



# Advancing the Plastics Pollution Solution

### **Gary Sondermeyer**

Vice President, Bayshore Recycling Chair, Sustainable Jersey Waste Management Task Force

May 13, 2020

### Announcements

More info on each initiative can be found in the rotating images at <u>sustainablejersey.com</u>



- Certification Timeline Changes
  - o Municipal Samantha, info@sustainablejersey.com
  - Schools Veronique, lambertv@tcnj.edu
- Energy Toolkits & Energy Efficiency Outreach Trainings -Nancy, quirkn@tcnj.edu
- Free Municipal Tech Coaching Lauren, skowronl@tcnj.edu
- Census Response Samantha, info@sustainablejersey.com

## Agenda

- Review
  - ✓ The Complex Nature of Plastics
- Describe
  - ✓ What we Know About Plastics in New Jersey
- Frame
  - ✓ Existing and Future Potential SJ Actions
- Discuss
  - ✓ Challenges Ahead of Us— Problems To Overcome
- Present
  - ✓ Impacts on COVID-19 on Plastics Bans
- Brainstorm
  - ✓ What May Happen Post Lock-Down
- Forecast
  - ✓ Where We Need to Go in the Big Picture

## Complexity of Plastics

### WHAT DO RECYCLING SYMBOLS ON PLASTICS MEAN?



### PET, PETE (Polyethylene Terephthalate)

- Soft drink, water and salad dressing bottles; peanut butter and jam jars...
- Suitable to store cold or warm drinks. Bad idea for hot drinks.



#### **HDPE**

### (High-density Polyethylene)

 Water pipes, milk, juice and water bottles; grocery bags, some shampoo / toiletry bottles...



### **PVC**

### (Polyvinyl Chloride)

- Not used for food packaging.
- · Pipes, cables, furniture, clothes, toys...



#### LDPE

### (Low-density Polyethylene)

 Frozen food bags; squeezable bottles, e.g. honey, mustard; cling films; flexible container lids....



### PP

### (Polypropylene)

 Reusable microwaveable ware; kitchenware; yogurt containers; microwaveable disposable take-away containers; disposable cups; plates....



#### PS

### (Polystyrene)

 Egg cartons; packing peanuts; disposable cups, plates, trays and cutlery; disposable take-away containers;
 Avoid for food storage!



#### Other

### (often polycarbonate or ABS)

 Beverage bottles; baby milk bottles. compact discs; "unbreakable" glazing; lenses including sunglasses, prescription glasses, automotive headlamps, riot shields, instrument panels...



Safe food containers are made from number

1, 2, 4, and 5 plastics.

# Plastics Recycling Breakouts

- IPF's or MRF's Process "Post-Consumer" Plastics;
- Normal Breakout Categories:
  - PET: Clear Water Bottles
  - HDPE Natural: Milk Containers
  - HDPE Color: Laundry Detergent Containers
  - LDPE Film Natural: Dry Cleaner Bags
  - LDPE Film Colored: Clothing Bags
  - Mixed Rigid: Spackling Buckets, Kids Toys
  - Other 3 7 Plastic: Yogurt and other Containers
  - PVC: White and Dark Piping, Etc.

