



Plastic Market Update

Tonya Randell, More Recycling
Wisconsin Council on Recycling Meeting
March 3, 2017

More Recycling



More Recycling is the Next Generation of Moore Recycling Associates

- Have nearly 20 years of research and consulting experience in the recycling of postconsumer materials, specifically plastics;
- Offer a deep understanding of the complex and ever-changing lifecycle of plastic packaging; and
- Serve as a liaison between industry, public agencies, and NGOs and prioritize accurate information and neutrality in the marketplace.



Overview

Market Overview

Specific Commodities

Resources

Considerations

- Quality & Quantity Matters
- Not all Plastics are Created Equal
- Readily Recyclable vs. Not
- Post Commercial vs. Post Consumer
- Multilayered, Barriers, Multi-resin, Non-plastic components



Plastics Market Drivers

- General economic conditions
- Price of natural gas, petroleum & derivatives
- Virgin resin production capacity relative to demand
- Industrial scrap & off-spec supplies
- ***Supply and demand of recycled feedstock***

Current Economic Conditions

Strong Dollar

- + Excess Production of Crude & Other Commodities
 - + Changes in China/Asia
 - + Increased Processing Costs
-

Down Market

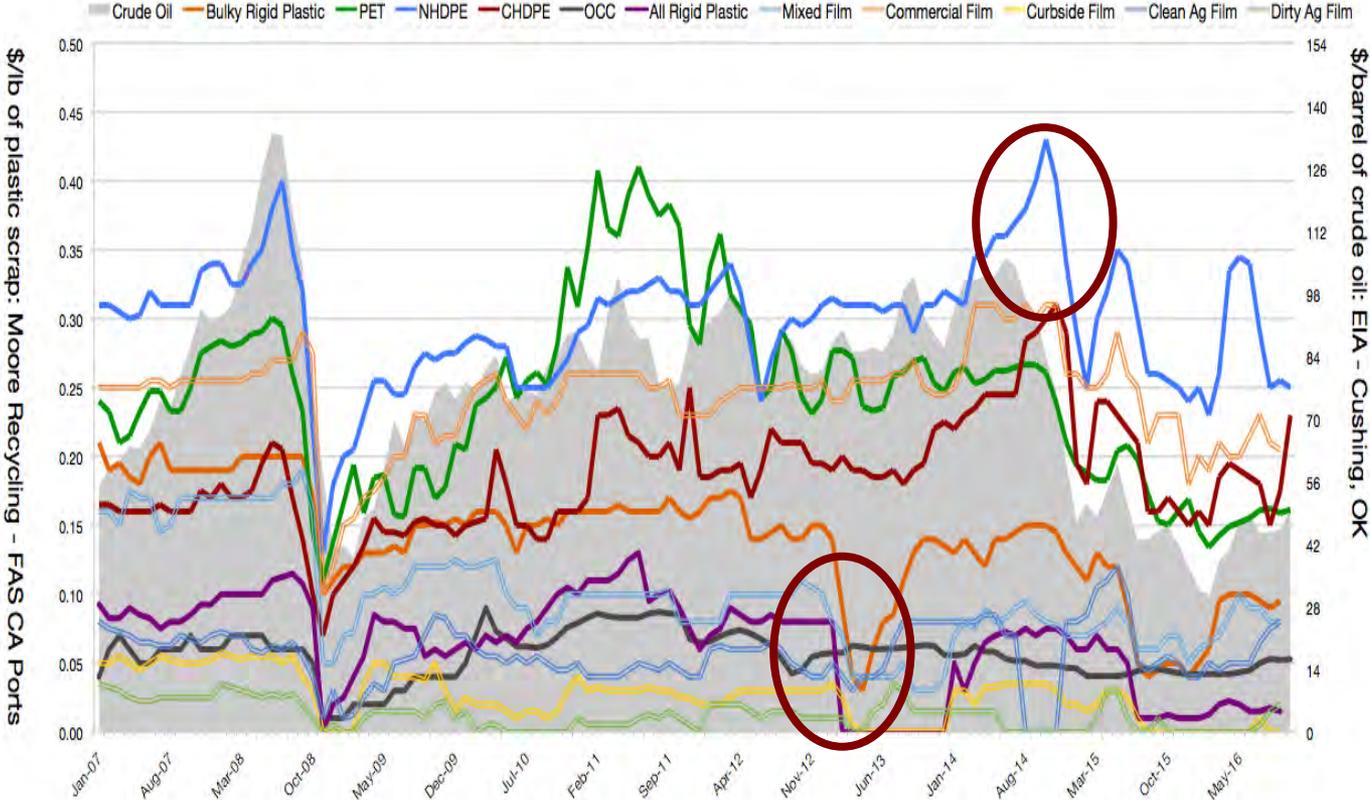
Tight Margins

Industry Pains/Constraints

