		1
758	MVC 10		7.83		16		294	<	0.01				71	<	0.03		9		6
759	MVC 11		7.32		7		95		0.31				23		**1.99**		2	<	1
760	MVC 12		7.86		17		263		0.66				52		0.3		14	<	1
761	MVC 13		7.73		20		450	<	0.01				108	<	0.03		28		1
762	MVC 15		7.57		31		**1030**		0.17				142	<	0.03		40		6
763	MVC 16		7.86		27		**670**		0.11				112	<	0.03		37		5
764	MVC 17 (MVC 3 Dup)		7.13		57		402		0.66				9		**4.96**		4	<	1

Notes: 1400 Criterion exceeded for this parameter, see

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
1	Munster Beckers				0		0
2	Munster School / Community Centre				0		0
3	1		**510**				
4	10						
5	100		86				
6	1000-1		27		0		**2**
7	1000-2		61		0		0
8	1000-3		22		0		0
9	100-1 (TW1)		12		0		0
10	100-2		33		0		0
11	100-3		13		0		0
12	100-4		15		0		0
13	101		35				
14	102						
15	103		43				
16	104		6				
17	105		3				
18	106		102				
19	107		33				
20	108		112				
21	109		89				
22	11						
23	1-1		128		0		0
24	110		4				
25	1100-1		10		0		0
26	1100-2		130		0		0
27	1100-3		14		0		0
28	1100-4		61		0		0
29	1100-5		199		0		0
30	1100-6		19		0		0
31	1100-7		45		0		0
32	1100-8		76		0		0
33	1100-8 dup		80		0		0
34	111		1				
35	11-1		77		0		0
36	112						
37	11-2		41		0		**2**
38	113		4				
39	11-3		42		0		0
40	114						
41	115						
42	116		62.7				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
43	117		24				
44	118						
45	119		22				
46	12		50				
47	1-2		21		0		0
48	120		24				
49	1200-1		61		0		0
50	1200-10		91		0		0
51	1200-11		**279**		0		0
52	1200-12		35		0		0
53	1200-12 dup						
54	1200-14		53		0		0
55	1200-15		44		0		0
56	1200-16		39		0		0
57	1200-19		44		0		0
58	1200-2		**239**		0		**10**
59	1200-3		51		0		0
60	1200-4		**217**		**1**		**5**
61	1200-5		104		0		0
62	1200-6		58		0		0
63	1200-7		50		0		0
64	1200-8		85		0		0
65	1200-8 dup		85		0		0
66	1200-9		34		0		0
67	121		21.7				
68	122		1				
69	123		6				
70	124		50				
71	125		39				
72	126		53				
73	127		8				
74	128						
75	129						
76	12a-1		21		0		0
77	12b-1		185		0		0
78	13		0				
79	1-3		20		0		0
80	130		8.4				
81	131		11				
82	132						
83	133		20.8				
84	134						
85	135		4				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
86	136						
87	137		4				
88	138						
89	139						
90	14						
91	1-4		24		0		0
92	140						
93	141		65				
94	142		7				
95	143		86.1				
96	144						
97	145		**246**				
98	146		33				
99	147		19				
100	148		26.4				
101	149		27				
102	15		17				
103	1-5		96		0		0
104	150						
105	151						
106	152		35				
107	153		5				
108	154						
109	155		1				
110	156						
111	157		40				
112	158		2.5				
113	159		114				
114	16		**246**				
115	1-6		23		0		**2**
116	1-6 dup		23		0		0
117	160		8.3				
118	161		43				
119	162		2				
120	163		3				
121	164		47				
122	165		110				
123	166		132				
124	167		7				
125	168		**502**				
126	169		**214**				
127	17		**343**				
128	1-7		73		0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
129	17 Channonhouse (K.P.2D)				0		0
130	170		57				
131	171		10				
132	172		3				
133	173		8				
134	174		17				
135	175		55				
136	176		23				
137	177		8				
138	178		5				
139	179		12				
140	18		23.5				
141	180		10				
142	181		12				
143	182		21				
144	183		5				
145	184		25				
146	185		14				
147	186		4				
148	187		19				
149	188		64				
150	189		5				
151	19		200				
152	190		8				
153	191		8				
154	192		50				
155	193		8				
156	194		17				
157	195						
158	196		5				
159	197		4				
160	198						
161	199		67				
162	2		**208**				
163	20		27				
164	200		1				
165	200-1		26		0		0
166	200-2		35		0		0
167	200-3		40		0		0
168	200-4		35		0		0
169	201						
170	202		2				
171	203		7				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
172	204		4				
173	205		20				
174	206		18				
175	207		22				
176	208		5				
177	209						
178	21		15.2				
179	2-1		12		0		**14**
180	210		3				
181	211		13				
182	212		14.8				
183	213		8.2				
184	214		7				
185	215		3.1				
186	216		71				
187	217		35				
188	218		50				
189	219		**686**				
190	22		60.2				
191	2-2		74		0		0
192	220		14.2				
193	221		102.1				
194	222		**1614**				
195	223		33				
196	224		32				
197	225		**241**				
198	226		102				
199	227		76				
200	228		86				
201	229		85				
202	23		**245**				
203	2-3		39		0		0
204	230		27				
205	231		23				
206	232		18				
207	233						
208	234						
209	235						
210	236						
211	237		23				
212	238		65				
213	239						
214	24		**585**				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
215	2-4		38		0		0
216	240						
217	241						
218	242		10.3				
219	243		30				
220	244		108				
221	245						
222	246						
223	247						
224	248		8				
225	249		8				
226	25		8				
227	2-5		17		0		0
228	250		54				
229	251		15				
230	252		**356**				
231	253		57				
232	254						
233	255		78				
234	256		98				
235	257						
236	258		23				
237	259		43				
238	26		90				
239	2-6		**251**		0		0
240	260						
241	261		1				
242	262		1.7				
243	263		13.6				
244	264		60				
245	265		18				
246	266		28.2				
247	267						
248	268						
249	269						
250	27		49				
251	270		43.2				
252	271		**238**				
253	272		14.8				
254	273		24.8				
255	274						
256	275						
257	276						

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
258	277						
259	278		56				
260	279		83.8				
261	28		**223**				
262	280		63				
263	281						
264	282		10				
265	283		5				
266	284		5				
267	285		9				
268	286						
269	287		29				
270	288		**517**				
271	289		130				
272	29		60				
273	290		3				
274	291		169				
275	292		146				
276	293		24				
277	294		3				
278	295		17				
279	296		9				
280	297		26				
281	298						
282	299		18				
283	3		**265**				
284	30		90.2				
285	300		3				
286	300-1		32		0		0
287	300-2		27		0		0
288	301		53.5				
289	302		5				
290	303		6				
291	304		3				
292	305		5				
293	306		39				
294	307		71.3				
295	308		17				
296	309		7				
297	31		13.6				
298	3-1		34		0		0
299	310		39				
300	3-10		**205**		0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
301	311		1				
302	3-11		9		0		**70**
303	312		12				
304	313		8				
305	314		**413**				
306	315		74				
307	316		140				
308	317		188				
309	318		5.6				
310	319						
311	32		10				
312	3-2		67		0		0
313	3-2 dup		67		0		0
314	320		5.6				
315	321		135				
316	322						
317	323						
318	324		27.7				
319	325		50				
320	326		11				
321	327						
322	328						
323	329						
324	33		44				
325	3-3		25		0		0
326	330						
327	331						
328	332						
329	333						
330	334						
331	335						
332	336						
333	337						
334	338		190				
335	339						
336	34		145				
337	3-4		46		0		0
338	340		**312**				
339	341		**1330**				
340	342		3				
341	343		50				
342	344		126				
343	345		4				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
344	346						
345	347		2				
346	348		38				
347	349		101				
348	35		57				
349	3-5		48		0		0
350	350		3				
351	351		23				
352	352						
353	353						
354	354		188				
355	355		5				
356	356		**321**				
357	357						
358	358		16				
359	359		8.4				
360	36		**349**				
361	3-6		74		0		0
362	360		1.3				
363	361		82				
364	362		10.5				
365	363						
366	364						
367	365						
368	366						
369	367		4				
370	368		40				
371	369						
372	37		68				
373	3-7		93		0		0
374	370						
375	371						
376	372		4				
377	373		3				
378	374		138				
379	375		65				
380	376		138				
381	377						
382	378						
383	379						
384	38		**334**				
385	3-8		43		0		0
386	380						

