

### **Florida Department of Environmental Protection**

Waste Reduction/Recycling

### It Begins with the Bin

### **Residential Recycling Education**

**September 15, 2016** 













### Housekeeping

- All attendees are in "listen-only" mode
- Please use the "Questions" tab to submit a question
- Questions will be answered at the end of the presentation
- The presentation and other material are available in the "Handouts" tab
- This session is being recorded and will be available on the DEP website for sharing
- Please complete the survey after the webinar



### Florida Department of Environmental Protection

Waste Reduction/Recycling

### Kim Brunson

# Recycling and Solid Waste Manager Publix Supermarkets

Chair of Florida Recycling Partnership and Vice-Chair of Recycle Florida Today













### Agenda

- Kim Brunson
  - Publix Super Markets
- Mitch Hedlund
  - Recycle Across America
- Elizabeth Bartlett
  - Keep Florida Beautiful
- Amy Boyson
  - Waste Management
- Allison Macdonald
  - St. Lucie County



### Florida Department of Environmental Protection

Waste Reduction/Recycling

#### Mitch Hedlund

# **Executive Director Recycle Across America**















### Residential recyclingis ...

Actor Phatspares person rategies de Acros America:

Johnny Galeckies idential Recycling



hindered by society-wide recycling issues.

Outron and stocking ison for Recycle Adress America:

Johnny Galecki al Recycling



In order for recycling to be economically viable and able to compete with virgin commodity pricing fluctuations ... you, me and 320 million other people in the U.S. need to do it properly, at home and wherever we go.

Actress, model and spokesperson for Recycle Across America: Angie Harmon









Imagine stops signs
looking different
everywhere we go,
whether near our home,
at our children's school,
at our workplace, or
when we travel to
other places.





Due to the lack of consistency with design, colors and messaging with labels on bins, whether at home, at work, at school or throughout society, people are confused, apathetic and even becoming skeptical about recycling.

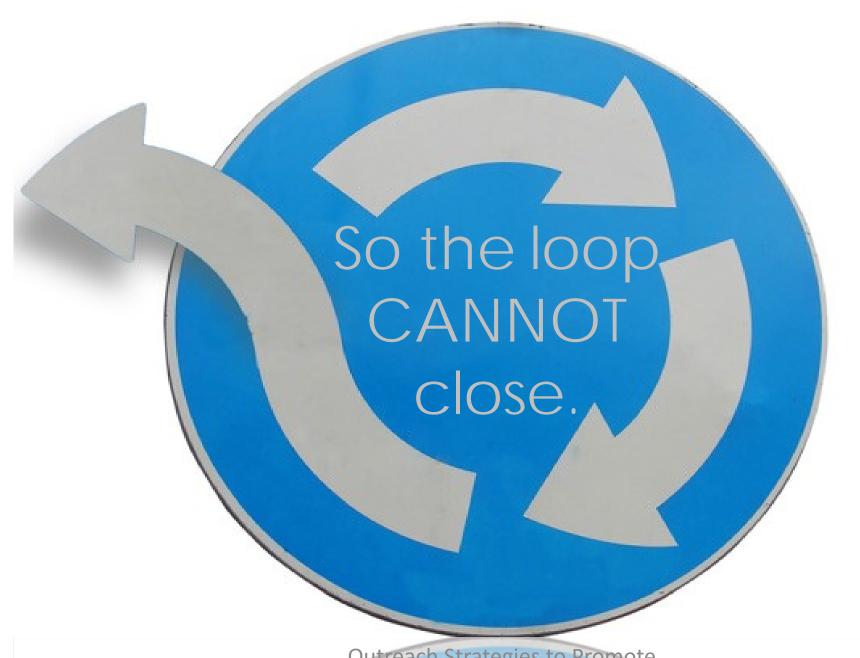




Which is putting CPG companies between a rock and a hard place.