Changes in Collection Programs

Plastic Scrap Price vs Oil

Scrap Price History vs Oil: 2007 to-date

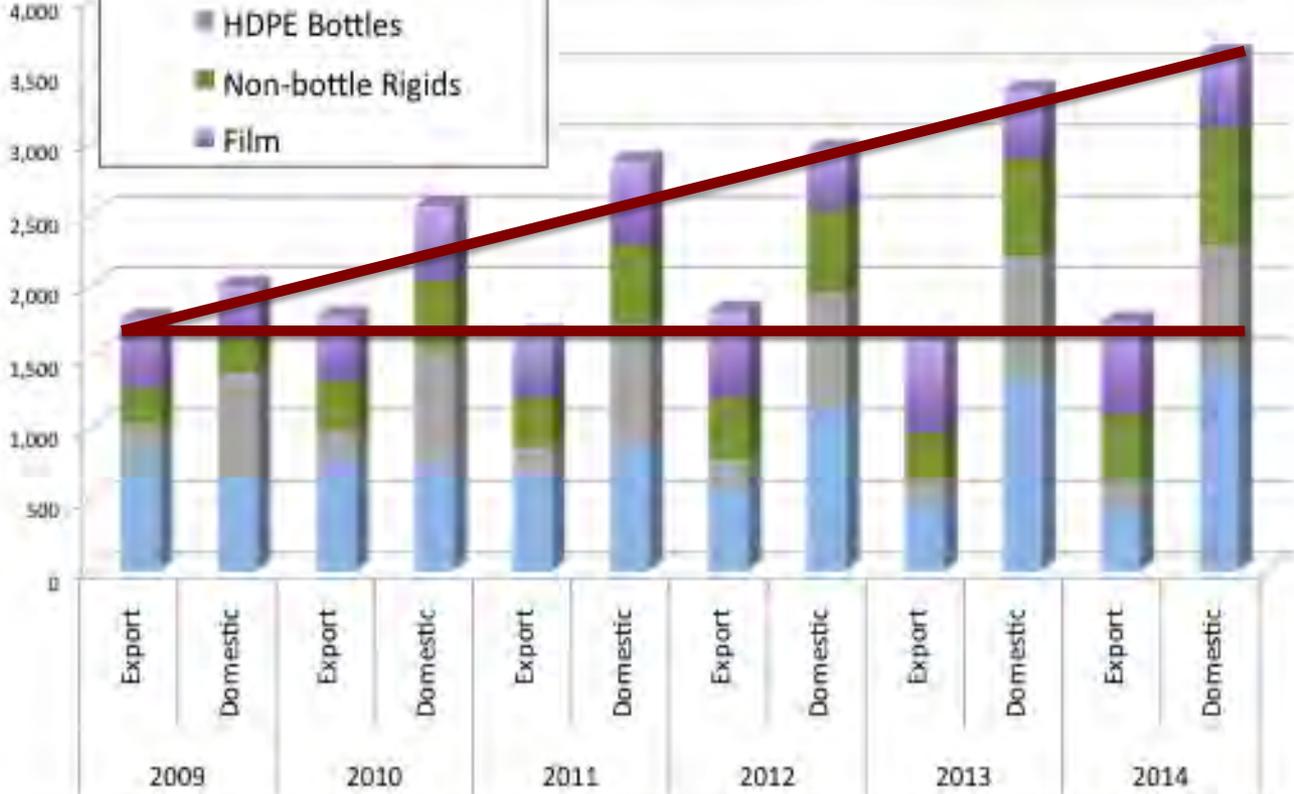


Domestic vs Export Data

U.S. Postconsumer Plastic Recycling
in millions of pounds



- PET Bottles
- HDPE Bottles
- Non-bottle Rigid
- Film



Specific Commodities

PET Bottles & Thermoforms

HDPE Bottles

Non-Bottle Rigid

Polypropylene Bottles & Containers

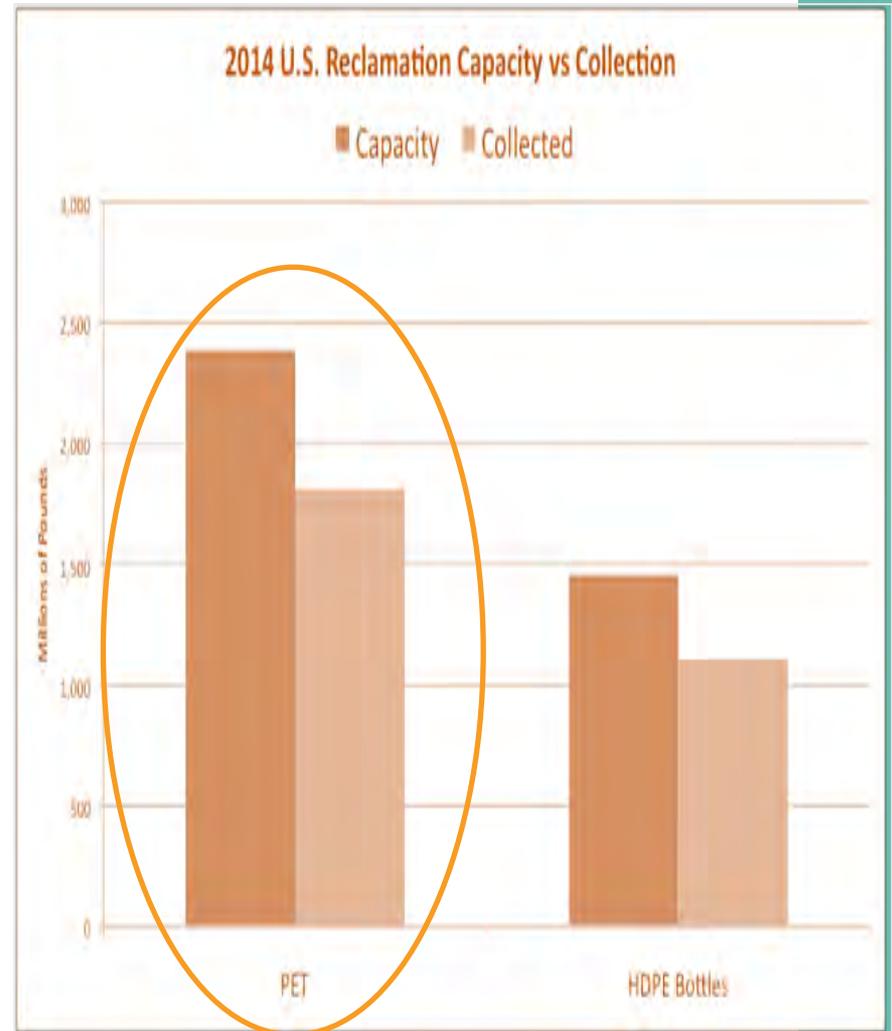
Plastic Film and Bags

Polystyrene

PET Recycling

- Recycling Rate: 30.1%*
- Lightweighting affects yields
- Bale yield mid-60% to mid-70%
- Flattening bottle demand
- Lower PCR demand
- Virgin resin capacity

