

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

# Plastics

## *Issues and 2018 Task Force*



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October 2023

# Quick thoughts on plastics

- Manufacture and use of plastics is growing
- Plastics are accumulating in our oceans
- Wildlife is increasingly impacted by plastics in our environment
- End of life — what happens?



# Manufacture and use of plastics is growing

1950

1993

2015

**2.3**  
million

**162**  
million

**448**  
million

**tons manufactured**



# Plastics accumulate in our oceans



- Litter is carried by storm water runoff to our rivers and seas
- 5 trillion pieces are now floating in the ocean
- By 2050, mass of plastic in the oceans will surpass the mass of fish
- 73% of beach litter is plastic
- URI Research has shown there is over **1000 tons of microplastics** in Narragansett Bay

# Plastics seriously impact wildlife

- Wildlife is entangled, or consumes, plastic wastes in the seas
- 700 species of marine animals have been found to have eaten or been entangled in plastics
- By 2050, every seabird in existence will have consumed plastic material



# End of life for plastics: what happens?



- As of 2015, more than **6.9 billion tons of plastic waste** had been generated
  - Around **9 percent** of that was recycled,
  - **12 percent** was incinerated, and,
  - **79 percent** accumulated in landfills or environment.
- Most plastics last forever, but an "optimistic" estimate of lasting in the environment is 450 years

# Plastics and climate change

- The plastics industry is the fastest-growing source of industrial greenhouse gases in the world. About 99 percent of the plastics we use today originate from fossil fuels like oil, gas or coal. Plastic production is therefore deeply linked with the fossil fuel supply chain
- If plastic production and use grow as currently planned, by 2030, these emissions could reach 1.34 gigatons per year — equivalent to the emissions released by more than 295 new 500-megawatt coal-fired power plants
- The UN Environment Programme estimates that the greenhouse gas emissions from plastic production, use and disposal could account for 19 percent of the total global carbon budget by 2040

# 2018 Executive Order on Tackling Plastics

- Signed by Governor Raimondo on July 16, 2018
- Encourage financial and market factors to support reducing and recycling plastics
- Develop non-regulatory recognition and incentive programs
- Introduce potential legislation and/or regulations to eliminate sources of plastic pollution



# Plastics task force process



- Task force established by September 17, 2018
- 22 members + state agency staff
- Four working groups created:
  1. Lead by Example and Inventory
  2. Legislative Solutions
  3. Education
  4. Innovation
- Task force met six times with multiple workgroup meetings
- Report submitted February 2019

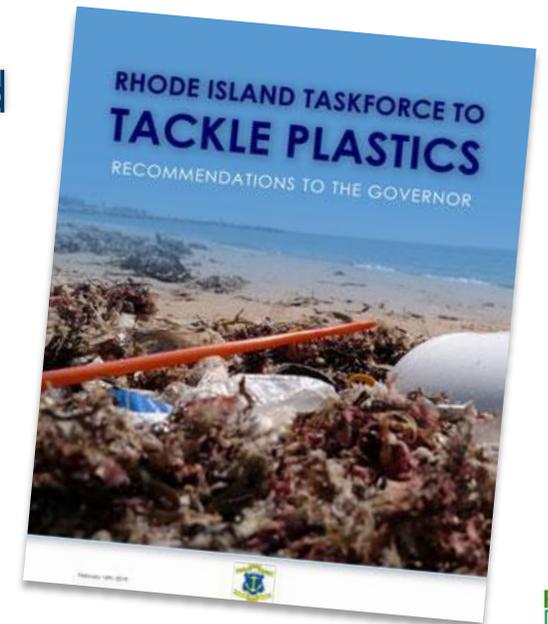
# High level consensus

- Great initial dialog on Tackling Plastics and needs to continue in some form beyond the timelines set in the Executive Order
- Plastic pollution in our oceans is a serious and growing problem that must be addressed
- Litter, including plastic materials, on our coastlines and land should be eliminated
- A hierarchy for approaching the plastics issue, particularly single-use plastics is:
  - Eliminate as many plastic products as possible;
  - If elimination is impractical or impossible, use readily recyclable plastics as much as possible and maximize the opportunities to properly recycle those plastics;
  - If elimination or recycling is impractical or impossible, ensure the proper collection and disposal of the remaining material

# Task force recommendations

- Encourage and facilitate voluntary reduction of single-use plastics by Rhode Island entities, including the State and businesses across sectors
- Reduce the number of single-use bags in Rhode Island by establishing a ban on single-use plastic check-out bags and a fee on single-use paper check-out bags and pairing that change with increased availability of free reusable bags, especially for vulnerable populations
- Increase awareness of plastic pollution and recycling and its implications through educational initiatives that meet target audiences in their daily lives, in meaningful ways
- Support innovation related, but not limited, to single-use disposables, that draws on the strengths of Rhode Island by involving businesses and academic organizations

**24 total recommendations**  
immediate, short-term, intermediate-term, long-term



# Progress since 2019...



- Statewide plastic bag ban
- Statewide ban on balloon releases
- Statewide ban on polystyrene food containers & single use plastic stirrers
- 2023 Budget initiative by Governor McKee to prevent litter
- [Senate resolution](#) 2023 S-0015A approved in the last legislative session requested DOA to complete an analysis of state purchasing requirements related reducing refuse and carbon emissions by February 1, 2024, including “phasing out single-use plastic water bottles by creating access to potable water through bottle fill stations or other available measures”.
- Governor McKee directed DEM to evaluate an Executive Order issued by Massachusetts Governor Healey banning [banning state agencies from buying single-use plastic bottles](#)
- Senate approved 2022 S-2582 SUBSTITUTE A-a [resolution](#) directing DEM and the RI Resource Recovery Corporation to jointly prepare a study exploring a variety of recycling topics
  - 13 areas related to recycling, including beverage containers
  - Report submitted in January 2023