

Name: Dana Michele Griffith

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Title: Waste reduction as a method to meet conservation goals; a comparative analysis of plastic waste management.

Committee:

ECM Parsons, Chair

Peter Balint, Environmental Science and Policy

Susan A. Crate, Environmental Science and Policy

Abstract

Plastics have become a staple of the urbanized human environment. Plastics have created threats to the environment and human health and contribute to the emissions of greenhouse gases, attributed to global climate change. Legislative measures have been implemented to increase the recovery of plastics, but polyethylene plastics remain the lowest recovered of all recyclable materials. The ability of a 25 percent source reduction and achieving a 35 percent recycling rate of these plastics was compared to determine which policy is most effective in reducing the amount of polyethylene plastics available for introduction to the environment and in reducing the emissions of carbon dioxide. The study provides evidence that a 25 percent source reduction is more effective than the nation reaching a 35 percent recycling rate at addressing these issues.