*2015 data



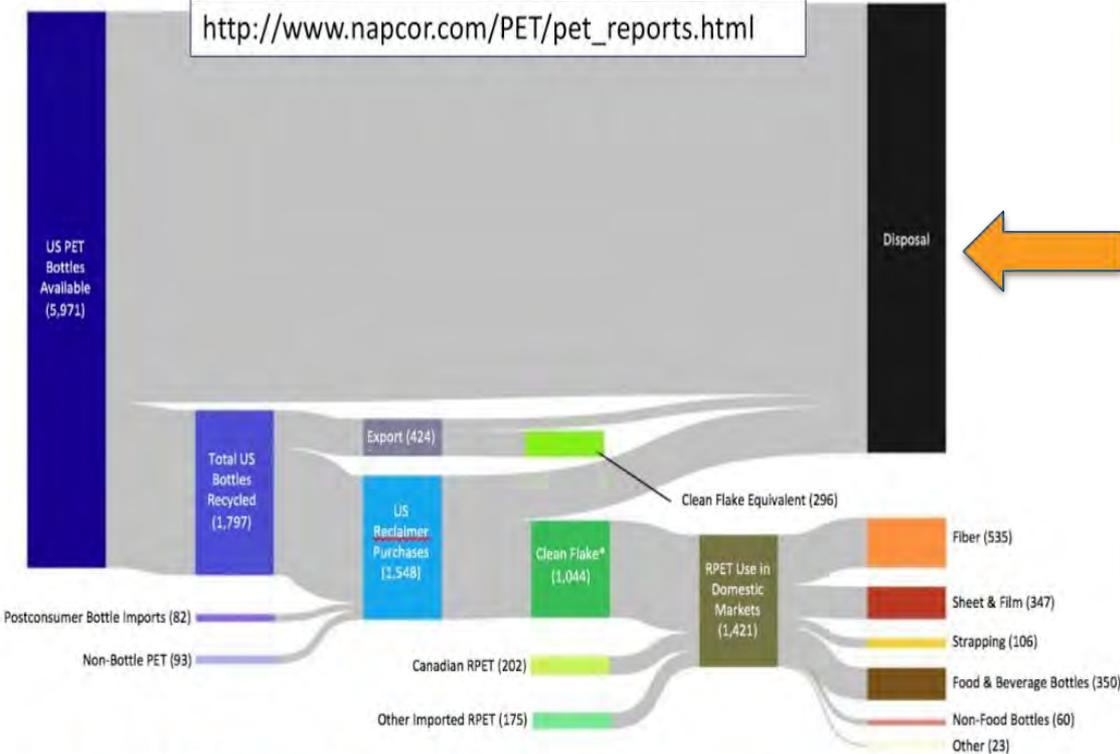
PET Thermoform Challenges

- Intrinsic property differences
- Aggressive labels
- Sorting difficulties
- Black plastic
- Not all haulers/MRFs/reclaimers want them