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
387	381		53.6				
388	382						
389	383						
390	384		2.2				
391	385		5				
392	386		15				
393	387		160				
394	388		81				
395	389		53				
396	39						
397	3-9		69		0		0
398	390		5				
399	391		5				
400	392		36				
401	393		152				
402	394						
403	395		19.4				
404	396						
405	397						
406	398		42				
407	399						
408	4		**300**				
409	40		99				
410	400		129.8				
411	400-1		99		0		0
412	400-2		54		0		**540**
413	400-3		57		0		0
414	400-4		63		0		**2**
415	401		7				
416	402		7				
417	403						
418	404		14				
419	405		183				
420	406		13				
421	407		8				
422	408		7				
423	409						
424	41		44.4				
425	4-1		19		0		**38**
426	410		8				
427	411		19				
428	412		27.3				
429	413		77				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
430	414						
431	415						
432	416						
433	417		26				
434	418		48				
435	419		19				
436	42		36.5				
437	4-2		147		0		0
438	4-2 dup		147		0		0
439	420						
440	421						
441	422						
442	423						
443	424						
444	425						
445	426		62.5				
446	427						
447	428						
448	429						
449	43		124				
450	430						
451	431		5.6				
452	432						
453	433						
454	434						
455	435		103				
456	436						
457	437		78				
458	438		45				
459	439						
460	44		3				
461	440						
462	441						
463	442						
464	443						
465	444						
466	445						
467	446						
468	447						
469	448						
470	449						
471	45		23.1				
472	4-5		27		0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
473	450						
474	451		52				
475	452		136				
476	453		55				
477	454		**456**				
478	455		8				
479	456		53				
480	457						
481	458						
482	459						
483	46		**206**				
484	4-6		7		0		0
485	460						
486	461						
487	462						
488	463		**990**				
489	464						
490	465						
491	466						
492	467						
493	468						
494	469		9				
495	47		140				
496	4-7		105		0		**2**
497	470						
498	471		34				
499	472		6				
500	473		67				
501	474						
502	475						
503	476						
504	477						
505	478						
506	479						
507	48		117				
508	4-8		86		0		0
509	480						
510	481						
511	482						
512	483						
513	484						
514	485		59				
515	486						

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
516	487		17				
517	488						
518	489		46				
519	49		145.9				
520	4-9		38		0		**6**
521	490						
522	491		3				
523	492		9				
524	493						
525	494						
526	495						
527	496		34				
528	497		25				
529	498						
530	499						
531	5						
532	50		**382**				
533	500		10				
534	500-1		11		0		0
535	500-2		28		0		**2**
536	500-3		25		0		**3**
537	500-4		52		0		0
538	500-4 dup		53				
539	501		20				
540	502		19				
541	503						
542	504						
543	505		5				
544	506						
545	507						
546	508						
547	509		**322**				
548	51		21				
549	5-1		**301**		0		0
550	52		**388**				
551	5-2		121		0		0
552	53		160				
553	5-3		54		0		0
554	54		15				
555	5-4		195		0		0
556	55						
557	5-5		20		0		0
558	56						

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
559	5-6		23		0		0
560	57						
561	5-7		**311**		0		0
562	5-7 dup		**316**		0		0
563	58		76.5				
564	5-8		80		0		0
565	59		84				
566	6		31				
567	60						
568	600-1		9		0		
569	600-2		104		0		0
570	600-3		72		0		0
571	600-4		63		0		0
572	61						
573	6-1		**241**		0		0
574	62						
575	6-2		**227**		0		0
576	63						
577	64		81				
578	6-4		157		0		0
579	65		155				
580	66		3				
581	67		28				
582	6-7		**239**		0		0
583	68						
584	69		0.5				
585	7						
586	70		9				
587	700-1		23		0		0
588	700-2		13		0		0
589	700-3		65		0		0
590	700-4				0		0
591	71		45				
592	7-1		**270**		**5**		**34**
593	72		1.7				
594	73		9.9				
595	74		13.3				
596	7-4		12		0		0
597	7-4 dup		13		0		0
598	75		2.5				
599	7-5		16		0		**19**
600	7-5 dup		16		0		**16**
601	76		1.3				

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
602	77		7				
603	78		40				
604	79		9				
605	8		34				
606	80		24				
607	800-1		50		0		0
608	800-2		32		0		0
609	800-3		84		0		0
610	800-4		27		0		0
611	81		15				
612	82		38				
613	83						
614	84		11				
615	85		3				
616	86		10				
617	87		7				
618	88		38				
619	89		45				
620	9		1				
621	90		9				
622	900-1		29		0		**10**
623	900-2		58		0		0
624	900-3		56		0		0
625	900-4		35		0		0
626	91		6.5				
627	92		6				
628	93		16				
629	94		43				
630	95		9				
631	96		20				
632	97						
633	98		27				
634	99		83				
635	9a-5		7		0		0
636	A-1		61		0		0
637	A-10		20		0		0
638	A-11		80		0		0
639	A-12		31		0		0
640	A-13		56		0		0
641	A-13 dup		57		0		0
642	A-15		106		0		0
643	A-2		48		0		0
644	A-3		5		0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
645	A-4		4		0		0
646	A-5		44		0		0
647	A-6		8		0		0
648	A-7		5		0		**1**
649	A-8		87		0		0
650	A-9		23		0		**2**
651	B-1		69		0		0
652	B-10		35		0		0
653	B-11		10		0		0
654	B-12		4		0		0
655	B-13		20		0		0
656	B-13 dup		20		0		0
657	B-2	<	2		0		0
658	B-3		126		0		0
659	B-4		3		0		0
660	B-5		73		0		0
661	B-6		11		0		0
662	B-7		3		0		0
663	B-8		10		0		0
664	B-9		2		0		0
665	C-1	<	2		0		0
666	C-3		88		0		0
667	Carleton Lodge 3rd Floor (dist # 2)				0		0
668	Carleton Lodge Kitchen (dist #1)				0		0
669	Carleton Lodge #4 Well				0		0
670	Carleton Lodge #5 Well				0		**1**
671	Carp #1 Well				0		0
672	Carp #2 Well				0		0
673	Carp Arena				0		0
674	Carp School / Video (dist #1)				0		0
675	Carp School/Medical Centre				0		0
676	D-1		9		0		0
677	D-10		3		0		**18**
678	D-11		11		0		0
679	D-12		30		0		0
680	D-13		23		0		0
681	D-14		10		0		0
682	D-14 dup		10		0		0
683	D-2		20		0		0
684	D-3		12		0		0
685	D-4		71		0		0
686	D-5		9		0		0
687	D-6		65		0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
688	D-7		32		0		0
689	D-8		13		0		0
690	D-9		5		0		0
691	Dist 17 Channonhouse (K.P.1D.)				0		0
692	E-1		7		0		**17**
693	E-10		163		0		0
694	E-11		24		0		0
695	E-12		173		0		0
696	E-13		**1120**		0		0
697	E-13 dup		**1090**		0		0
698	E-15		**364**		0	>	**1500**
699	E-2		**484**		0		0
700	E-3		**592**		0		0
701	E-4		**499**		0		0
702	E-5		2		0		0
703	E-6		131		0		0
704	E-7		107		0		0
705	E-8		79		0		0
706	E-9		98		0		**1500**
707	F-1		11		0		0
708	F-10		117		0		0
709	F-12		94		0		0
710	F-13		**256**		0		0
711	F-13 dup		**246**		0		0
712	F-2		81		0		0
713	F-3		43		0		0
714	F-4		43		0		0
715	F-5		**350**		0		0
716	F-6		73		0		0
717	F-7		14		0		0
718	F-8		40		0		0
719	F-9		91		0		0
720	GAC #1						
721	GAC #2						
722	K.P#2				0		0
723	K.P. Dist#1				0		0
724	K.P. Dist#2				0		0
725	K.P.#1				0		0
726	King's Park #1 Dist				0		0
727	King's Park #1 Well				0		0
728	King's Park #2 Dist				0		0
729	King's Park #2 Well				0		0
730	KP #1 Dist - 17 Channonhouse & Mc Storey				0		0

Table 2.3-1

Groundwater - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Station ID	Interval Name	Sodium (mg/L)		E.coli (cfu / 100 mL)		Total Coliforms (cfu / 100 mL)	
		Qual.	Avg.	Qual.	Avg.	Qual.	Avg.
731	KP #2 Dist - 17 Channonhouse and Mc Storey				0		0
732	Munster #1 Well				0		0
733	Munster #2 Well				0		0
734	Munster Beckers/Mac's (dist #1)				0		0
735	Munster School				0		0
736	Munster School/23 Dogwood (dist #2, Dogwood in				0		0
737	Munster School/Community Centre-in summer				0		0
738	Raw Water Sample Line				**6**		**68**
739	Rideau Valley		65.9				
740	Vars #1 Well				0		0
741	Vars #2 Well				0		0
742	Vars Grocery				0		0
743	Vars Grocery (Dist #1)				0		0
744	Vars School / Restaurant				0		0
745	Vars School / Restaurant (Dist #2)				0		0
746	Vars School/Restaurant				0		0
747	W.C.Lodge (dist #2)				0		0
748	West Carleton Lodge				0		0
749	MVC 1		10		0		0
750	MVC 2		22		0		0
751	MVC 3		126		0		0
752	MVC 4		6		0		**65**
753	MVC 5		4		0		0
754	MVC 6	<	2		0		0
755	MVC 7		3		0		0
756	MVC 8	<	2		0		0
757	MVC 9		7		0		0
758	MVC 10		7		0		0
759	MVC 11		4		0		0
760	MVC 12		14				
761	MVC 13		4				
762	MVC 15		115				
763	MVC 16		39				
764	MVC 17 (MVC 3 Dup)		119				

