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Titolo	Contaminants of the Great Lakes // Jill Crossman; Chris Weisener
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Descrizione fisica	1 online resource (XII, 265 p. 1 illus.)
Collana	The Handbook of Environmental Chemistry, , 1867-979X ; ; 101
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Soggetti	Water - Pollution - Great Lakes (North America) Ecological science, the Biosphere Water supply & treatment
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Contaminants in the Great Lakes: An Introduction -- Occurrence, sources, transport and fate of microplastics in the Great Lakes -- St. Lawrence River Basin -- Spatial and temporal trends of metals and organic contaminants in the Huron-Erie corridor : 1999-2014 -- A review of heavy metals contamination within the Laurentian Great Lakes -- Binational efforts addressing cyanobacterial harmful algal blooms in the Great lakes -- Impacts of invasive species in the Laurentian Great Lakes -- 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 -- Geochemical approaches to improve nutrient source tracking in the Great Lakes -- Advances in remote sensing of Great Lakes algal blooms -- Land use, land cover, and climate change in southern Ontario: implications for nutrient delivery to the lower Great Lakes -- Enhanced transboundary governance capacity needed to achieve policy goals for harmful algal blooms.
Sommario/riassunto	This book reviews the globally important freshwater resource of the Great Lakes, which is currently threatened by contaminants that compromise water quality and impact its ecological and economic health. Divided into four parts, this volume covers historic, current and emerging sources of contamination from heavy metals and persistent

organic pollutants to microplastics; and identifies their ecological impacts. Due to factors ranging from rapidly changing land use practices, climate change and our emerging understanding of their impact on biological, chemical and physical interactions, the effectiveness of management strategies has proven highly variable. Continued enhancements in the rate of lake recovery are required to sustain the health of the Great Lakes. Accordingly, the book also explores recent advances in contaminant detection, along with future steps forward in lake management approaches. Revealing our current knowledge gaps and providing a roadmap towards sustainable solutions, the book offers a valuable asset for scientists, managers and the public alike.