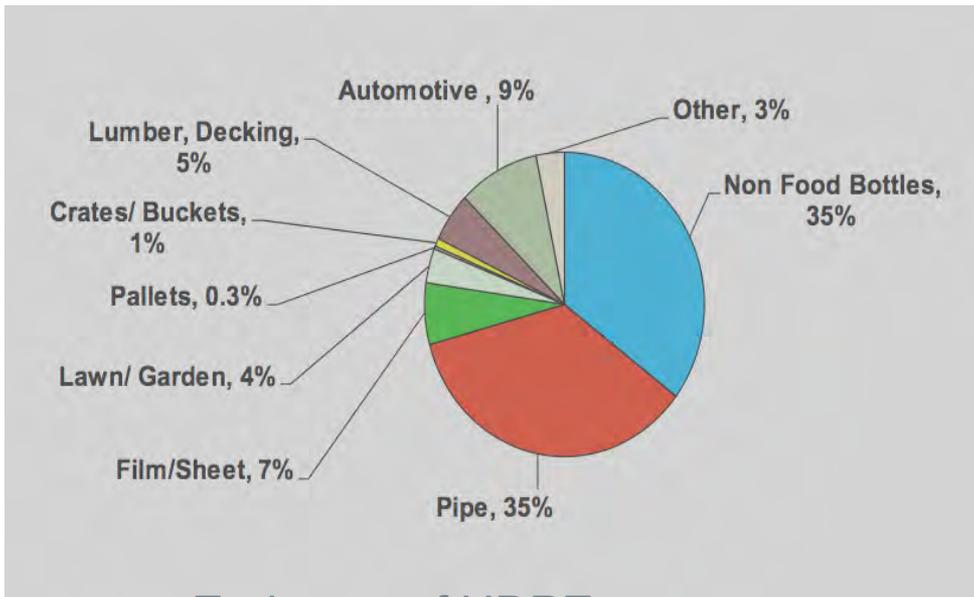
PET Bottle* Movement

PET Materials Flows in the US

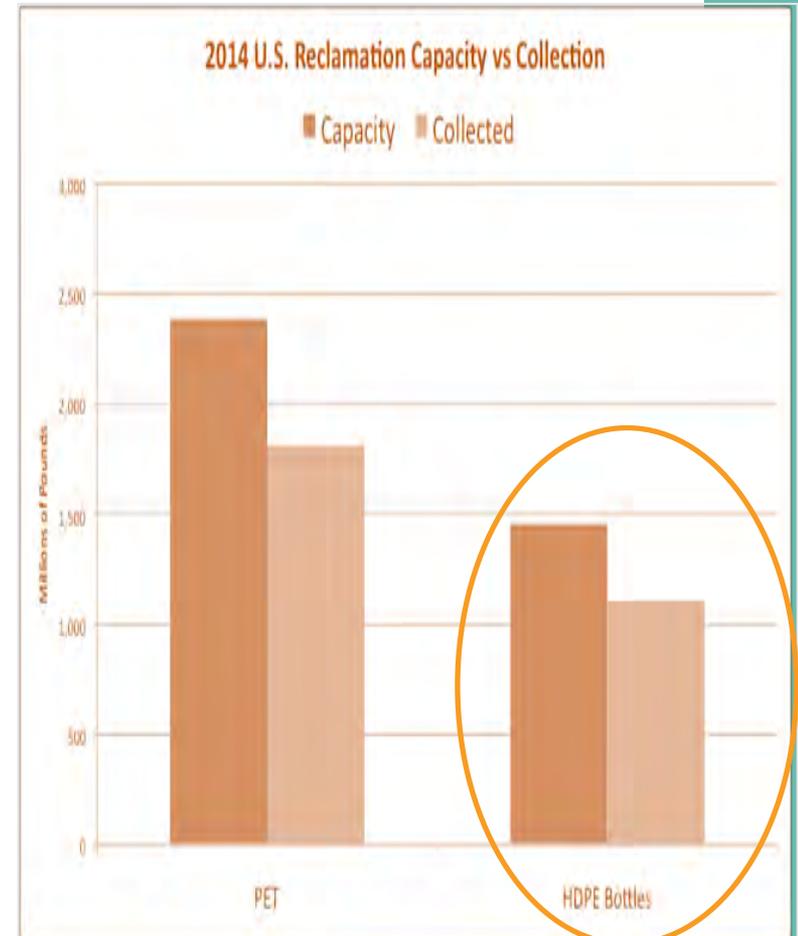


HDPE Bottles

- Recycling Rate 34.6% in 2015
- Right-sizing of bottles
- Bale yield at nearly 82%