Notes: 1400 Criterion exceeded for this parameter, see

Table 2.3-2

Groundwater Quality Exceedences
Mississippi - Rideau Source Protection Region

Parameter	ODWQS Criteria	ODWSOG Criteria	ODWQS or ODWSOG Qualifier	No. of Exceedence Locations	No. of Samples	% of Exceedence
Inorganic Chemicals						
Chloride		250 mg/l	AO	95	3,517	3%
Fluoride	1.5 mg/l		MAC	6	489	1%
Nitrate	10 mg/L		MAC	72	3,235	2%
Sodium		200 mg/l	AO	51	738	7%
Metals						
Iron		0.3 mg/L	AO	264	824	32%
Aesthetics parameters						
Total Dissolved Solids		500mg/l	AO	103	374	28%
Hardness		80-100 mg/l	OG	851	875	97%
Sulphate		500 mg/l	AO	4	2,970	0%
Sulfide (H_2S)		0.05 mg/l	AO	18	116	16%
Turbidity		5 NTU	AO	10	6,701	0%
pH		6.5-8.5	OG	36	2,937	1%
Alkalinity		30-500 mg/l	OG	7	356	2%
Dissolved Organic Carbon		5 mg/l	AO	8	136	6%
Microbiological Standards						
E. Coli	ND		MAC	204	7,624	3%
Total Coliform	ND		MAC	301	7,619	4%

Notes:

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Alkalinity (mg/L) as CaCO3									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	277	313	44	30 - 500	0	0%	299	No	298	No
	Mississippi Mills	Almonte Well # 5	2000	2007	286	336	44	30 - 500	0	0%	313	No	313	No
	Mississippi Mills	Almonte Well # 6	2000	2007	254	283	10	30 - 500	0	0%	273	No	273	No
	Mississippi Mills	Almonte Well # 7	2000	2007	289	303	44	30 - 500	0	0%	295	No	295	No
	Mississippi Mills	Almonte Well # 8	2000	2007	7.76	316	43	30 - 500	1	2%	283	No	266	No
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	203	252	18	30 - 500	0	0%	230	No	230	No
	Ottawa	Carp - Well #2	2001	2005	203	250	18	30 - 500	0	0%	216	No	215	No
	Ottawa	King's Park Well #1	2001	2005	232	285	18	30 - 500	0	0%	254	No	253	No
	Ottawa	King's Park Well #2	2001	2005	262	281	17	30 - 500	0	0%	272	No	272	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	0.2	277	19	30 - 500	1	5%	240	No	174	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	241	268	13	30 - 500	0	0%	257	No	257	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, MOE
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Ammonia (mg/L)					Calcium (mg/L)				
			Start Year	End Year	Min	Max	# of Samples	Average	Geometric Mean	Min	Max	# of Samples	Average	Geometric Mean
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007						89	119	29	103	102
	Mississippi Mills	Almonte Well # 5	2000	2007						85	268	29	102	99
	Mississippi Mills	Almonte Well # 6	2000	2007						82	111	9	93	92
	Mississippi Mills	Almonte Well # 7	2000	2007						69	96	29	83	83
	Mississippi Mills	Almonte Well # 8	2000	2007						67	110	28	82	81
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	0.02	0.45	112	0.20	0.19					
	Ottawa	Carp - Well #2	2001	2005	0.00	0.29	107	0.12						
	Ottawa	King's Park Well #1	2001	2005	0.00	0.20	62	0.38						
	Ottawa	King's Park Well #2	2001	2005	0.00	0.16	72	0.06						
	Ottawa	Munster Hamlet Well # 1	2001	2005	0.00	0.22	110	0.10						
	Ottawa	Munster Hamlet Well # 2	2001	2005	0.01	0.30	59	0.10	0.08					
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Chloride (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007										
	Mississippi Mills	Almonte Well # 5	2000	2007										
	Mississippi Mills	Almonte Well # 6	2000	2007										
	Mississippi Mills	Almonte Well # 7	2000	2007										
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	10.4	80.0	184	250	0	0%	48.3	No	46.9	No
	Ottawa	Carp - Well #2	2001	2005	10.1	85.0	181	250	0	0%	52.6	No	50.1	No
	Ottawa	King's Park Well #1	2001	2005	102.0	220.0	114	250	0	0%	134.9	No	133.9	No
	Ottawa	King's Park Well #2	2001	2005	6.5	180.0	100	250	0	0%	141.6	No	137.8	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	13.8	95.4	184	250	0	0%	70.3	No	69.8	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	12.1	84.0	133	250	0	0%	62.7	No	62.0	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Conductivity (µS/cm)				
			Start Year	End Year	Min	Max	# of Samples	Average	Geometric Mean
Ground Water	Merrickville-Wolford	Merrickville Well #1							
	Merrickville-Wolford	Merrickville Well #2							
	Merrickville-Wolford	Merrickville Well #4							
	Mississippi Mills	Almonte Well # 3	2000	2007					
	Mississippi Mills	Almonte Well # 5	2000	2007					
	Mississippi Mills	Almonte Well # 6	2000	2007					
	Mississippi Mills	Almonte Well # 7	2000	2007					
	Mississippi Mills	Almonte Well # 8	2000	2007					
	North Grenville	Kemptville (Alfred Well)	2003	2006					
	North Grenville	Kemptville (Kernahan Well)	2003	2006					
	North Grenville	Kemptville (Van Buren Well)	2003	2006					
	Ottawa	Carp - Well #1	2001	2005	508	760	17	630	627
	Ottawa	Carp - Well #2	2001	2005	478	748	17	638	634
	Ottawa	King's Park Well #1	2001	2005	756	1060	17	917	913
	Ottawa	King's Park Well #2	2001	2005	815	1170	16	989	985
	Ottawa	Munster Hamlet Well # 1	2001	2005	668	893	17	797	794
	Ottawa	Munster Hamlet Well # 2	2001	2005	676	922	12	790	787
	Westport	Westport Well # 2	2003	2006					

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Dissolved Organic Carbon (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	0.50	1.50	42	5	0	0%	1.00	No	0.97	No
	Mississippi Mills	Almonte Well # 5	2000	2007	0.50	1.50	41	5	0	0%	0.88	No	0.85	No
	Mississippi Mills	Almonte Well # 6	2000	2007	0.60	0.90	8	5	0	0%	0.66	No	0.65	No
	Mississippi Mills	Almonte Well # 7	2000	2007	0.50	1.70	42	5	0	0%	0.87	No	0.84	No
	Mississippi Mills	Almonte Well # 8	2000	2007	0.50	1.70	43	5	0	0%	0.89	No	0.85	No
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	1.9	1.9	1	5	0	0%				
	Ottawa	Carp - Well #2	2001	2005	1.4	1.4	1	5	0	0%				
	Ottawa	King's Park Well #1	2001	2005	1.1	1.1	1	5	0	0%				
	Ottawa	King's Park Well #2	2001	2005	1.1	1.1	1	5	0	0%				
	Ottawa	Munster Hamlet Well # 1	2001	2005	1.2	1.2	1	5	0	0%				
	Ottawa	Munster Hamlet Well # 2	2001	2005										
	Westport	Westport Well # 2	2003	2006										

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		E.coli (cfu / 100 mL)									
			Start Year	End Year	Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1			0	1	171	0	1	1%	0	Yes		
	Merrickville-Wolford	Merrickville Well #2			0	0	173	0	0	0%	0	No		
	Merrickville-Wolford	Merrickville Well #4			0	0	170	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 3	2000	2007	0	0	227	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 5	2000	2007	0	0	202	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 6	2000	2007	0	0	145	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 7	2000	2007	0	0	224	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 8	2000	2007	0	0	215	0	0	0%	0	No		
	North Grenville	Kemptville (Alfred Well)	2003	2006	0	0	173	0	0	0%	0	No		
	North Grenville	Kemptville (Kernahan Well)	2003	2006	0	0	171	0	0	0%	0	No		
	North Grenville	Kemptville (Van Buren Well)	2003	2006	0	1	169	0	3	2%	0	Yes		
	Ottawa	Carp - Well #1	2001	2005	0	0	502	0	0	0%	0	No		
	Ottawa	Carp - Well #2	2001	2005	0	0	467	0	0	0%	0	No		
	Ottawa	King's Park Well #1	2001	2005	0	0	307	0	0	0%	0	No		
	Ottawa	King's Park Well #2	2001	2005	0	0	291	0	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 1	2001	2005	0	0	492	0	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 2	2001	2005	0	0	390	0	0	0%	0	No		
	Westport	Westport Well # 2	2003	2006	0	1	176	0	1	1%	0	Yes		