Many manufacturers and CPG companies are experiencing **billions** of dollars of shareholder pressure to begin using more recycled content. But because they don't have access to quality recycled commodities at competitive prices (due to the contamination), they begin to change their packaging material, which causes more issues with consumer confusion and recycling. And so the cycle becomes more Promote complicated.

ηø



Outreach Strategies to Promote Residential Recycling



## recycle across america.

standardized labels for recycling bins ... simple solution - profound impact

Outreach Strategies to Promote Residential Recycling

Therefore we created a simple nonprofit solution to fix the systemic issues which come from public confusion.



Society-wide standardized labels make it easy for people to recycle more and recycle right, wherever they are.

It's that simple

Musician Alanis Morrissette
(spokesperson for Recycle Across America)

Outreach Strategies to Promote

Residential Recycling

Contact: Mitch Hedlund mitch@recycleacrossamerica.org

Society-wide standardized labels on rollaway carts for houses and multi-family housing help people recycle more and recycle right at home.

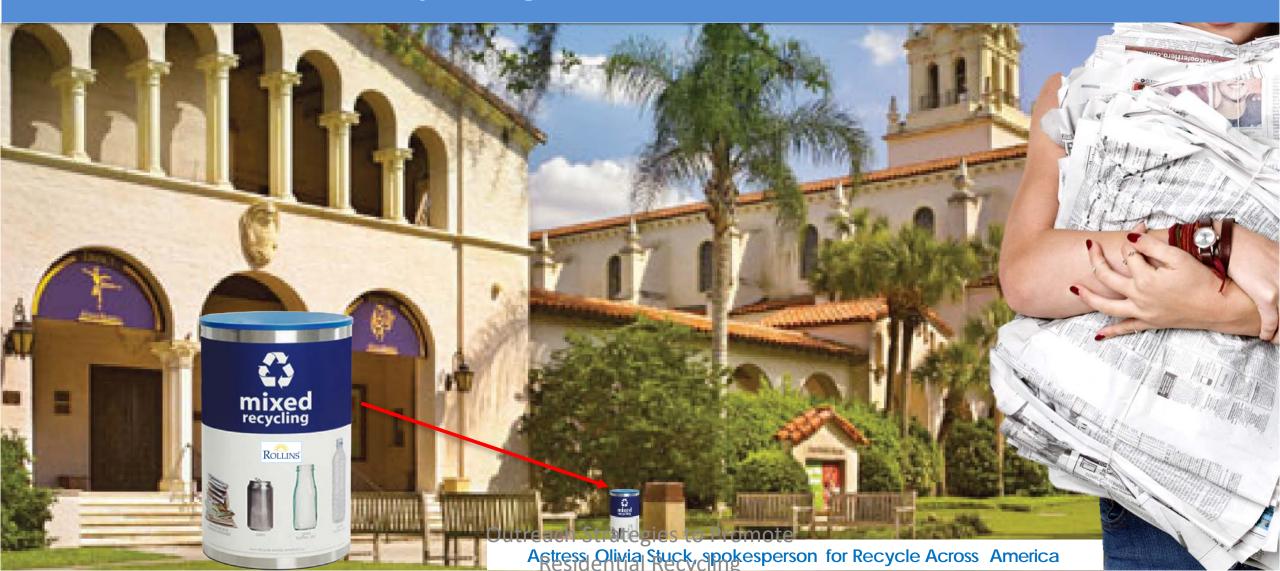






Outreach Strategies to Promote
Contact: Mitch Hedlund mitch@recycleacrossamerica.org
Residential Recycling

Society-wide standardized labels on recycling bins at colleges and universities help students recycle more and recycle right at school.





Society-wide standardized labels on recycling bins at K-12 schools help students recycle more and recycle right at school.

Residential Recycling



Society-wide standardized labels on recycling bins at airports help travelers and visitors recycle more and recycle right.

recycle acress america.



Society-wide standardized labels on recycling bins at grocery stores, banks, parks, retailers and throughout society help consumers and people recycle more and recycle right.

Outreach Strategies to Promote Residential Recycling



Society-widestandardized labels at the workplace, helps employees recycle more and recycle right.