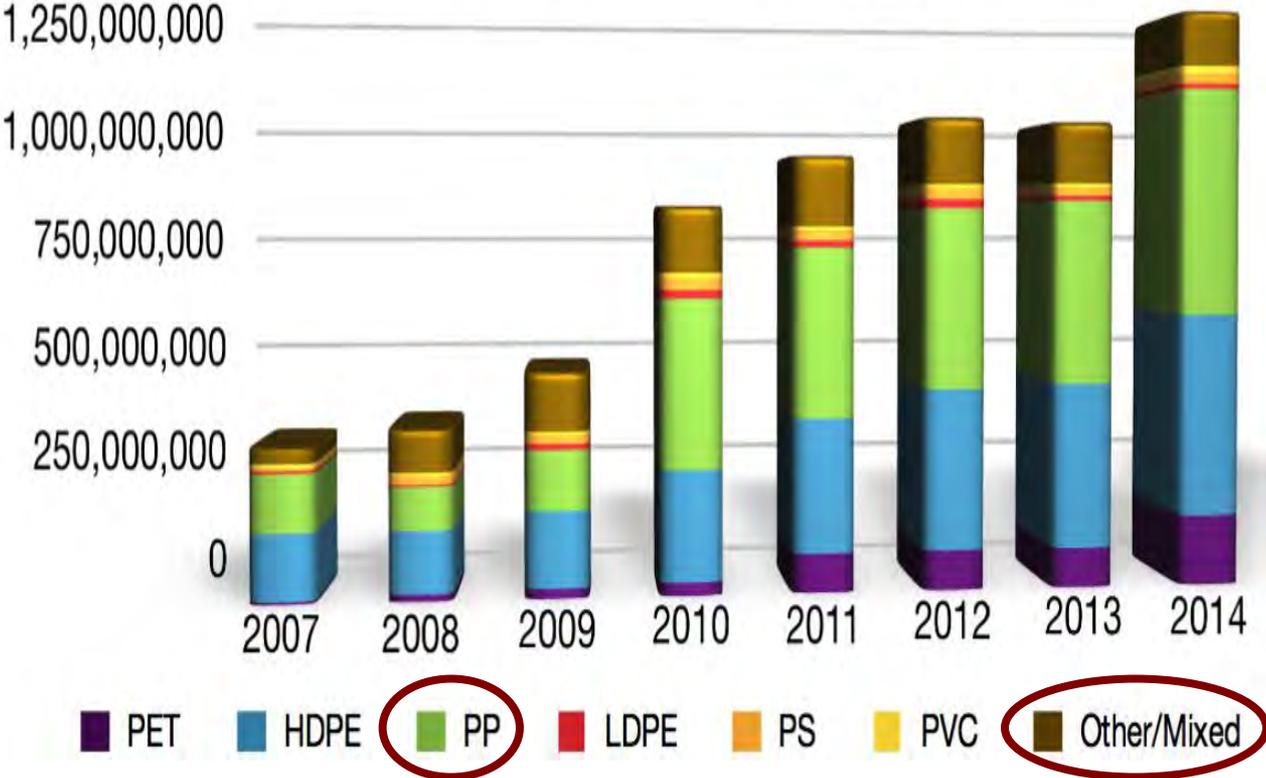


End uses of HDPE bottles



Non-Bottle Rigid

U.S. Non-Bottle Rigid Plastic Recovered Year over Year by Resin² (pounds)

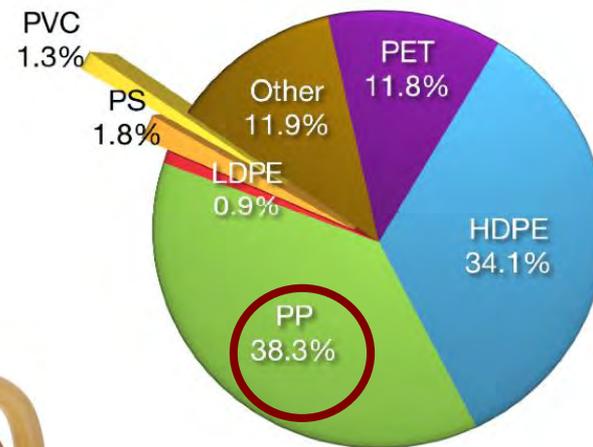


Polypropylene

- Recycling rate is growing for both bottles and containers/caps
- Opportunity to expand collection?
- Demand for material continues to grow
- PRFs/Secondary MRFs support growth of processing



