

Appendix A-1

Data Sources for Development of Assessment Report - MVSPA

Mississippi-Rideau Source Protection Region

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Chapter	Background Technical Studies						
	Technical Report and Date	Author	Purpose	Key Data Sources	Methods of Analysis	Limitations	
Chapter 2 - The Mississippi-Rideau Source Protection Region (Watershed Characterization)	Watershed Characterization Report		Watershed characterization	Multiple data sets, including several existing reports. See technical report	Generally a compilation of existing information, see technical report for methods of analysis	See Section 8.2.1	
	Mississippi-Rideau Source Protection Region, Watershed Characterization Report - Preliminary Draft, March 2008	Mississippi-Rideau Source Protection Region Staff					
Chapter 3 - Water Budget	Conceptual Water Budget Report		Watershed scale, annual water budget	Multiple data sets, including: Canadian Climate Service climate data, Ontario land cover data, MOE water well records, stream flow database (HYDAT), MOE permit to take water database	Methods of analysis discussed in Chapter 3 and technical report	See Sections 3.2.5 and 8.2.2	
	Mississippi-Rideau Source Protection Region, Conceptual Understanding of the Water Budget -Preliminary Draft, March 2007	Mississippi-Rideau Source Protection Region Staff and Intera Engineering					
	MNR Acceptance of the Conceptual Understanding and Peer Review Record, September 2008	MNR					
	Water Budget Peer Review Record, January 2007	Mississippi-Rideau Source Protection Region Staff					
	Tier 1 Water Budget Report		Subwatershed scale, monthly water budget and stress assessment	Same as above	Methods of analysis discussed in Chapter 3 and technical report	See Sections 3.4.4 and 8.2.2	
	Mississippi-Rideau Source Protection Region, Tier 1 Water Budget and Water Quantity Stress Assessment, Preliminary Draft, August 2009	Mississippi-Rideau Source Protection Region Staff and Intera Engineering					
Chapter 5 - Groundwater Resources	Sections 5.1 & 5.2	Highly Vulnerable Aquifer Report		Delineation of highly vulnerable aquifers	MOE water well records, surficial geology mapping	Methods of analysis discussed in Section 5.1 and technical report	See Sections 5.1.2 and 8.2.3
		Aquifer Vulnerability Analysis, September 2003	Golder Associates				
		Significant Groundwater Recharge Areas Report		Delineation of significant groundwater recharge areas	Evapotranspiration and Precipitation data (from water budget studies), surficial geology mapping, Nepean Aquifer mapping	Methods of analysis discussed in Section 5.2 and technical report	See Section 8.2.3
	Significant Groundwater Recharge Area Delineation in Mississippi-Rideau Source Protection Region, June 2009	Intera Engineering					
	Almonte	Groundwater Vulnerability Reports		Delineation of wellhead protection areas and vulnerability scoring	Multiple data sets, including: MOE water well records, and geological/hydrogeological data from available engineering reports	Methods of analysis discussed in Section 5.3 and technical report	See Section 8.2.3
		2003 - Initial Study					
		Wellhead Protection Area Study, Almonte, Ontario, January 2003	Intera Engineering				
		Available Peer Review Documentation for Almonte Wellhead Protection Study, January 2003	Various				
		2008 - Updates					
		Additional Vulnerability Analysis for Almonte WHPA Model, February 2008	Intera Engineering				
Review of Almonte Wellhead Protection Area Delineation, November 2008		Golder Associates					
2009 - Upper aquifer analysis							
Additional Vulnerability Analysis for Upper Aquifers (Oxford/March Formations and Ottawa Group) in the Almonte WHPA Model, May 2009	Intera Engineering						