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Fluoride (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007										
	Mississippi Mills	Almonte Well # 5	2000	2007										
	Mississippi Mills	Almonte Well # 6	2000	2007										
	Mississippi Mills	Almonte Well # 7	2000	2007										
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	0.35	0.80	18	1.5	0	0%	0.67	No	0.65	No
	Ottawa	Carp - Well #2	2001	2005	0.26	0.64	18	1.5	0	0%	0.48	No	0.48	No
	Ottawa	King's Park Well #1	2001	2005	0.26	0.55	18	1.5	0	0%	0.47	No	0.46	No
	Ottawa	King's Park Well #2	2001	2005	0.21	0.54	18	1.5	0	0%	0.40	No	0.40	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	0.34	0.80	18	1.5	0	0%	0.70	No	0.69	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	0.54	0.73	13	1.5	0	0%	0.64	No	0.64	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Hardness (mg/L) as CaCO3									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	325	429	44	80 - 100	44	100%	374	Yes	373.71	Yes
	Mississippi Mills	Almonte Well # 5	2000	2007	346	941	44	80 - 100	44	100%	396	Yes	390.56	Yes
	Mississippi Mills	Almonte Well # 6	2000	2007	345	442	10	80 - 100	10	100%	376	Yes	374.98	Yes
	Mississippi Mills	Almonte Well # 7	2000	2007	280	355	44	80 - 100	44	100%	314	Yes	313.56	Yes
	Mississippi Mills	Almonte Well # 8	2000	2007	266	390	43	80 - 100	43	100%	308	Yes	307.52	Yes
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	152	204	18	80 - 100	18	100%	178	Yes	177	Yes
	Ottawa	Carp - Well #2	2001	2005	176	248	18	80 - 100	18	100%	213	Yes	211	Yes
	Ottawa	King's Park Well #1	2001	2005	256	348	17	80 - 100	17	100%	296	Yes	296	Yes
	Ottawa	King's Park Well #2	2001	2005	272	420	17	80 - 100	17	100%	354	Yes	352	Yes
	Ottawa	Munster Hamlet Well # 1	2001	2005	210	288	20	80 - 100	20	100%	248	Yes	247	Yes
	Ottawa	Munster Hamlet Well # 2	2001	2005	272	320	13	80 - 100	13	100%	293	Yes	292	Yes
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Hydrogen Sulphide (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007										
	Mississippi Mills	Almonte Well # 5	2000	2007										
	Mississippi Mills	Almonte Well # 6	2000	2007										
	Mississippi Mills	Almonte Well # 7	2000	2007										
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	0.18	0.23	2	0.05	2	100%	0.21	Yes	0.20	Yes
	Ottawa	Carp - Well #2	2001	2005	0.20	0.24	2	0.05	2	100%	0.22	Yes	0.22	Yes
	Ottawa	King's Park Well #1	2001	2005	0	0	1	0.05	0	0%				
	Ottawa	King's Park Well #2	2001	2005	0	0	2	0.05	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 1	2001	2005	0	0	2	0.05	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 2	2001	2005	0	0	1	0.05	0	0%				
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Iron (mg/L)										
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding	Min
Ground Water	Merrickville-Wolford	Merrickville Well #1													
	Merrickville-Wolford	Merrickville Well #2													
	Merrickville-Wolford	Merrickville Well #4													
	Mississippi Mills	Almonte Well # 3	2000	2007											25
	Mississippi Mills	Almonte Well # 5	2000	2007											32
	Mississippi Mills	Almonte Well # 6	2000	2007	40.00	40.00	1	0.30	1	100%					33
	Mississippi Mills	Almonte Well # 7	2000	2007											24
	Mississippi Mills	Almonte Well # 8	2000	2007											24
	North Grenville	Kemptville (Alfred Well)	2003	2006											
	North Grenville	Kemptville (Kernahan Well)	2003	2006											
	North Grenville	Kemptville (Van Buren Well)	2003	2006											
	Ottawa	Carp - Well #1	2001	2005	0	22.00	54	0.30	2	4%	0.43	Yes			
	Ottawa	Carp - Well #2	2001	2005	0	0.44	53	0.30	2	4%	0.02	No			
	Ottawa	King's Park Well #1	2001	2005	0	0.51	50	0.30	46	92%	0.38	Yes			
	Ottawa	King's Park Well #2	2001	2005	0.23	0.81	48	0.30	43	90%	0.40	Yes	0.39	Yes	
	Ottawa	Munster Hamlet Well # 1	2001	2005	0	0.52	50	0.30	2	4%	0.19	No			
	Ottawa	Munster Hamlet Well # 2	2001	2005	0	0.83	42	0.30	20	48%	0.34	Yes			
	Westport	Westport Well # 2	2003	2006											

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Magnesium (mg/L)			
			Start Year	End Year	Max	# of Samples	Average	Geometric Mean
Ground Water	Merrickville-Wolford	Merrickville Well #1						
	Merrickville-Wolford	Merrickville Well #2						
	Merrickville-Wolford	Merrickville Well #4						
	Mississippi Mills	Almonte Well # 3	2000	2007	32	29	29	29
	Mississippi Mills	Almonte Well # 5	2000	2007	66	28	37	36
	Mississippi Mills	Almonte Well # 6	2000	2007	40	9	36	36
	Mississippi Mills	Almonte Well # 7	2000	2007	28	28	26	26
	Mississippi Mills	Almonte Well # 8	2000	2007	29	28	26	26
	North Grenville	Kemptville (Alfred Well)	2003	2006				
	North Grenville	Kemptville (Kernahan Well)	2003	2006				
	North Grenville	Kemptville (Van Buren Well)	2003	2006				
	Ottawa	Carp - Well #1	2001	2005				
	Ottawa	Carp - Well #2	2001	2005				
	Ottawa	King's Park Well #1	2001	2005				
	Ottawa	King's Park Well #2	2001	2005				
	Ottawa	Munster Hamlet Well # 1	2001	2005				
	Ottawa	Munster Hamlet Well # 2	2001	2005				
	Westport	Westport Well # 2	2003	2006				

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Nitrate (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	0.10	32.00	40	10	1	3%	1.06	No	0.24	No
	Mississippi Mills	Almonte Well # 5	2000	2007	0.01	0.61	42	10	0	0%	0.38	No	0.33	No
	Mississippi Mills	Almonte Well # 6	2000	2007	0.01	1.12	23	10	0	0%	0.57	No	0.47	No
	Mississippi Mills	Almonte Well # 7	2000	2007	0.34	1.54	7	10	0	0%	0.93	No	0.82	No
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006	0.10	0.10	1	10	0	0%				
	North Grenville	Kemptville (Kernahan Well)	2003	2006	0.10	0.10	1	10	0	0%				
	North Grenville	Kemptville (Van Buren Well)	2003	2006	0.17	0.17	1	10	0	0%				
	Ottawa	Carp - Well #1	2001	2005	0	0.06	189	10	0	0%	0.00	No		
	Ottawa	Carp - Well #2	2001	2005	0	0.02	185	10	0	0%	0.00	No		
	Ottawa	King's Park Well #1	2001	2005	0	0.06	139	10	0	0%	0.00	No		
	Ottawa	King's Park Well #2	2001	2005	0	0.07	101	10	0	0%	0.01	No		
	Ottawa	Munster Hamlet Well # 1	2001	2005	0	0.22	185	10	0	0%	0.02	No		
	Ottawa	Munster Hamlet Well # 2	2001	2005	0	0.08	135	10	0	0%	0.01	No		
	Westport	Westport Well # 2	2003	2006	0.87	2.15	4	10	0	0%	1.33	No	1.25	No

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		pH (unitless)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	7.14	7.99	45	6.5 - 8.5	0	0%	7.62	No	7.62	No
	Mississippi Mills	Almonte Well # 5	2000	2007	7.25	8.04	43	6.5 - 8.5	0	0%	7.66	No	7.65	No
	Mississippi Mills	Almonte Well # 6	2000	2007	7.44	7.76	6	6.5 - 8.5	0	0%	7.59	No	7.59	No
	Mississippi Mills	Almonte Well # 7	2000	2007	7.23	8.04	44	6.5 - 8.5	0	0%	7.68	No	7.67	No
	Mississippi Mills	Almonte Well # 8	2000	2007	7.32	8.08	42	6.5 - 8.5	0	0%	7.69	No	7.69	No
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	7.50	9.50	449	6.5 - 8.5	4	1%	8.09	No	8.09	No
	Ottawa	Carp - Well #2	2001	2005	7.15	9.10	331	6.5 - 8.5	1	0%	7.97	No	7.97	No
	Ottawa	King's Park Well #1	2001	2005	7.21	8.60	258	6.5 - 8.5	0	0%	7.60	No	7.60	No
	Ottawa	King's Park Well #2	2001	2005	5.90	8.40	245	6.5 - 8.5	0	0%	7.51	No	7.51	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	7.10	9.80	365	6.5 - 8.5	2	1%	7.71	No	7.71	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	7.10	8.07	266	6.5 - 8.5	0	0%	7.62	No	7.60	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Sodium (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007	33	33	1	200	0	0%				
	Mississippi Mills	Almonte Well # 5	2000	2007	41	41	1	200	0	0%				
	Mississippi Mills	Almonte Well # 6	2000	2007	25	25	1	200	0	0%				
	Mississippi Mills	Almonte Well # 7	2000	2007	26	26	1	200	0	0%				
	Mississippi Mills	Almonte Well # 8	2000	2007	31	31	1	200	0	0%				
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005										
	Ottawa	Carp - Well #2	2001	2005										
	Ottawa	King's Park Well #1	2001	2005										
	Ottawa	King's Park Well #2	2001	2005										
	Ottawa	Munster Hamlet Well # 1	2001	2005										
	Ottawa	Munster Hamlet Well # 2	2001	2005										
	Westport	Westport Well # 2	2003	2006	76	103	4	200	0	0%	90	No	89	No