All 80,000 Walt Disney World employees only see the standardized labels on recycling bins at work.

Imagine what happens when they go home and they see the same standardized labeling system on their rollaway cart at home.



Society-wide standardized labels on recycling bins at the beach and throughout the county help visitors, students and residents recycle more and recycle right.

Outreach Strategies to Promote



Society-wide standardized labels on recycling bins at national parks and other destinations help people recycle more and recycle right.

There is a standardized label designed for nearly every sorting need in the U.S.

When necessary, the standardized labels can beslightly modified to accommodate various materials, while not compromising the integrity of the standardized label elements or the efficacy of the solution.













































### There are standardized labels for all types of lids/bins.







#### The standardized labels work!

50-100% increases in recycling levels

THE STANDARDIZED LABELS
ARE DRAMATICALLY
INCREASING
RECYCLING LEVELS





Orlando K-12 Public Schools (OCPS), recycling levels increased

90%

in the first year of using the standardized labels on their recycling bins.

### The standardized help prevent contamination!



### National Focus Group - Won - Consumer's Choice

Rubbermaid conducted a randomized focus group with 1,000 consumers from across the U.S.

The standardized labels WON against all the labels they were compared to, including Rubbermaid's recycling labels and numerous other recycling labels in the marketplace.

The focus group participants agreed that the Recycle Across America societywide standardized labels were:

- More appealing
- More comprehensive
- More effective, and subsequently
- Generated the best recycling results!

### Rapid National Movement - Global Brand Leaders



Mr and Mason I Gobain George

Washing Sony Co





















































Office Depot is the designated office supplier retailer for the state of Florida and municipalities and they have just joined the movement.

# Office DEPOT. Office DVIax



lefs recycle right®

the standardized labels on bins make it easy

Outreach Strategies to Promote Residential Recycling



To help introduce the standardized label solution publicly and to begin advancing the message about proper recycling, we now have nearly 50 celebrities donating their influence to grow this solution in the

campaign.



Recycling is far too important

to be confusing.







Thank you,

Winter Park for starting to use the societywide standardized labels on recycling bins to make it easier for people to recycle *right!* 