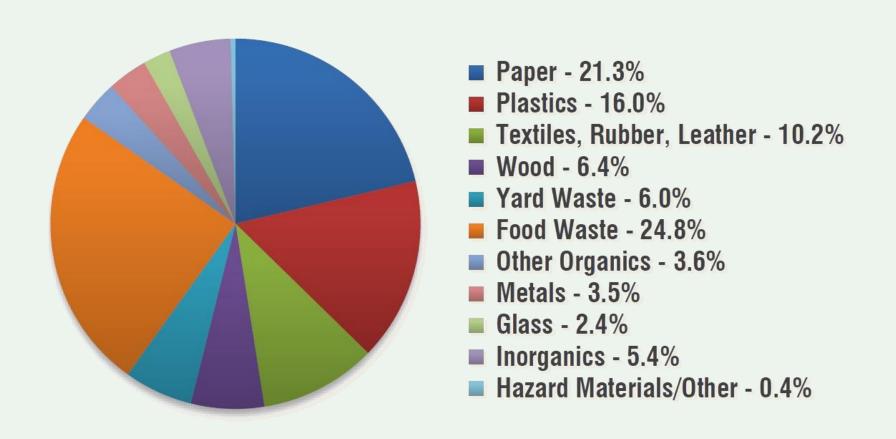
## **HDPE** Color



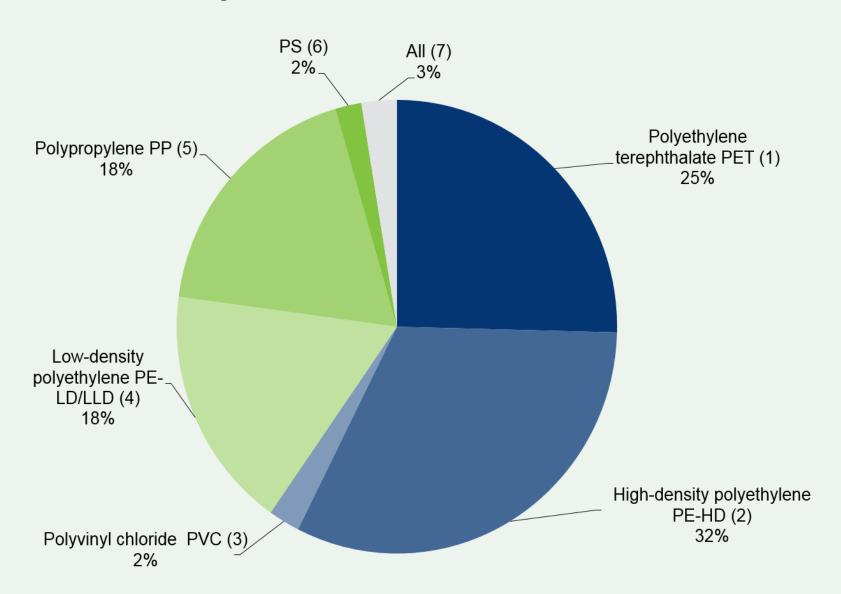
## **PET Water Bottles**



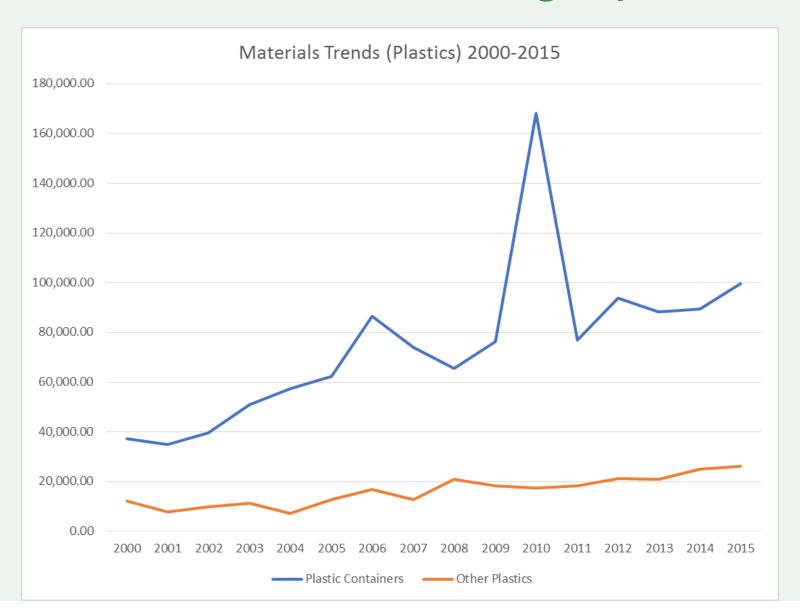
# What's Left in the Can After 30 Years of Mandatory Recycling?



## Composition of Plastics



## Plastics Trending Up



# Sustainable Jersey & Plastics

### **Existing Municipal Program Actions:**

- Recycling & Waste Reduction Education & Compliance
- Non-Mandated Materials Recycling
- Reusable Bag Education Program

### **New Proposal:** Single-Use Plastic Ban Ordinances

- Single use plastic bag bans 10 Points;
- Single use plastic straw bans 10 Points;
- Styrofoam take-out container bans 10 Points;
- Banning the release of balloons 5 Points;
- Disposable-Free dining ordinance 5 Points;
- Zero Waste Events Ordinance 5 Points

## Incredibly Exciting Times!

- Recycling Markets are the Most Challenging in History!
- We have Unprecedented Media Focus on Recycling and Plastics:
  - Hollywood "A Plastic Ocean", "Bag It", "Smog of the Sea"
  - Microplastics Threat Rutgers Conference in March 2019
  - Proposed State (S864/A1978) and Federal/International Legislation
  - "Save Our Seas 2.0" Combat Marine Debris & Create Infrastructure
- Creation of the "Alliance to End Plastic Waste" and Pledge to Provide \$1.5 BILLION to Address the Problem (P&G, Shell, Veolia, Suez, Exxon/Mobile, Phillips/Chevron, Dow Chemical, PolyOne, BASF and others)
- International Pilot for Reuse by TerraCycle: LOOP Program (P&G, Nestle, PepsiCo, Unilever, Mars, Clorox, Coca-Cola)
  - Toronto, Paris and New York City Started in May 2019
- LOOP Now Expanding Across USA This Summer, Record Sales in March and April Due to Pandemic

### Status of Ban Ordinances

- Bag Bans = 57 Towns (Jersey City, Trenton, Bayonne)
- Styrofoam Take-Out = 20 Towns (Lambertville, Paramus)
- Straws = 18 Towns (Red Bank, Summit, Belmar)
- Balloons = 29 Towns (Asbury Park, Atlantic City, Shore)
- Ordinances Pending = 19 (Newark, Edison, Princeton)
- 9 States Plus Puerto Rico with Ban Legislation
  - California New York Hawaii
  - Vermont Maine Maryland
  - Oregon Delaware Connecticut
- Jersey Pending S864/A1978 Ban on plastics and paper carryout bags & Styrofoam, straws on demand.