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Sulphate (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007										
	Mississippi Mills	Almonte Well # 5	2000	2007										
	Mississippi Mills	Almonte Well # 6	2000	2007										
	Mississippi Mills	Almonte Well # 7	2000	2007										
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	8.4	41.0	187	500	0	0%	19.2	No	17.7	No
	Ottawa	Carp - Well #2	2001	2005	10.2	45.0	186	500	0	0%	31.0	No	30.4	No
	Ottawa	King's Park Well #1	2001	2005	44.0	58.0	109	500	0	0%	51.6	No	51.5	No
	Ottawa	King's Park Well #2	2001	2005	45.0	61.0	102	500	0	0%	56.8	No	56.7	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	33.0	77.0	185	500	0	0%	69.3	No	69.1	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	43.0	79.0	135	500	0	0%	70.4	No	70.2	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Total Coliforms (cfu / 100 mL)									
			Start Year	End Year	Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1			0	104	171	0	23	13%	2	Yes		
	Merrickville-Wolford	Merrickville Well #2			0	5	173	0	8	5%	0	Yes		
	Merrickville-Wolford	Merrickville Well #4			0	19	170	0	8	5%	0	Yes		
	Mississippi Mills	Almonte Well # 3	2000	2007	0	1	222	0	3	1%	0	Yes		
	Mississippi Mills	Almonte Well # 5	2000	2007	0	0	203	0	0	0%	0	No		
	Mississippi Mills	Almonte Well # 6	2000	2007	0	2	145	0	3	2%	0	Yes		
	Mississippi Mills	Almonte Well # 7	2000	2007	0	2	225	0	2	1%	0	Yes		
	Mississippi Mills	Almonte Well # 8	2000	2007	0	4	215	0	1	0%	0	Yes		
	North Grenville	Kemptville (Alfred Well)	2003	2006	0	0	173	0	0	0%	0	No		
	North Grenville	Kemptville (Kernahan Well)	2003	2006	0	1	171	0	1	1%	0	Yes		
	North Grenville	Kemptville (Van Buren Well)	2003	2006	0	300	169	0	43	25%	6	Yes		
	Ottawa	Carp - Well #1	2001	2005	0	2	502	0	11	2%	0	Yes		
	Ottawa	Carp - Well #2	2001	2005	0	2	465	0	5	1%	0	Yes		
	Ottawa	King's Park Well #1	2001	2005	0	1	307	0	2	1%	0	Yes		
	Ottawa	King's Park Well #2	2001	2005	0	0	291	0	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 1	2001	2005	0	0	492	0	0	0%	0	No		
	Ottawa	Munster Hamlet Well # 2	2001	2005	0	0	390	0	0	0%	0	No		
	Westport	Westport Well # 2	2003	2006	0	35	176	0	41	23%	1	Yes		

Notes:
CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		TDS (mg/L)									
			Start Year	End Year	Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1												
	Merrickville-Wolford	Merrickville Well #2												
	Merrickville-Wolford	Merrickville Well #4												
	Mississippi Mills	Almonte Well # 3	2000	2007										
	Mississippi Mills	Almonte Well # 5	2000	2007										
	Mississippi Mills	Almonte Well # 6	2000	2007										
	Mississippi Mills	Almonte Well # 7	2000	2007										
	Mississippi Mills	Almonte Well # 8	2000	2007										
	North Grenville	Kemptville (Alfred Well)	2003	2006										
	North Grenville	Kemptville (Kernahan Well)	2003	2006										
	North Grenville	Kemptville (Van Buren Well)	2003	2006										
	Ottawa	Carp - Well #1	2001	2005	180	444	18	500	0	0%	329	No	320	No
	Ottawa	Carp - Well #2	2001	2005	220	420	18	500	0	0%	354	No	351	No
	Ottawa	King's Park Well #1	2001	2005	426	600	18	500	8	44%	502	Yes	500	No
	Ottawa	King's Park Well #2	2001	2005	318	642	17	500	12	71%	521	Yes	515	Yes
	Ottawa	Munster Hamlet Well # 1	2001	2005	370	496	18	500	0	0%	444	No	443	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	410	494	13	500	0	0%	442	No	442	No
	Westport	Westport Well # 2	2003	2006										

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		TKN (mg/L)										
			Start Year	End Year	Min	Max	# of Samples	EC guideline	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding	Min
Ground Water	Merrickville-Wolford	Merrickville Well #1													
	Merrickville-Wolford	Merrickville Well #2													
	Merrickville-Wolford	Merrickville Well #4													
	Mississippi Mills	Almonte Well # 3	2000	2007											0.02
	Mississippi Mills	Almonte Well # 5	2000	2007											0.10
	Mississippi Mills	Almonte Well # 6	2000	2007											0.20
	Mississippi Mills	Almonte Well # 7	2000	2007											0.07
	Mississippi Mills	Almonte Well # 8	2000	2007											0.06
	North Grenville	Kemptville (Alfred Well)	2003	2006											
	North Grenville	Kemptville (Kernahan Well)	2003	2006											
	North Grenville	Kemptville (Van Buren Well)	2003	2006											
	Ottawa	Carp - Well #1	2001	2005	0.08	0.66	185	0.5	77	42%	0.47	No	0.46	No	0.00
	Ottawa	Carp - Well #2	2001	2005	0.09	2.30	180	0.5	2	1%	0.31	No	0.30	No	0.05
	Ottawa	King's Park Well #1	2001	2005	0.02	0.32	112	0.5	0	0%	0.20	No	0.19	No	0.02
	Ottawa	King's Park Well #2	2001	2005	0.05	0.30	98	0.5	0	0%	0.18	No	0.18	No	0.04
	Ottawa	Munster Hamlet Well # 1	2001	2005	0.07	0.42	180	0.5	0	0%	0.28	No	0.28	No	0.06
	Ottawa	Munster Hamlet Well # 2	2001	2005	0.03	0.40	134	0.5	0	0%	0.28	No	0.27	No	0.12
	Westport	Westport Well # 2	2003	2006											

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.3-3

Municipal Groundwater Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		Turbidity (NTU)								
			Start Year	End Year	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Ground Water	Merrickville-Wolford	Merrickville Well #1											
	Merrickville-Wolford	Merrickville Well #2											
	Merrickville-Wolford	Merrickville Well #4											
	Mississippi Mills	Almonte Well # 3	2000	2007	2.04	485	5	0	0%	0.51	No	0.38	No
	Mississippi Mills	Almonte Well # 5	2000	2007	2.04	291	5	0	0%	0.86	No	0.71	No
	Mississippi Mills	Almonte Well # 6	2000	2007	2.00	484	5	0	0%	1.05	No	0.96	No
	Mississippi Mills	Almonte Well # 7	2000	2007	2.04	452	5	0	0%	0.21	No	0.15	No
	Mississippi Mills	Almonte Well # 8	2000	2007	2.04	452	5	0	0%	0.24	No	0.17	No
	North Grenville	Kemptville (Alfred Well)	2003	2006									
	North Grenville	Kemptville (Kernahan Well)	2003	2006									
	North Grenville	Kemptville (Van Buren Well)	2003	2006									
	Ottawa	Carp - Well #1	2001	2005	0.64	449	5	0	0%	0.25	No	0.23	No
	Ottawa	Carp - Well #2	2001	2005	0.55	357	5	0	0%	0.23	No	0.21	No
	Ottawa	King's Park Well #1	2001	2005	0.74	274	5	0	0%	0.18	No	0.17	No
	Ottawa	King's Park Well #2	2001	2005	2.52	265	5	0	0%	0.20	No	0.17	No
	Ottawa	Munster Hamlet Well # 1	2001	2005	1.46	387	5	0	0%	0.30	No	0.27	No
	Ottawa	Munster Hamlet Well # 2	2001	2005	3.87	297	5	0	0%	0.69	No	0.52	No
	Westport	Westport Well # 2	2003	2006									