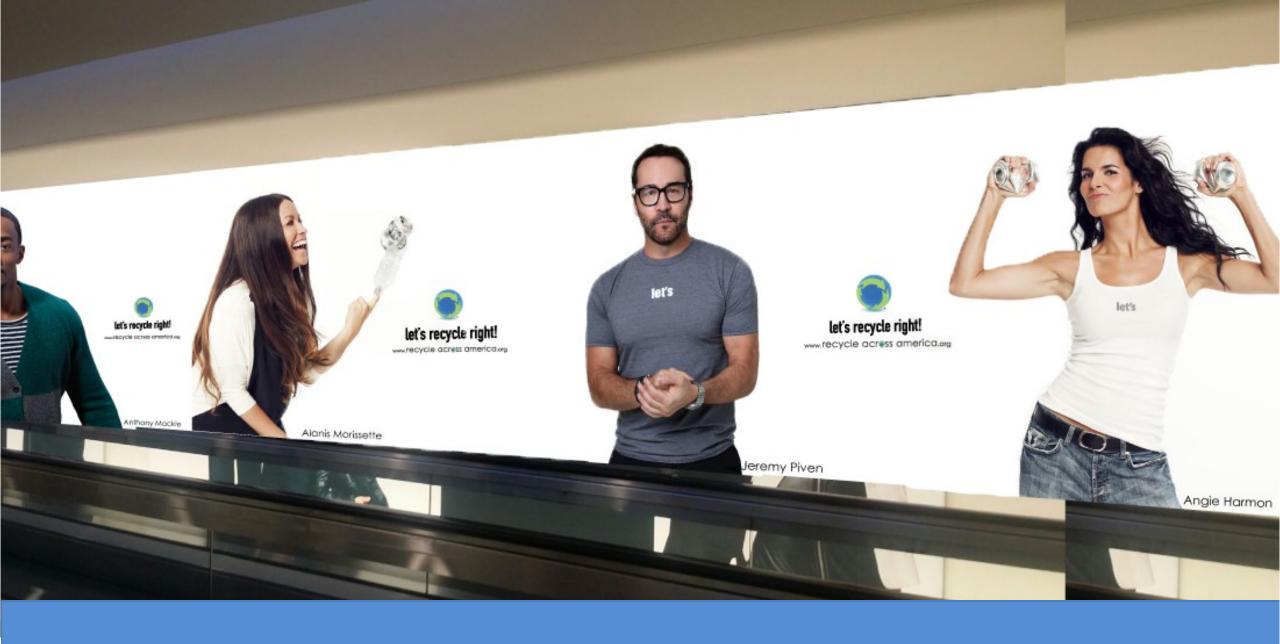
Johnny Galecki

Let's recycle right!

Be part of the solution: recycle acress america.org

The celebrity-led
"Let's recycle right!" PSA
campaign is available
for participating municipalities and
government agencies.

Outreach Strategies to Promote



And can be used at participating schools and airports.

Residential Recycling

And free billboard space and print ad use is available to participating municipalities and brands.



# And TV commercials and radio spots as well.



Outreach Strategies to Promote Residential Recycling



# Recycling is the #1 action

society can do to improve our impact on the environment, and to simultaneously improve the economy, to green-up manufacturing, to prevent waste from going into oceans and to mitigate climate change.

But it all starts at the bin.









Nutrition Facts Serving Size 172 g		
Amount Per Se	rvina	
Calories 200	Calories	from Fat
	% 0	aily Value
Total Fat 1g		19
Saturated Fat (	)g	19
Trans Fat		
Cholesterol 0m	9	09
Sodium 7mg		09
Total Carbohyd	rate 36g	129
Dietary Fiber 1	1g	459
Sugars 6g		
Protein 13g		
Vitamin A 1	% • Vitemin (	2 19
Calcium 4	% • Iron	249
Percent Bally Value calorie diet. Your o or lower dependin	taily values may	the higher

### IT'S TIME FOR PROGRESS.

It's time to apply the same logic to recycling, that has been used for many other critical standardizations in history, which have helped society act on their good intentions. So that recycling can begin to be profitable and thriving, and so manufacturers and CPG brands can begin relying on recyclables as dependable and evergreen commodity.







recycle across america.