2014 Sources of Non-Bottle Plastics

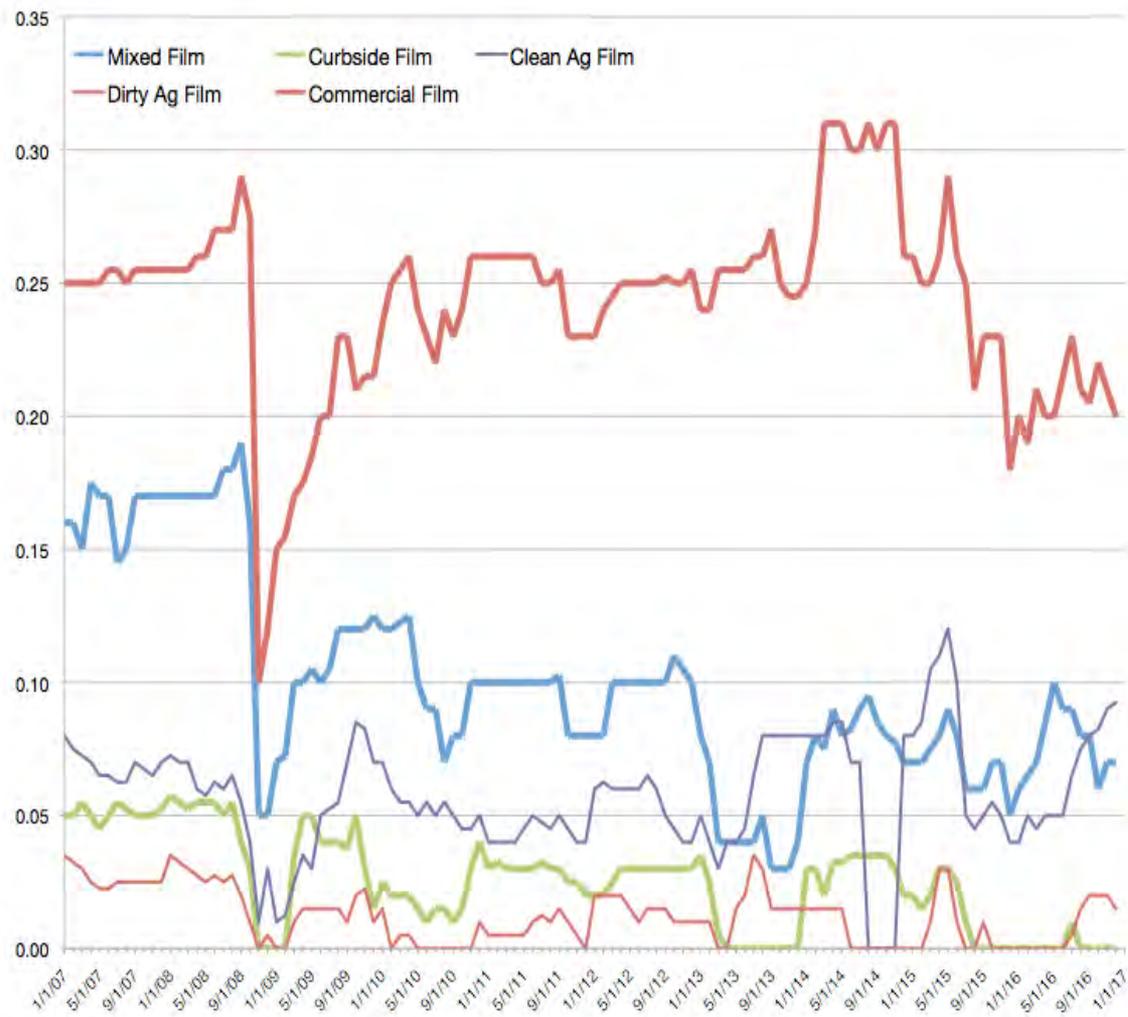


Polypropylene Map

www.RecycleMorePlastic.org/plastics/map.html

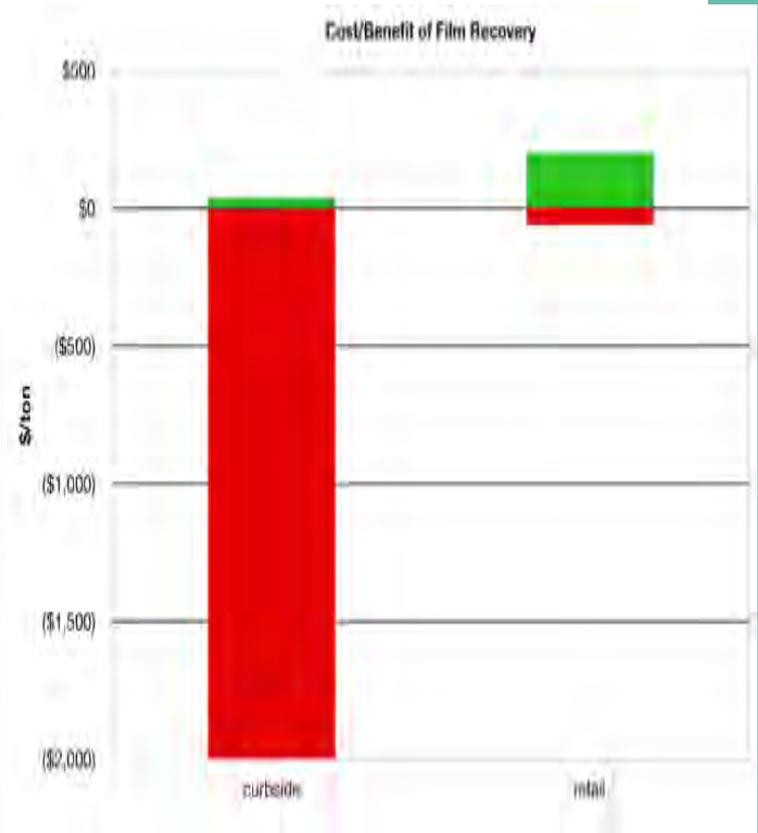


Plastic Film & Bags



Retail to Retail Message

- Discourage curbside collection
- More than 18,000 drop off locations
- Many opportunities to improve commercial collection
- Growing use of How2Recycle Label



Polystyrene

- Domestic Markets exist
- Densification is essential
- Easily identifiable
- Grants available from Foodservice Packaging Institute
- Athens-Clarke County CHaRM received grant in 2016.



Ag plastics

- Resources expanding-terminology & market info: maps and directories
- Good market for clean ag film and some rigid container types



Resources

RecycleMorePlastic.org



The Association of Plastic Recyclers



Plastics Recycling Terms & Tools

Take the ambiguity out of plastics recycling. Clear, consistent recycling terminology can help your community (and the nation) recycle more plastics.

Clear terminology. Better education. More recycling.



recycle your plastics

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Market Support

www.RecycleMorePlastic.org

- Maps
- Case Studies

RecycleMorePlastic.org

www.PlasticsMarkets.org

- Directories
- Bale Specs
- Markets



www.PlasticsRecycling.org

- Case Studies
- Toolkits



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Education Resources

www.PlasticFilmRecycling.org

- Tools
- Case Studies
- Signage
- Drop off Directories



www.RecycleYourPlastics.org

- Plastic Recycling Terminology
 - www.RecycleYourPlastics.org/termsandtools
 - www.RecycleYourPlastics.org/commodityterms
- Recycling Resources



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How to succeed in *all* market conditions?

Focus on quality

Strong buyer/supplier relationship

Consistent Material Supply

Putting the Pieces Together



Resource Links

- ISRI Bale Specs
 - <http://www.isri.org/docs/default-source/commodities/specsupdate.pdf?sfvrsn=2>
- APR Bale Specs
 - <http://www.plasticsrecycling.org/markets/model-bale-specs/pe-pp-resin-specifications>
- PlasticsMarkets.org
 - [Connect suppliers and buyers of all types of scrap plastic]
- PlasticFilmRecycling.org
 - [Resource for plastic film recycling]
- RecycleYourPlastics.com
 - [Resources for common terminology and collection tips]

Questions?

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