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
MVC WW - Mississippi Valley Conservation - Watershed Watch
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, M
Ottawa - City of Ottawa - Surface Water Quality Monitoring
PWQMN - Provincial Water Quality Monitoring Network
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Summary Results
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Period of Record		E.coli (cfu / 100 mL)									
			Start Year	End Year	Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River	2003	2006	0	200	179	0	87	49%	3.2	Yes		
	Ottawa	Britannia - Ottawa River	2001	2006	0	4081	1044	0	1024	98%	54.8	Yes		
	Ottawa	Lemieux Island - Ottawa River	2001	2006	0	50101	1028	0	1026	100%	121.6	Yes		
	Perth	Perth - Tay River	2001	2006	0	274	141	0	128	91%	38.4	Yes		
	Smiths Falls	Smiths Falls - Rideau River	2001	2006	0	30	152	0	103	68%	3.5	Yes		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives and Guidelines, MOE
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Lead (mg/L)									
			Min	Max	# of Samples	PWQO criteria[2]	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.001	0.002	3	0.003	0%	0%	0.001	No	0.001	No
	Ottawa	Lemieux Island - Ottawa River	0.001	0.002	4	0.003	0%	0%	0.001	No	0.001	No
	Perth	Perth - Tay River	0.000	0.000	15	0.003	0%	0%	0.000	No		
	Smiths Falls	Smiths Falls - Rideau River	0.000	0.002	15	0.003	0%	0%	0.001	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Nitrate (mg/L)									
			Min	Max	# of Samples	ODWQS criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.09	4.50	88	10	0	0%	0.22	No	0.16	No
	Ottawa	Lemieux Island - Ottawa River	0.09	0.57	81	10	0	0%	0.15	No	0.15	No
	Perth	Perth - Tay River	0.01	0.08	15	10	0	0%	0.04	No		
	Smiths Falls	Smiths Falls - Rideau River	0.01	0.16	15	10	0	0%	0.07	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Nitrite (mg/L)									
			Min	Max	# of Samples	CWQG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.02	0.10	88	0.06	1	1%	0.02	No	0.02	No
	Ottawa	Lemieux Island - Ottawa River	0.02	0.10	81	0.06	1	1%	0.02	No	0.02	No
	Perth	Perth - Tay River	0.00	0.00	15	0.06	0	0%	0.00	No		
	Smiths Falls	Smiths Falls - Rideau River	0.00	0.01	15	0.06	0	0%	0.01	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	pH (unitless)									
			Min	Max	# of Samples	ODWSOG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River	7.25	8.24	37	6.5 - 8.5	0	0%	7.74	No	7.73	No
	Ottawa	Britannia - Ottawa River	7.50	7.69	16	6.5 - 8.5	0	0%	7.60	No		
	Ottawa	Lemieux Island - Ottawa River	7.48	7.69	17	6.5 - 8.5	0	0%	7.59	No		
	Perth	Perth - Tay River	7.84	8.06	15	6.5 - 8.5	0	0%	7.95	No		
	Smiths Falls	Smiths Falls - Rideau River	8.01	8.23	15	6.5 - 8.5	0	0%	8.11	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	TKN (mg/L)									
			Min	Max	# of Samples	EC guideline	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.25	0.31	20	0.5	0	0%	0.28	No		
	Ottawa	Lemieux Island - Ottawa River										
	Perth	Perth - Tay River	0.41	0.59	15	0.5			0.48	No		
	Smiths Falls	Smiths Falls - Rideau River	0.42	0.54	15	0.5			0.48	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Total Phosphorus (mg/L)									
			Min	Max	# of Samples	PWQO criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.01	0.02	20	0.03	0	0%	0.01	No		
	Ottawa	Lemieux Island - Ottawa River										
	Perth	Perth - Tay River	0.01	0.03	15	0.03	0	0%	0.02	No		
	Smiths Falls	Smiths Falls - Rideau River	0.01	0.02	15	0.03	0	0%	0.02	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	TSS (mg/L)									
			Min	Max	# of Samples	CWQG criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	43.00	54.40	20	5	20	100%	49.50	Yes		
	Ottawa	Lemieux Island - Ottawa River										
	Perth	Perth - Tay River	103.40	142.00	15	5	15	100%	119.93	Yes		
	Smiths Falls	Smiths Falls - Rideau River	126.80	175.40	15	5	15	100%	148.07	Yes		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 2.4-1

Municipal Surface Water Drinking Water System - Water Quality Su
Mississippi - Rideau Source Protection Region

Water Source	Municipality	Well / Intake	Zinc (mg/L)									
			Min	Max	# of Samples	PWQO criteria	# Samples Exceeding	% Samples Exceeding	Average	Average Exceeding	Geometric Mean	Geomean Exceeding
Surface Water	Carleton Place	Carleton Place - Mississippi River										
	Ottawa	Britannia - Ottawa River	0.003	0.005	20	0.030	0	0%	0.004	No		
	Ottawa	Lemieux Island - Ottawa River										
	Perth	Perth - Tay River	0.001	0.002	15	0.030	0	0%	0.002	No		
	Smiths Falls	Smiths Falls - Rideau River	0.001	0.005	5	0.030	0	0%	0.002	No		

Notes: CCME - Canadian Council of Ministers of the Environment
CWQG - Canadian Water Quality Guidelines, CCME
EC - Environment Canada
MOE - Ontario Ministry of the Environment
ODWQS - Ontario Drinking Water Quality Standards, MOE
ODWSOG - Ontario Drinking Water Standards, Objectives an
PWQO - Provincial Water Quality Objectives, MOE

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Data Source and Years								
					Ecolog						
			Aerial Photograph Review	Dun & Bradstreet Database	Anderson's Waste Disposal Inventory	Automobile Wrecking & Supplies	Chemical Registry	Coal Tar Registry	Compliance & Convictions of Environmental Offences	National PCB Inventory	Pesticides Register
Addington Highlands	Renfrew-MR	2003			Not specified		1992				Not specified
Athens	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Augusta	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Beckwith	Renfrew-MR	2003			Not specified		1992				Not specified
Carleton Place	Renfrew-MR	2003			Not specified		1992				Not specified
Central Frontenac	Renfrew-MR	2003			Not specified		1992				Not specified
Clarence-Rockland	Renfrew-MR	2003			Not specified		1992				Not specified
Drummond / North Elmsley	Renfrew-MR	2003			Not specified		1992				Not specified
Edwardsburg-Cardinal	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Elizabethtown-Kitley	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Greater Madawaska	Renfrew-MR	2003			Not specified		1992				Not specified
Lanark Highlands	Renfrew-MR	2003			Not specified		1992				Not specified
Merrickville-Wolford	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Montague	Renfrew-MR	2003			Not specified		1992				Not specified
Mississippi Mills	Renfrew-MR	2003			Not specified		1992				Not specified
	Almonte WHPA	2003									
North Dundas	Renfrew-MR	2003			Not specified		1992				Not specified
North Frontenac	Renfrew-MR	2003			Not specified		1992				Not specified
North Grenville	Kemptville WHP	2000	1946, 1950, 1966, 1978 & 1987								
	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Ottawa	Carp WHP	2003	1959, 1975, 1984 & 1994		Not specified		Not specified	Not specified		Not specified	Not specified
	Constance Bay	2006			Not specified	Not specified					Not specified
	Cumberland	2003	1949, 1959, 1967, 1971, 1998 & 1994								
	North Gower	2005			Not specified	Not specified					Not specified
	Munster - King's Park WHP	2003	1959, 1975, 1988 & 1994		Not specified		Not specified	Not specified		Not specified	Not specified

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Data Source and Years								
					Ecolog						
			Aerial Photograph Review	Dun & Bradstreet Database	Anderson's Waste Disposal Inventory	Automobile Wrecking & Supplies	Chemical Registry	Coal Tar Registry	Compliance & Convictions of Environmental Offences	National PCB Inventory	Pesticides Register
	Ottawa Former Industrial	1988									
	Ottawa Old Landfills	2004	Not specified		-2001						
	Renfrew-MR	2003			Not specified		1992				Not specified
Perth	Renfrew-MR	2003			Not specified		1992				Not specified
Rideau Lakes	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
Smiths Falls	Renfrew-MR	2003			Not specified		1992				Not specified
South Frontenac	Renfrew-MR	2003			Not specified		1992				Not specified
Tay Valley	Renfrew-MR	2003			Not specified		1992				Not specified
Westport	Leeds & Grenville	2001		Not specified	1930-1998		1992 & 1999		1989-1994		1988-1998
	Renfrew-MR	2003			Not specified		1992				Not specified
	Westport Preliminary WHPA	2004									

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Data Source and Years Reviewed									
			Pulp & Paper Mills Registry	Federal Contaminated Sites	Field / Windshield Survey	Fire Insurance Plans	MNR - Licensed Pits & Quarries	Coal Gasification Plant Waste Site Inventory	File Review	Fuel (Private) Storage Tank Database	Fuel (Retail) Storage Tank Database	PCB database
Addington Highlands	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Athens	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Augusta	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Beckwith	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Carleton Place	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Central Frontenac	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Clarence-Rockland	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Drummond / North Elmsley	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Edwardsburg-Cardinal	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Elizabethtown-Kitley	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Greater Madawaska	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Lanark Highlands	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Merrickville-Wolford	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Montague	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Mississippi Mills	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
	Almonte WHPA	2003								Not specified	Not specified	Not specified
North Dundas	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
North Frontenac	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
North Grenville	Kemptville WHP	2000				1927		-1991				
	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Ottawa	Carp WHP	2003	Not specified	Not specified	Not specified					Not specified	Not specified	Not specified
	Constance Bay	2006		Not specified	Not specified			Not specified		Not specified	Not specified	Not specified
	Cumberland	2003			Not specified			-1987				-2000
	North Gower	2005		Not specified	Not specified			Not specified		Not specified	Not specified	Not specified
	Munster - King's Park WHP	2003	Not specified	Not specified	Not specified					Not specified	Not specified	Not specified