# Thank You!

Contact: Mitch Hedlund mitch@recycleacrossamerica.org

Residential Recycling



### Florida Department of Environmental Protection

Waste Reduction/Recycling

### **Elizabeth Bartlett**

# **Environmental Education Coordinator Keep Florida Beautiful**









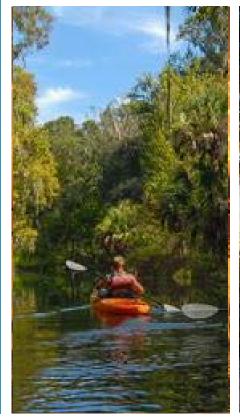






# Outreach Strategies to Promote Residential Recycling

September 15, 2016

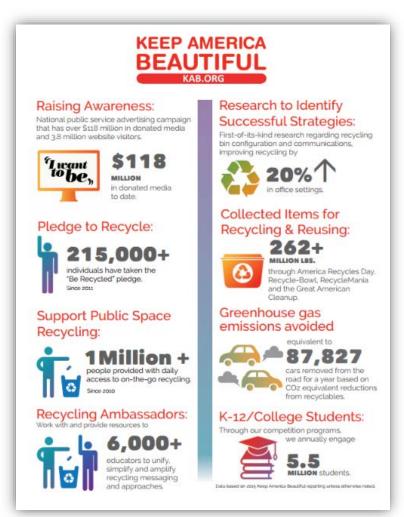




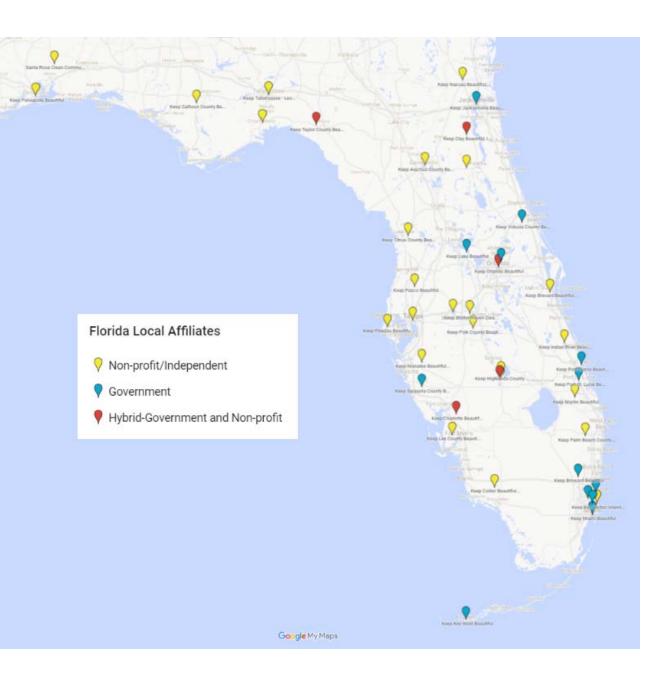


# About Keep Florida Beautiful

- State-level affiliate of Keep America Beautiful
- KFB's mission is to inspire, educate and empower people in Florida to take action every day to improve and beautify their community environments
- We collaborate with > 40 local affiliates in Florida to engage thousands of volunteers in Florida who take action in their communities through programs that deliver positive and lasting impact
- Our primary initiatives are:
  - Recycling
  - Litter Prevention
  - Environmental Education
  - Solid Waste Reduction







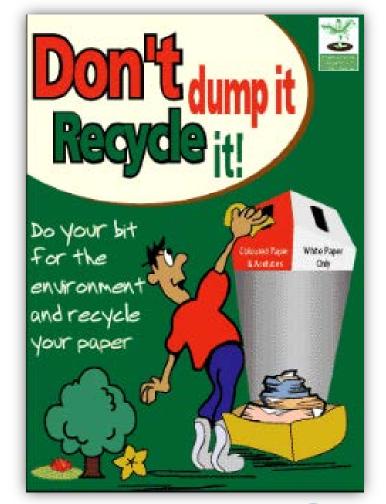
### Florida Local Affiliates

- 43 city, county, neighborhood affiliates in Florida
- Some are associated with local government, some are non-profit, a few are hybrids of both
- Have well-established relationships with communities and businesses



# Challenges to Recycling

- 75% recycling goal mandated by Florida statute in 2008
- Recycling rates in Florida have increased over the past 7 reporting years, but need to improve significantly in order to reach the 75% goal
- There is a collective will to do the right thing, but inconsistent messaging can work at cross purposes







# Outreach Strategies





# Avenues for Public Engagement



Collaborate with state and county recycling programs to communicate consistent messaging through:

- Keep America Beautiful Recycling Initiatives
- Keep Florida Beautiful website and social media
- Florida Local Affiliates network



# Keep America Beautiful – America Recycles Day

Date: November 15, 2016

America Recycles Day is a nationally recognized day dedicated to promoting and celebrating recycling in the United States. Every year on or around November 15 (America Recycles Day) event organizers educate neighbors, friends and colleagues through thousands of events.

Several Florida Local Affiliates participate in this event every year

Learn more and register your event: <a href="http://americarecyclesday.org/">http://americarecyclesday.org/</a>





# Keep America Beautiful – I Want To Be Recycled



'I Want To Be Recycled' is a public service advertising and awareness campaign produced by Keep America Beautiful in partnership with the Ad Council.