## Plastic Packaging Challenges

- 100 MILLION Tons Manufactured Globally Annually;
- 9 BILLION Tons of Plastic Manufactured by Mankind;
- In the U.S. only about 10% is recovered of all Plastic;
- Problematic Packaging:
  - Pigmented Plastic (Laundry Containers);
  - Lightweighting Trend;
  - Multilayered Laminated Pouches;
  - Decorative Advertising of Different Resins;
- Single Stream Increases Volume Much Lower Value;
- Tremendous Confusion on What is and Isn't Recyclable!



# COVID-19 Impacts on Plastics

- Public Health Concerns Take Center Stage What is Safer, Reusables or Disposables??? – Jury Still Out!
- Temporary Repealing of Single Use Plastic Bans
  - Boston Reinstated Use
  - Mass Banned Reusable Bags/Preempted Local Ban
  - New Hampshire Temporarily Banned Reusable Bags
  - Maine Delayed Implementation (April 22 Effective Date)
  - Connecticut Suspended Bag Fee (10 cents)
  - Hawaii Suspended Ban
- Petroleum Glut Lowest Gas in 15 Years Below \$2.00
- Prices for Even #1 and #2 Have Gone Negative!



# Long-Term Global Considerations

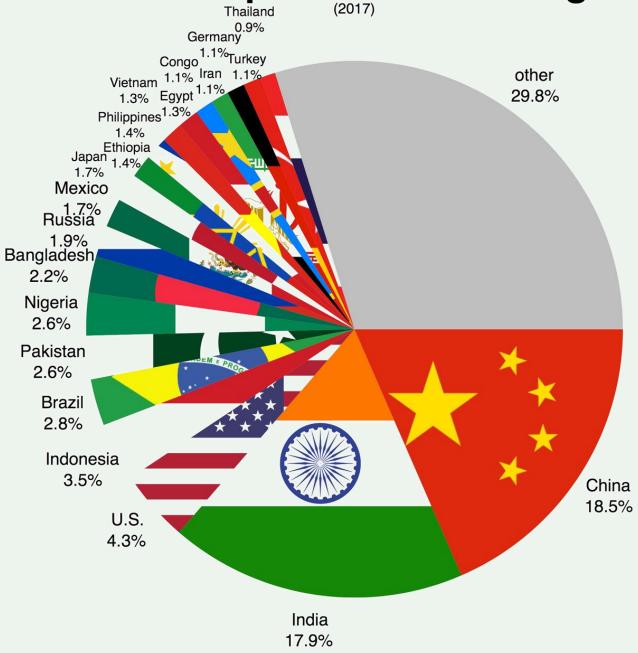
- The World Has Been Rocked By COVID-19!
- Arguably the Most Cohesive International Response In History –
   Shared Science and Public Policy Action
- Will we Emerge From Quarantine More United or Divided?
- Have we Had the "Wake-Up-Call" to Prepare for Climate?
- Dependence on Plastics is NOT Sustainable!
- Must Focus on Plastic Impacts to Fisheries & Public Health
- Fish is the Primary Source of Nutrition to 1 Billion People
- Behavior, Science & Public Policy MUST Come Together
   (Waste Reduction, Recycling, Technology, Common Goals)



## Think Globally, Act Locally



## World Population Percentages Thailand (2017)



### Resources

Sustainable Jersey Actions:

https://www.sustainablejersey.com/actions/

Clean Water Action NJ Toolkit:

https://www.cleanwateraction.org/plastics-toolkit

ANJEC – "Are Reusables Safe?"

https://anjec.org/action-alerts/

- Clean Ocean Action Microplastics
   <a href="http://www.cleanoceanaction.org/index.php?id=824">http://www.cleanoceanaction.org/index.php?id=824</a>
- Rutgers University Microplastics in the Urban Environment

https://cues.rutgers.edu/microplastics-conference-2019.html



## PROGRAM UNDERWRITERS

### SUMMIT SPONSORS









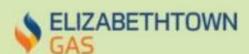


















\_ustaii

y, April 23, 3

Register

**Protecting Drinkin** 

Friday, April 24, 11:0

Register

Asbury Park Dinne

Monday, April 27, 4:

egister

Final Week of Virtual Sustainability Summit

List of VSS events & to register - bit.ly/NJVirtualSustSummit

Recordings of VSS events – www.sustainablejersey.com > Resources > Presentations > Sustainability Summit

## Questions?

### **Gary Sondermeyer**

gsondermeyer@bayshorerecycling.com





### Resources

Sustainable Jersey Actions:

https://www.sustainablejersey.com/actions/

Clean Water Action NJ Toolkit:

https://www.cleanwateraction.org/plastics-toolkit

ANJEC – "Are Reusables Safe?"

https://anjec.org/action-alerts/

- Clean Ocean Action Microplastics
   <a href="http://www.cleanoceanaction.org/index.php?id=824">http://www.cleanoceanaction.org/index.php?id=824</a>
- Rutgers University Microplastics in the Urban Environment

https://cues.rutgers.edu/microplastics-conference-2019.html

