

Contents

Contaminants in the Great Lakes: An Introduction	1
J. Crossman and C. Weisener	
Part I Source, Transport and Fate	
Occurrence, Sources, Transport, and Fate of Microplastics in the Great Lakes–St. Lawrence River Basin	15
Paul A. Helm	
Spatial and Temporal Trends of Metal and Organic Contaminants in the Huron-Erie Corridor: 1999–2014	49
Ken G. Drouillard, Joseph Lafontaine, Alice Grgicak-Mannion, Kerry McPhedran, and Ewa Szalińska	
A Review of Heavy Metals Contamination Within the Laurentian Great Lakes	85
Ewa Szalinska	
Part II Ecological Impact	
Binational Efforts Addressing Cyanobacterial Harmful Algal Blooms in the Great Lakes	109
Katelyn McKindles, Thijs Frenken, R. Michael L. McKay, and George S. Bullerjahn	
Impacts of Invasive Species in the Laurentian Great Lakes	135
Emma M. DeRoy and Hugh J. MacIsaac	

Understanding the Ecological Consequences of Ubiquitous Contaminants of Emerging Concern in the Laurentian Great Lakes Watershed: A Continuum of Evidence from the Laboratory to the Environment	157
Heiko L. Schoenfuss, Lina C. Wang, Victoria R. Korn, Chryssa K. King, Satomi Kohno, and Stephanie L. Hummel	
Part III Monitoring and Modelling	
Geochemical Approaches to Improve Nutrient Source Tracking in the Great Lakes	183
Meagan L. Beaton, Neda Mashhadi, R. Paul Weidman, Karlyne R. Dominato, and Scott O. C. Mundle	
Advances in Remote Sensing of Great Lakes Algal Blooms	217
Caren E. Binding, Richard P. Stumpf, Robert A. Shuchman, and Michael J. Sayers	
Part IV Management	
Land Use, Land Cover, and Climate Change in Southern Ontario: Implications for Nutrient Delivery to the Lower Great Lakes	235
M. Catherine Eimers, Freddy Liu, and Jennifer Bontje	
Enhanced Transboundary Governance Capacity Needed to Achieve Policy Goals for Harmful Algal Blooms	251
Irena F. Creed and Kathryn Bryk Friedman	