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Chapter 5 - Groundwater Resources	Carp	2003 and 2004 - Initial Study		Delineation of wellhead protection areas and vulnerability scoring	Multiple data sets, including: MOE water well records, and geological/hydrogeological data from available engineering reports	Methods of analysis discussed in Section 5.3 and technical report	See Section 8.2.3
		Wellhead Protection Study, Carp Communal Wells, City of Ottawa, MVC Study Group, April 2003	Golder Associates				
		Peer Review Documentation, Mississippi-Rideau Wellhead Protection Studies, July 2007 [available peer review documentation for the 2003 wellhead studies at Carp, King's Park and Munster]	Multiple				
		Revised Carp Capture Zones, August 2004	Golder Associates				
		2008 - Updates					
		Wellhead Protection Area Maps, Carp, Munster Hamlet and King's Park, May 2008	Golder Associates				
	This space is reserved for the future Lanark groundwater-based Municipal Drinking Water System						
	Groundwater Threats and Issues Report		Enumeration of significant threats, issues and conditions	Multiple data sets, including: windshield survey, agricultural assessment, municipal staff interviews, Scott's Select database, MOE water wells database, MOE data, Ontario Spills database, MOE hauled sewage/biosolids data, Certificates of Approval, Ecolog ERIS database	Methods of analysis discussed in Section 4.6 and technical report	See Section 8.2.3	
	Technical Memo, Potential Rail Transportation Threat, Carp WHPA, October 2009	Dillon Consulting					
	Technical Memo, Drinking Water Issues Evaluation - MRSRP, October 2009	Dillon Consulting					
	Mississippi-Rideau Source Water Assessment, Drinking Water Threats and Issues Inventory, Part 1 - Groundwater Systems, May 2010	Dillon Consulting					
	Managed Lands and Livestock Density Reports		Determination of managed lands and livestock density	Multiple data sets, including: landsat imagery, Agriculture Canada data, Municipal Property Assessment Corporation (MPAC) data, Ontario nutrient conversion tables	Methods of analysis discussed in Sections 5.1.3 and 5.3.3 and technical report	See Section 8.2.3	
	Technical Report, Update of Livestock Density Map, Mississippi-Rideau Source Water Protection, November 2009	Agricultural Watersheds Associates					
	Mississippi-Rideau Source Protection Study, Revised Managed Lands and Livestock Density Calculations, September 2010	Dillon Consulting					
	Impervious Surfaces Report		Determination of percent impervious surfaces	Southern Ontario Land Resource Information System (SOLRIS), Ontario Road Network, MNR built-up areas	Methods of analysis discussed in Sections 5.2.4 and technical report		
	Impervious Surface Technical Memo, 2010	Mississippi-Rideau Source Protection Region Staff					

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Chapter 6 - Surface Water Sources	Surface Water Vulnerability Reports		Intake characterization, IPZ delineation and vulnerability scoring	Multiple data sets, including: stream flow data, bathymetry maps, airphotos, engineers reports, site visit, municipal staff interviews, water treatment plant records	Methods of analysis discussed in Sections 6.3 through 6.6 and technical report	See Section 8.2.4	
	Carleton Place	Intake Characterization for the Carleton Place, Perth and Smiths Falls Water Treatment Plants, September 2010					J.F. Sabourin and Associates Inc., and Water and Earth Science Associates
		Intake Protection Zone Delineation for the Carleton Place, Perth and Smiths Falls Water Treatment Plants, September 2010					
		Vulnerability Assessments for the Carleton Place, Perth and Smiths Falls Water Treatment Plants, September 2010					
	Britannia and Lemieux Island	Surface Water Vulnerability Study, Intake Characterization for Lemieux Island and Britannia Water Purification Plants, January 2010	Baird & Associates	Intake characterization, IPZ delineation and vulnerability scoring	Multiple data sets, including: stream flow data, bathymetry maps, airphotos, engineers reports, site visit, municipal staff interviews, water treatment plant records	Methods of analysis discussed in Sections 6.7 through 6.9 and technical report	See Section 8.2.4
		Surface Water Vulnerability Study, IPZ Delineation for Lemieux Island and Britannia Water Purification Plants, September 2010					
		Surface Water Vulnerability Study, Vulnerability Assessments for Lemieux Island and Britannia Water Purification Plants, September 2010					
		Surface Water Threats and Issues Report		Enumeration of significant threats, issues and conditions	Multiple data sets, including: windshield survey, agricultural assessment, municipal staff interviews, Scott's Select database, MOE water wells database, MOE data, Ontario Spills database, MOE hauled sewage/biosolids data, Certificates of Approval, Ecolog ERIS database	Methods of analysis discussed in Section 4.6 and technical report	See Section 8.2.4
		Mississippi-Rideau Source Water Assessment, Drinking Water Threats and Issues Inventory, Part 2 - Surface Water Systems, May 2010 (part 2 updated in September 2010)	Dillon Consulting				
		Managed Lands and Livestock Density Reports		Determination of managed lands and livestock density	Multiple data sets, including: landsat imagery, Agriculture Canada data, Municipal Property Assessment Corporation (MPAC) data, Ontario nutrient conversion tables	Methods of analysis discussed in Sections 6.3.3 and technical report	See Section 8.2.4
Technical Report, Update of Livestock Density Map, Mississippi-Rideau Source Water Protection, November 2009		Agricultural Watersheds Associates					
Mississippi-Rideau Source Protection Study, Revised Managed Lands and Livestock Density Calculations, September 2010		Dillon Consulting					
Impervious Surface Report		Determination of percent impervious surfaces	Southern Ontario Land Resource Information System (SOLRIS), Ontario Road Network, MNR built-up areas	Methods of analysis discussed in Sections 6.3.4 and technical report			
Impervious Surface Technical Memo, 2010	Mississippi-Rideau Source Protection Region Staff						
Chapter 7 - Climate Change	Review of Known Information about Climate Change in the Mississippi-Rideau Source Protection Region, July 2009	Jackie Oblak (Private Consultant)	Review of climate change information	Multiple data sources, including Intergovernmental Panel on Climate Change, Environment Canada, Ontario Ministry of Natural Resources, Mississippi Valley Conservation	No analysis, only a collection/review of existing information	See Section 8.2.5	