RESOLUTION

Adopted October 14, 2021

Mercury Monitoring, Research, and Risk Reduction Efforts in the Great Lakes Basin

Whereas, the Great Lakes and St. Lawrence River provide a multitude of ecological, social, and economic benefits for the United States and Canada, including providing drinking water, sport, commercial and subsistence fisheries, tourism, and recreational opportunities; and

Whereas, mercury pollution leads to ecologic, economic, and societal costs, potentially compromising the ability of the Great Lakes-St. Lawrence River ecosystem to continue to provide the aforementioned opportunities and benefits; and

Whereas, exposure to mercury has been linked to toxic effects on the nervous, digestive, and immune systems, and historic data shows that mercury exposure in the womb impairs neurological development in hundreds of thousands of children born each year in the United States and Canada; and

Whereas, the Great Lakes and St. Lawrence River and their natural resources provide an irreplaceable cultural significance for Native American Tribes, First Nations, and provincially recognized Métis communities in Canada; and

Whereas, disadvantaged communities and other vulnerable populations, including subsistence fishers, Native American Tribes, First Nations, and provincially recognized Métis communities in Canada, are at higher risk and generally experience disproportionate effects from mercury contamination creating environmental justice concerns; and

Whereas, mercury is deposited or discharged to land and water where it is potentially transformed into methylmercury that bioaccumulates and biomagnifies in fish and wildlife and, at high exposure levels, leads to abnormal behavior, slower growth and development, and reduced reproduction; and

Whereas, methylmercury concentrations in fish in the Great Lakes-St. Lawrence River basin exceed thresholds considered potentially harmful to humans, triggering fish consumption advisories, and threatening vulnerable communities that rely on the Great Lakes fishery and tribal treaty rights that guarantee access to fish and other resources; and

Whereas, the United States and Canada have taken action to reduce mercury use and emissions domestically; however, despite this progress legacy contaminants such as mercury continue to cause harm long after sources are managed, and local and ongoing use of mercury in some consumer products and industrial processes present ongoing challenges; and

Whereas, states and provinces are implementing mercury pollution prevention strategies and several states including Michigan, Minnesota and New York have established statewide Total Maximum Daily Loads (TMDLs) for mercury-

impaired waters under Section 303(d) of the Clean Water Act, and several states have imposed stringent water quality standards and limitations on the discharge of mercury to the Great Lakes basin: and

Whereas, a major contributor of mercury atmospheric deposition to the United States and Canada are international sources beyond state, provincial, and federal regulatory control; and

Whereas, rising global temperatures and increasingly intense storm events are releasing previously sequestered mercury into waterways and are likely to impact patterns of deposition; and

Whereas, the United States and Canada are parties to the Minamata Convention on Mercury, a 2017 multilateral environmental agreement that addresses specific human activities which are contributing to widespread global mercury pollution; and

Whereas, the United States and Canada jointly signed an Air Quality Agreement, the Great Lakes Water Quality Agreement (GLWQA), and the Great Lakes Toxic Substances Control Agreement to control transboundary emissions, and to cooperate on research and development projects to eliminate toxic substances, including mercury in all forms; and

Whereas, mercury is identified as a chemical of mutual concern for the United States and Canada under Annex 3 of the 2012 GLWQA and in accordance with the agreement, Environment and Climate Change Canada and the U.S. Environmental Protection Agency established a Great Lakes Binational Strategy for Mercury Risk Management that will guide the efforts of the U.S. and Canadian governments to identify, prioritize, and implement actions to reduce the anthropogenic releases of mercury into the waters of the Great Lakes; and

Whereas, mercury monitoring is important for many contexts: (a) informing model predictions to support prevention efforts, (b) understanding mercury sources, consequences, fate, transport, and pollution trends, (c) accurately informing consumers of fish and wildlife about the risks and benefits of their consumption, (D) understanding the impact of and benefits from pollution prevention and risk mitigation strategies, and (e) informing local, national, regional, and/or international mercury reduction efforts and policies; and

Whereas, mercury monitoring networks have shrunk in the United States and Canada, are resource limited, and must be balanced with efforts on other emerging and/or persistent bioaccumulative toxic chemicals; and

Whereas, historic work by the Great Lakes Commission identified specific needs related to understanding and addressing mercury contamination and several of those needs remain, including the need to maintain, and in some cases enhance, regional mercury monitoring programs; and

Whereas, legislation has been proposed in multiple U.S. Congresses that would establish a comprehensive long-term mercury monitoring program to track mercury cycling in the environment, including quantifying changes in ambient concentration, mercury deposition, watershed transport and levels in key biota.

Therefore, be it resolved, that the Great Lakes Commission supports efforts in the United States and Canada to authorize and fund comprehensive, collaborative, long-term monitoring of mercury in the environment, biota, and humans, and research programs within and outside of the Great Lakes-St. Lawrence River basin; and

Be it further resolved, that the Great Lakes Commission supports specific research to better understand and target reductions and remediation of the highest risk sources and forms of mercury contamination, and how climate

stressors may impact mercury pollution and exposure in the Great Lakes-St. Lawrence River region, including mercury concentrations in fish and shellfish, amount of harvest, and human consumption; and

Be it further resolved, that the Great Lakes Commission supports specific efforts to better understand and address mercury exposure and disproportionate impacts to disadvantaged communities and other vulnerable populations, including but not limited to subsistence anglers, Native American Tribes, First Nations, and provincially recognized Métis communities in Canada; and

Be it further resolved, that the Great Lakes Commission urges the United States and Canada to implement the binational mercury strategy developed under the GLWQA, in consultation with the states and provinces, as well as Native American Tribes, First Nations, and provincially recognized Métis communities in Canada; and

Be it further resolved, that the Great Lakes Commission supports the efforts of U.S. and Canadian federal, state, and provincial governments to address mercury pollution, and encourages continued pursuit of binationally compatible and coordinated approaches to standard-setting, remediation and reduction technology development, research and monitoring, and education and outreach; and

Be it further resolved, that the Great Lakes Commission urges the U.S. and Canadian federal, state and provincial governments to engage their international counterparts to achieve global reductions in mercury emissions as articulated in the Minamata Convention; and

Be it finally resolved, that the Great Lakes Commission offers its services, e.g., through Blue Accounting, to help coordinate, communicate, and track progress on mercury-related efforts in the Great Lakes-St. Lawrence River region.

Adopted at the 2021 Annual Meeting of the Great Lakes Commission, October 12-14, 2021, held online.
The resolution was passed unanimously.