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Data Source and Years Reviewed									
			Pulp & Paper Mills Registry	Federal Contaminated Sites	Field / Windshield Survey	Fire Insurance Plans	MNR - Licensed Pits & Quarries	Coal Gasification Plant Waste Site Inventory	File Review	Fuel (Private) Storage Tank Database	Fuel (Retail) Storage Tank Database	PCB database
	Ottawa Former Industrial	1988			Not specified	1878, 1901, 1922, 1948 & 1956						
	Ottawa Old Landfills	2004										
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Perth	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Rideau Lakes	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Smiths Falls	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
South Frontenac	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Tay Valley	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
Westport	Leeds & Grenville	2001					-2000		Not specified	1989-1996	1989-1999	
	Renfrew-MR	2003	Not specified	2000 -				-1988	Not specified	1989-1996		1987-2000
	Westport Preliminary WHPA	2004			Not specified							Not specified

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	MOE									Municipal Directories
			Sewage Treatment Plant Inventory	Storm Water Discharger Registration	Spills Database	Staff Interviews	Waste Disposal Site Inventory	Waste Generators Inventory	Waste Water Discharger Inventory	Water Treatment Plant Inventory	Water Well Records Database	
Addington Highlands	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Athens	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Augusta	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Beckwith	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Carleton Place	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Central Frontenac	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Clarence-Rockland	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Drummond / North Elmsley	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Edwardsburg-Cardinal	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Elizabethtown-Kitley	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Greater Madawaska	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Lanark Highlands	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Merrickville-Wolford	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Montague	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Mississippi Mills	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
	Almonte WHPA	2003			Not specified		Not specified					
North Dundas	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
North Frontenac	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
North Grenville	Kemptville WHP	2000					-1991				Not specified	Not available
	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Ottawa	Carp WHP	2003			Not specified	Not specified	Not specified					
	Constance Bay	2006			Not specified		Not specified	Not specified				
	Cumberland	2003					-1991	-1999				1991, 1994, 1996, 1998 & 2000
	North Gower	2005			Not specified	Not specified	Not specified	Not specified				
	Munster - King's Park WHP	2003			Not specified	Not specified	Not specified					

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	MOE									Municipal Directories
			Sewage Treatment Plant Inventory	Storm Water Discharger Registration	Spills Database	Staff Interviews	Waste Disposal Site Inventory	Waste Generators Inventory	Waste Water Discharger Inventory	Water Treatment Plant Inventory	Water Well Records Database	
	Ottawa Former Industrial	1988						Not specified				Pre 1919
	Ottawa Old Landfills	2004				Not specified	-1991					
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Perth	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Rideau Lakes	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Smiths Falls	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
South Frontenac	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Tay Valley	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
Westport	Leeds & Grenville	2001	1998	1990-1998				-1998				
	Renfrew-MR	2003	Not specified		1999-2001	Not specified			1990-1998	Not specified		
	Westport Preliminary WHPA	2004					Not specified					

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Municipal Clerk Survey	Official Plan Review	Ottawa Historical Land Use Inventory	Scott's Business Directory	Site Specific Interviews / Questionnaires	Site Specific Reports	Topographic Maps
Addington Highlands	Renfrew-MR	2003	Not specified			1992 -			
Athens	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
Augusta	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
Beckwith	Renfrew-MR	2003	Not specified			1992 -			
Carleton Place	Renfrew-MR	2003	Not specified			1992 -			
Central Frontenac	Renfrew-MR	2003	Not specified			1992 -			
Clarence-Rockland	Renfrew-MR	2003	Not specified			1992 -			
Drummond / North Elmsley	Renfrew-MR	2003	Not specified			1992 -			
Edwardsburg-Cardinal	Leeds & Grenville	2001							
	Renfrew-MR	2003	Not specified			1992 -			
Elizabethtown-Kitley	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
Greater Madawaska	Renfrew-MR	2003	Not specified			1992 -			
Lanark Highlands	Renfrew-MR	2003	Not specified			1992 -			
Merrickville-Wolford	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
Montague	Renfrew-MR	2003	Not specified			1992 -			
Mississippi Mills	Renfrew-MR	2003	Not specified			1992 -			
	Almonte WHPA	2003		Not specified			Not specified		
North Dundas	Renfrew-MR	2003	Not specified			1992 -			
North Frontenac	Renfrew-MR	2003	Not specified			1992 -			
North Grenville	Kemptville WHP	2000		Not specified			Not specified		Not specified
	Leeds & Grenville	2001							
	Renfrew-MR	2003	Not specified			1992 -			
Ottawa	Carp WHP	2003			Not specified	Not specified		Not specified	Not specified
	Constance Bay	2006			Not specified				
	Cumberland	2003							
	North Gower	2005			Not specified				
	Munster - King's Park WHP	2003			Not specified	Not specified			Not specified

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Municipal Clerk Survey	Official Plan Review	Ottawa Historical Land Use Inventory	Scott's Business Directory	Site Specific Interviews / Questionnaires	Site Specific Reports	Topographic Maps
	Ottawa Former Industrial	1988							
	Ottawa Old Landfills	2004			-2000		Not specifed	Not specified	Not specified
	Renfrew-MR	2003	Not specified			1992 -			
Perth	Renfrew-MR	2003	Not specified			1992 -			
Rideau Lakes	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
Smiths Falls	Renfrew-MR	2003	Not specified			1992 -			
South Frontenac	Renfrew-MR	2003	Not specified			1992 -			
Tay Valley	Renfrew-MR	2003	Not specified			1992 -			
Westport	Leeds & Grenville	2001	Not specified						
	Renfrew-MR	2003	Not specified			1992 -			
	Westport Preliminary WHPA	2004							

Table 4.2-1

Threats Inventory Data Sources
Mississippi-Rideau Source Protection Region

Municipality	Study Report	Study Date	Data Source and Years								
					Ecolog						
			Aerial Photograph Review	Dun & Bradstreet Database	Anderson's Waste Disposal Inventory	Automobile Wrecking & Supplies	Chemical Registry	Coal Tar Registry	Compliance & Convictions of Environmental Offences	National PCB Inventory	Pesticides Register

Notes:

Almonte WHPA - Wellhead Protection Area Study - Almonte, Ontario (Intera[2], 2003)
Carp WHP - Wellhead Protection Study, Carp Communal Wells (Golder, 2003)
Constance Bay - Constance Bay GW Study (Dillon, 2005)
Cumberland - Water & Wastewater Alternative Servicing Solutions Study, Cumberland (Golder, 2003)
Kemptville WHP - Municipal Well Head Protection Study, Town of Kemptville (OMMA, 2000)
Leeds & Grenville - United Counties of Leeds & Grenville GW Study (Dillon, 2001)
Merrickville - Village of Merrickville-Wolford GW Study (Golder, 2000)
Munster-King's Park WHP - Wellhead Protection Study, Munster Hamlet & King's Park Communal Wells (Golder, 2003)
North Gower - North Gower GW Study (Dillon, 2005)
North Grenville - Constraint Mapping for Potential New Potable Water Sources, North Grenville (Golder, 2005)
Ottawa Former Industrial - Mapping & Assessment of Former Industrial Sites, City of Ottawa (Intera[1], 1988)
Ottawa Old Landfills - Old Landfill Management Strategy, Phase 1, City of Ottawa (Golder, 2004)
Ottawa Wastewater - Rural Wastewater Management Study, City of Ottawa (Burnside, 2004)
Renfrew-MR - Renfrew-Mississippi-Rideau GW Study, Appendix G (Golder, 2003)
Westport Preliminary WHPA - Preliminary Wellhead Protection Area Study, Westport (Malroz, 2004)

Not specified - Source reviewed during study, however date not specified for the source of information.

Dillon - Dillon Consulting Ltd.
Ecolog - Ecolog ERIS
Golder - Golder Associates Ltd.
Intera[1] - Intera Information Technologies (Canada) Ltd. (now Aqua Terre Solutions Inc.)
Intera[2] - Intera Engineering Ltd.
Malroz - Malroz Engineering Inc.
MNR - Ontario Ministry of Natural Resources
MOE - Ontario Ministry of the Environment
OMMA - Oliver, Mangione, McCalla & Associates (a division of Trow Consulting Engineers Ltd.)
PCB - Polychlorinated Biphenyl

Table 4.2-2

Mississippi-Rideau Souce Protection Region Threats Inventory Database Sources
Mississippi-Rideau Source Protection Region

Data Source	Study Date	Ecolog					MNDM					
		Anderson's Waste Disposal Inventory	Chemical Registry	Compliance & Convictions of Environmental Offences	Pesticides Register	Pulp & Paper Mills Registry	Abandoned Mines Information System	Coal Gasification Plant Waste Site Inventory	Fuel (Private) Storage Tank Database	Fuel (Retail) Storage Tank Database	PCB database	Sewage Treatment Plant Inventory
Renfrew-MR	2003	Not specified	1992		Not specified	Not specified		-1988	1989-1996		1987-2000	Not specified
Leeds & Grenville	2001	1930-1998	1992 & 1999	1989-1994	1988-1998				1989-1996	1989-1999		1998
MNDM	2008						2008					
MOE	1991											

Notes: Leeds & Grenville - United Counties of Leeds & Grenville GW Study (Dillon, 2001)
Renfrew-MR - Renfrew-Mississippi-Rideau GW Study, Appendix G (Golder, 2003)

Not specified - Source reviewed during study, however date not specified for the source of information.

