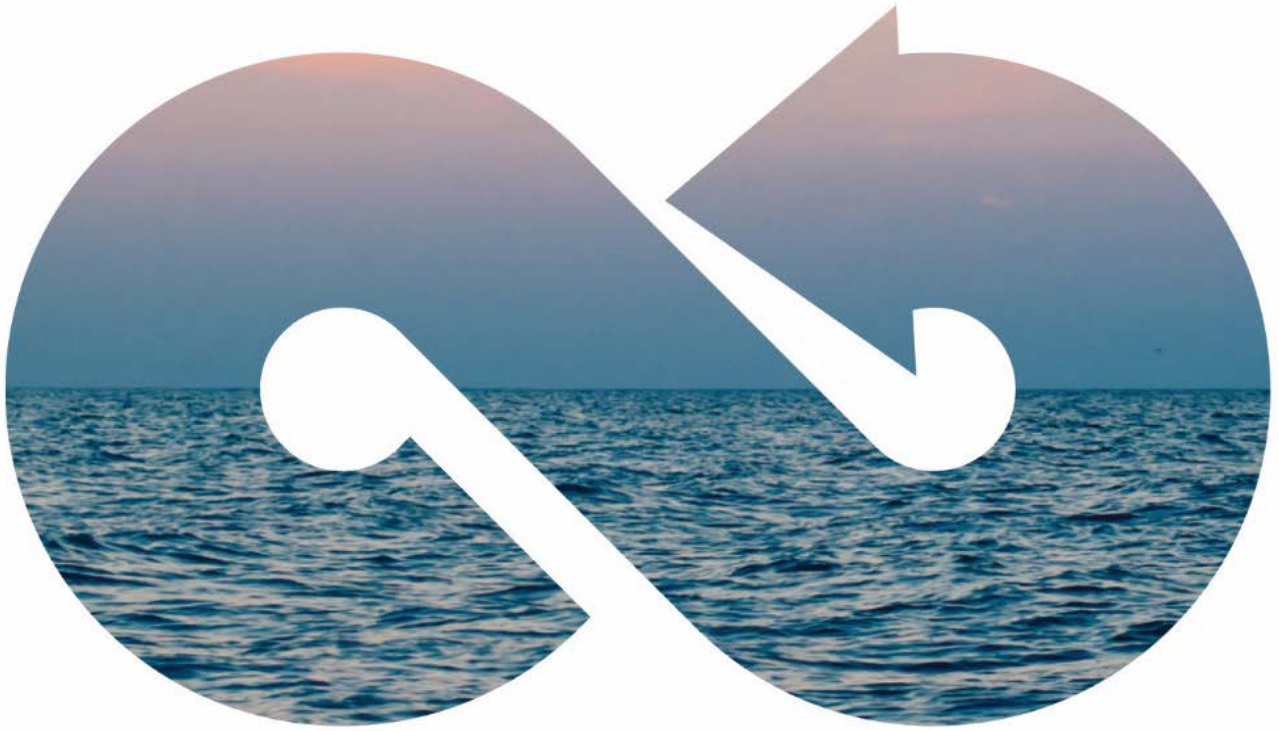

GREAT LAKES PLASTICS FORUM

SOLUTIONS FOR A SUSTAINABLE FUTURE

POLLUTION PROBE
CLEAN AIR. CLEAN WATER.

C G L R
COUNCIL OF THE GREAT LAKES REGION
REIMAGINING OUR FUTURE TODAY

State of the Science

- Plastics and microplastics are not marine issue or freshwater issue, they are global contaminant issue
- Microplastics are diverse, originate from different sources and contaminate different environments, including the Arctic and the Great Lakes
- Some evidence of physical and chemical impacts to biota but more research needed
- Key research questions: where microplastics come from, where they end up, how are they ecologically relevant, and what are impacts on human health and food security
- Research underway to quantity effectiveness of different mitigation strategies
- While we need more science, there is already enough to act
- Microplastics more abundant near urban centres; greatest abundance near points of input to the lakes – highest amounts around WWTPs
- Microplastics categories are broad and inconsistent and do not always reflect the source

Leading the Way

- Plastics offer significant social, environmental and economic benefits, including energy resource savings, consumer protection and innovations that improve healthcare, reduce spoilage and improve quality of life
- But they must be properly managed to avoid ending up in landfill and waterways – other tools beyond addressing what ends up in landfill and other jurisdictions that could be looked to
- There is need for them to be responsibly used, reused, recycled and recovered and treated as a valuable resource, not waste
- Examples of leadership to work to advance the circular economy:
  - Project STOP - Nova Chemicals
  - Operation Clean Sweep - Canadian Plastics Industry Association is Canadian licensee
  - 100% recycled plastic bottles - Ice River
  - Hefty Energy Bag Program - Dow
- Partnerships are key to success - need to collaborate with government, consumers, civil society
- Need for policies that incentivize innovation and are supportive of new technology and the circular economy

Taking Action

- What we need to know about plastics in the Great Lakes and how we address any gaps
- What is the role of public policy and what are the conditions needed to support innovation?
- What are the challenges in terms of making transition to the circular economy?
- What advice we should communicate back to the government in terms of domestic action?
- Harmonizing regulatory environment and creating standardized basket of goods – common bucket for what is going into the stream for 4 R's across the country – need to create the marketplace, value the waste and standardize the inputs
- Replicating and scalability either in Canada or across the border
- Need for deeper knowledge base and supporting the science
- Need to make innovation competitive and ensure it is properly staged

Consumer Engagement and Behaviour Change

- To secure consumer behavioural change requires discipline and design to make it simple from the point of view of the consumer - we have work to do on this
- Science still a moving target (behavioural economics)
- Must start with leadership (modeling desired behaviours is key)
- Driven by “feel” and simple, clearly articulated actions
  - Information less important as a driver to consumers
- More work is needed to make materials management and waste policy simpler and easier for consumers to participate