This campaign seeks to inspire Americans who do not recycle regularly to make recycling a daily habit by providing tools and educational resources that will help make the occasional recyclers an "everyday" recycler:

- Learn <u>what to recycle and how</u>
- Discover how to "Give Your Garbage Another Life" through the recycling journey
- Play the <u>Super Sorter game</u>
- PSAs: <u>Journey</u>, <u>Stadium</u>, <u>Smile</u> and <u>Superhero</u>!

http://www.iwanttoberecycled.org/



# Keep America Beautiful – Recycle-Bowl

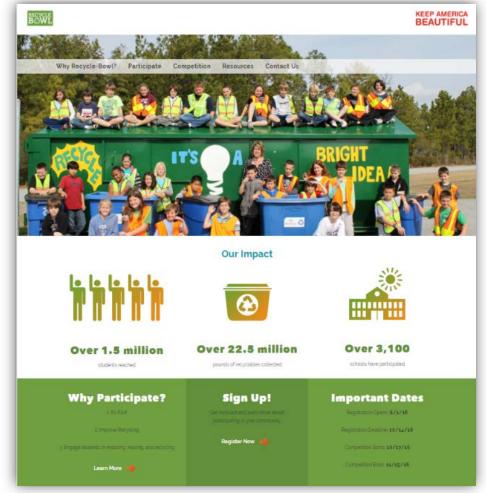
**Registration Deadline**: 10/14/2016

**Competition Dates:** 10/17/2016 – 11/15/2016

**Recycle-Bowl** is a competition that uses the Tools of Change to encourage recycling behavior in K-12 schools. Schools collect and track the weight of recyclables during the four-week competition period. Participation in Recycle-Bowl provides an opportunity to train and educate teachers, custodians, staff and students on recycling.

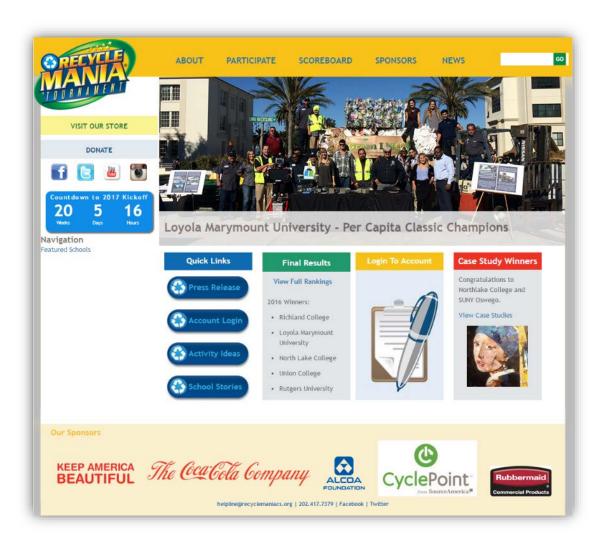
Recycle-Bowl is open to all elementary, middle and high schools, including public, private and charter schools.

Learn more and register your school(s): https://www.kab.org/recycle-bowl





# Keep America Beautiful – RecycleMania



Date: Spring 2017

**RecycleMania** is a friendly competition and benchmarking tool for college and university recycling programs to promote waste reduction activities to their campus communities.

Competing colleges and universities are ranked according to how much recycling, trash and food waste they collect over two months.

With each week's updated ranking, participating schools follow their performance against other colleges and use the results to rally their campus to reduce and recycle more.

http://recyclemaniacs.org/



# Keep Florida Beautiful Website

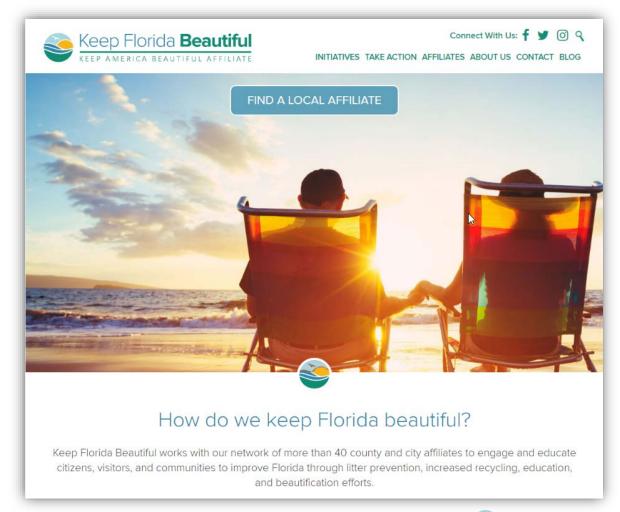
The Keep Florida Beautiful website is designed to promote public awareness regarding:

- Recycling
- Litter Prevention
- Environmental Education
- Solid Waste Reduction

### Primary features include:

- Listing of Florida Local Affiliates
- Affiliates event calendar searchable by location
- Blog articles on topics of interest
- Education and training resources

https://www.keepfloridabeautiful.org/





# Keep Florida Beautiful Social Media



Keep Florida Beautiful maintains a social media presence on Facebook, Twitter, and Instagram to educate, inform and involve the general public in litter prevention and recycling education.

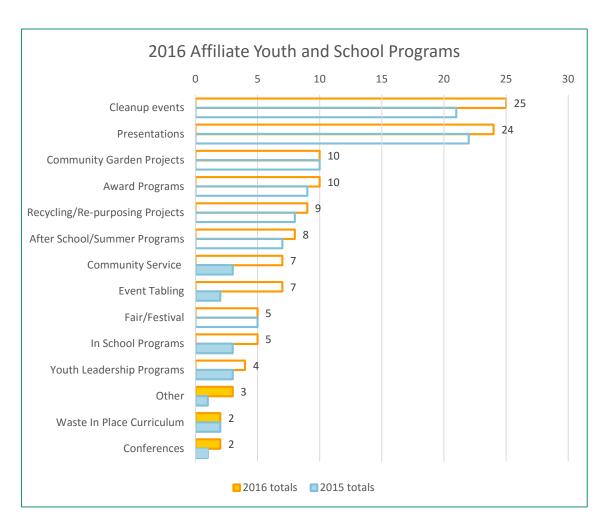
We also use social media as an avenue to engage the public with Florida Local affiliates in their communities by promoting affiliate activities and accomplishments.

- https://www.facebook.com/keepflbeautiful/
- <a href="https://twitter.com/KeepFLBeautiful">https://twitter.com/KeepFLBeautiful</a>
- https://www.instagram.com/keepflbeautiful/





### Florida Local Affiliates - Education Outreach



Florida Local Affiliates promote waste management and recycling education inside and outside of the classroom.

A few of the many examples include:

- Keep Brevard Beautiful works under contract with Brevard County Solid Waste to conduct classroom training on recycling and waste management in landfills for all 4<sup>th</sup> and 5<sup>th</sup> graders in the county.
- Keep Key West Beautiful assists in setting up recycling programs and training for students, teachers and staff as needed!
- Keep Pinellas Beautiful has a bright futures community service program that has several different options for completion which includes working at a plastic recycling center, clean up events, and office administration.
- Keep Winter Park Beautiful teaches recycling and litter prevention during Young Naturalist Camp at Mead Gardens. Instruction including an activity where youth recycle their own paper during a papermaking craft.



# Florida Local Affiliates – Connection to Community

Florida Local Affiliates are very engaged with their communities. During the last year, affiliates organized more than 4,000 cleanup events in Florida

