EMECS 12 Abstract Proposal: Global Impacts of Marine Debris on the Management of Coastal Seas

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Marine debris and plastics is a growing environmental problem for the management of coastal seas around the world. It is ubiquitous in the world's oceans affecting coastal waters, shorelines, fisheries, and deep ocean seabeds. Plastic comprises 60-80% of all marine debris and poses serious threats to coastal ecosystems, marine life, maritime transport, national and local economies, and human health. Around 80% of marine debris comes from land-based sources. The other 20% comes from waste that ships discard or abandon, lost fishing gear, derelict vessels, and other trash released at sea.

Marine debris has significant economic costs to coastal communities, affecting the tourism, fishing and shipping industries upon which coastal communities depend for their livelihoods. Larger debris poses navigational hazards to transport and fishing vessels, while lost and abandoned fishing gear negatively affect fishery harvests. Marine debris and plastics also has important health costs. An estimated eight million tons of plastics enters coastal waters and oceans every year, breaking down into smaller microplastics found in the seafood chain and marine environment which can threaten food security and human health.

Therefore, marine debris and plastics has become a priority concern for governments, non-governmental organizations and the private sector in many multilateral environmental policy fora, including the United Nations Environment Assembly (UNEA), Organization for Economic Cooperation and Development (OECD), International Maritime Organization (IMO), Asia-Pacific Economic Cooperation (APEC), and the G7 and G20 leadership meetings. Through these global fora, countries have called for global action to address marine debris and plastics. At the most recent UNEA3 meeting, a resolution was adopted which directs an Ad Hoc Open-Ended Expert Group to discuss how the global community can address this issue through voluntary actions, streamlining existing work or a legally binding instrument.

The U.S. Environmental Protection Agency (EPA) is addressing this issue locally, regionally and globally by advancing technical, policy and community based solutions on marine debris prevention and sustainable materials management. This work includes research to assess the impacts of trash on water quality, aquatic habitats and public health, as well as information tools and public private partnerships to promote innovative approaches for marine litter prevention and improved waste management. EPA is also advancing an international community-based program on marine debris, which is modeled after our domestic Trash Free Waters program. EPA has applied this Trash Free Waters model internationally in coastal communities in Peru, Jamaica and Panama through a partnership with the U.S. Peace Corps and UN

Environment. We are also implementing community-based projects to reduce marine debris in shared watersheds with Canada and Mexico through the Commission on Environmental Cooperation.

Marine debris and plastics have growing and significant ramifications for integrated management and resilience of coastal seas around the world. This presentation will focus on the U.S. efforts to collaborate with the global community to promote cooperative stewardship and concrete actions to address this important issue.