Dillon - Dillon Consulting Ltd.
Ecolog - Ecolog ERIS
Golder - Golder Associates Ltd.
MNDM - Ontario Ministry of Northern Development and Mines
MOE - Ontario Ministry of the Environment
PCB - Polychlorinated Biphenyl

Table 4.2-2

Mississippi-Rideau Souce Protection
Mississippi-Rideau Source Protection

Data Source	Study Date	MOE						Scott's Business Directory
		Storm Water Discharger Registration	Spills Database	Waste Disposal Site Inventory	Waste Generators Inventory	Waste Water Discharger Inventory	Water Treatment Plant Inventory	
Renfrew-MR	2003		1999-2001			1990-1998	Not specified	1992 -
Leeds & Grenville	2001	1990-1998			-1998			
MNDM	2008							
MOE	1991			1991				

Notes: Leeds & Grenville - United Cc
Renfrew-MR - Renfrew-Missis

Not specified - Source review

Dillon - Dillon Consulting Ltd.
Ecolog - Ecolog ERIS
Golder - Golder Associates Lt
MNDM - Ontario Ministry of N
MOE - Ontario Ministry of the
PCB - Polychlorinated Bipher

Table 4.2-3

Potential Contaminant Sources - Almonte
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Direct Introduction	Water Treatment Plant Waste Water Discharge					
	Sewage Treatment Plant Effluent	841	Mississippi Mills	Almonte Wells 5 & 6	2 year TOT	Threats data XY
	Sewage Treatment Plant By-Passess					
	Industrial Effluent					
Landscape Application	Road Salt Application					
	De-icing activities					
	Snow Storage					
	Stormwater Mangement Systems					
	Cemetaries					
	Landfills					
	Organic Soil-Conditioning					
	Septage Application					
	Hazardous Waste Disposal					
	Liquid Industrial Waste					
	Mine Tailings					
	Biosolids Application					
	Manure Application					
	Fertilizer Application					
	Pesticide / Herbicide Application					
	Historical Activities - Contaminated Lands					
Storage of Potential Contaminants	Fuels / Hydrocarbons	3594	Mississippi Mills	Almonte Wells 3, 7&8	2 year TOT	Threats data addressed
		3595	Mississippi Mills	Almonte Wells 5 & 6	2 year TOT	Threats data addressed
	Dense Non-Aqueous Phase Liquids (DNAPLs)					
	Organic Solvents					
	Pesticides	795	Mississippi Mills	Almonte Wells 3, 7&8	2 year TOT	Threats data XY
	Fertilizers					
	Manure					

Notes: TOT - Time of Travel

Table 4.2-3

Potential Contaminant Sources - Carp
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Direct Introduction	Water Treatment Plant Waste Water Discharge					
	Sewage Treatment Plant Effluent					
	Sewage Treatment Plant By-Passess					
	Industrial Effluent					
Landscape Application	Road Salt Application					
	De-icing activities					
	Snow Storage					
	Stormwater Mangement Systems					
	Cemetaries					
	Landfills	172	Ottawa	Carp Wells 1&2	5 yr TOT	Threats data XY
	Organic Soil-Conditioning					
	Septage Application					
	Hazardous Waste Disposal					
	Liquid Industrial Waste					
	Mine Tailings					
	Biosolids Application					
	Manure Application					
	Fertilizer Application					
	Pesticide / Herbicide Application					
	Historical Activities - Contaminated Lands					
Storage of Potential Contaminants	Fuels / Hydrocarbons	3691	Ottawa	Carp Wells 1&2	25 yr TOT	Threats data addressed
	Dense Non-Aqueous Phase Liquids (DNAPLs)	204	Ottawa	Carp Wells 1&2	5 yr TOT	RGWS buffered nomatch
	Organic Solvents					
	Pesticides	654	Ottawa	Carp Wells 1&2	2 yr TOT	Threats data XY
		810	Ottawa	Carp Wells 1&2	2 yr TOT	Threats data XY
		1	Ottawa	Carp Wells 1&2	2 yr TOT	RGWS buffered nomatch
		826	Ottawa	Carp Wells 1&2	2 yr TOT	RGWS buffered nomatch
		661	Ottawa	Carp Wells 1&2	25 yr TOT	Threats data XY
		743	Ottawa	Carp Wells 1&2	25 yr TOT	Threats data XY
	Fertilizers					
	Manure					

Notes: TOT - Time of Travel

Table 4.2-3

Potential Contaminant Sources - King's Park
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Direct Introduction	Water Treatment Plant Waste Water Discharge					
	Sewage Treatment Plant Effluent	3916	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		3917	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		3918	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
	Sewage Treatment Plant By-Passess					
	Industrial Effluent					
Landscape Application	Road Salt Application					
	De-icing activities					
	Snow Storage					
	Stormwater Mangement Systems					
	Cemetaries					
	Landfills	2691	Ottawa	Kings Park Wells 1&2	5 yr TOT	Threats data XY
		74	Ottawa	Kings Park Wells 1&2	25 yr TOT	Threats data XY
		2690	Ottawa	Kings Park Wells 1&2	25 yr TOT	Threats data XY
	Organic Soil-Conditioning					
	Septage Application					
	Hazardous Waste Disposal					
	Liquid Industrial Waste					
	Mine Tailings					
	Biosolids Application					
	Manure Application					
	Fertilizer Application					
	Pesticide / Herbicide Application					
	Historical Activities - Contaminated Lands	2946	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data XY
		3225	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data XY
		3566	Ottawa	Kings Park Wells 1&2	5 yr TOT	Threats data XY
		3066	Ottawa	Kings Park Wells 1&2	25 yr TOT	Threats data addressed

Table 4.2-3

Potential Contaminant Sources - King's Park
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Storage of Potential Contaminants	Fuels / Hydrocarbons	5834	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data XY
		4899	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data addressed
		5946	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data addressed
		4895	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data addressed
		4900	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data addressed
		117	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		821	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		838	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
	Dense Non-Aqueous Phase Liquids (DNAPLs)	205	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
	Organic Solvents	6493	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		6453	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		6469	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		6496	Ottawa	Kings Park Wells 1&2	2 yr TOT	RGWS
		605	Ottawa	Kings Park Wells 1&2	5 yr TOT	Threats data XY
	Pesticides	786	Ottawa	Kings Park Wells 1&2	2 yr TOT	Threats data XY
	Fertilizers	2068	Ottawa	Kings Park Wells 1&2	100 m	Threats data XY
	Manure					

Notes: TOT - Time of Travel

Table 4.2-3

Potential Contaminant Sources - Munster Hamlet WHPA
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Direct Introduction	Water Treatment Plant Waste Water Discharge					
	Sewage Treatment Plant Effluent	3915	Ottawa	Munster Wells 1&2	2 yr TOT	RGWS
	Sewage Treatment Plant By-Passess					
	Industrial Effluent					
Landscape Application	Road Salt Application					
	De-icing activities					
	Snow Storage					
	Stormwater Mangement Systems					
	Cemetaries					
	Landfills					
	Organic Soil-Conditioning					
	Septage Application					
	Hazardous Waste Disposal					
	Liquid Industrial Waste					
	Mine Tailings					
	Biosolids Application					
	Manure Application					
	Fertilizer Application					
	Pesticide / Herbicide Application					
	Historical Activities - Contaminated Lands	3149	Ottawa	Munster Wells 1&2	2 yr TOT	Threats data XY
Storage of Potential Contaminants	Fuels / Hydrocarbons					
	Dense Non-Aqueous Phase Liquids (DNAPLs)					
	Organic Solvents					
	Pesticides					
	Fertilizers					
	Manure					

Notes: TOT - Time of Travel

Table 4.2-3

Potential Contaminant Sources - Westport
Mississippi-Rideau Source Protection Region

Threat Type	Land Use	Threat_ID / CS_ID / Object_ID	Municipality	Well / Intake	Vulnerability Zone	Data Source
Direct Introduction	Water Treatment Plant Waste Water Discharge					
	Sewage Treatment Plant Effluent	2808	Westport	Well 2	5 yr TOT	Threats data XY
		2808	Westport	Well 3	5 yr TOT	Threats data XY
	Sewage Treatment Plant By-Passess					
	Industrial Effluent					
Landscape Application	Road Salt Application					
	De-icing activities					
	Snow Storage					
	Stormwater Mangement Systems					
	Cemetaries					
	Landfills					
	Organic Soil-Conditioning					
	Septage Application					
	Hazardous Waste Disposal					
	Liquid Industrial Waste					
	Mine Tailings					
	Biosolids Application					
	Manure Application					
	Fertilizer Application					
	Pesticide / Herbicide Application					
	Historical Activities - Contaminated Lands					
Storage of Potential Contaminants	Fuels / Hydrocarbons	2720	Westport	Well 2	5 yr TOT	Threats data XY
		2797	Westport	Well 2	5 yr TOT	Threats data XY
		2720	Westport	Well 3	2 yr TOT	Threats data XY
		2797	Westport	Well 3	2 yr TOT	Threats data XY
	Dense Non-Aqueous Phase Liquids (DNAPLs)					
	Organic Solvents					
	Pesticides					
	Fertilizers					
	Manure					

Notes: Duplicate listing for same site
TOT - Time of Travel