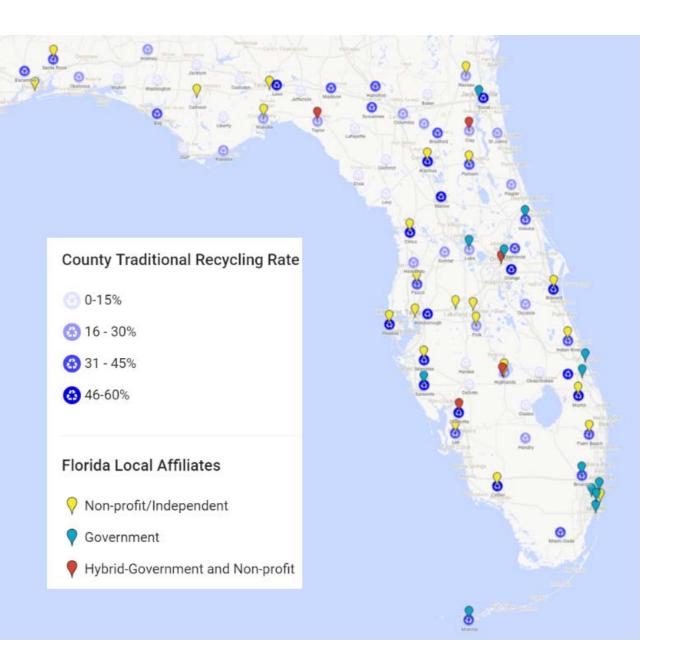
#### Volunteers make the difference:

- 82,000+ volunteers participated in cleanup events statewide.
- Floridians volunteered 350,000 + hours to make these cleanups a success.
- 4.8 million pounds of debris were removed from Florida's landscape.
- 95,000 pounds of recyclables were collected.

With support from county recycling offices, affiliates will be able to mobilize communities to spread the word on recycling.







# County Recycling Rates

- 15 out of 16 counties with traditional recycling rates above 45% have at least one local affiliate
- More than half of the 17 counties with recycling rates between 30 and 45% have local affiliates
- Only 8 of the 34 counties with recycling rates below 30% have local affiliates



# Wrap up



- Keep America Beautiful provides the framework to improve recycling through its initiatives and resources
  - Recycling programs carried out by local affiliates across the country
  - Programs include data collection and reporting used to quantify and demonstrate effectiveness of outreach
- **Keep Florida Beautiful** serves as a resource for promoting communication and cross-training for local affiliates
  - Collaborate and share your messages on recycling
  - Serve as a resource for recycling education
- Florida Local Affiliates are your connection to people in your communities
  - Directly connect with the public through outreach events
  - Can provide insight on local issues and how to resolve them







# Contact

Elizabeth (Lissie) Bartlett Environmental Education Coordinator Keep Florida Beautiful

ebartlett@keepfloridabeautiful.org





### **Florida Department of Environmental Protection**

Waste Reduction/Recycling

# **Amy Boyson**

# Community Relations Manager Waste Management











# Evolving to Recycling 2.0 A Conversation on Recycling



Amy Boyson Waste Management Community Affairs Manager

September 15, 2016





### The Recycling World Has Changed

And continues to evolve—we need to keep up!

The evolving ton

- •The material we use daily has evolved tremendously
- For example, look at the newspaper industry

Single-stream recycling

- •We can put all recyclables in one, convenient cart. Flip side is
- This invites materials that aren't recyclable
- •When in doubt, ~20% of people put something in recycle bin anyway

Recycling programs vary by region  Further compounding confusion about what is recyclable from Area to Area—internally and for our customers

Education

Outreach Strategies

to Promote Residential Recycling  Need to do things differently to have different outcomes



# What Makes Something Recyclable?



### Collection

Convenience
Size/shape
Contamination

Driving Forces



### Processing

Identification Sorting Size



### **End-Market**

Demand Volume Value



# Recycle Often. Recycle Right.<sup>™</sup>

### Getting Back to the Basics of Recycling

- Built on behavior change science framework:
  - Keep it simple
  - Focus on barriers and benefits
  - Tell people why
  - Ask for a commitment
- Focuses on specific actions, related to basic materials with large recycling potential: bottles, cans and paper
- Addresses contamination issues that cause the most issues at MRFs: Wet items and plastic bags



### Simple Messages



Recycle all my empty bottles, cans and paper.



Keep food and liquids out of my recycling.



Keep loose plastic bags out of my recycling.

# Simplifying the Message

- Focus on 3 simple behaviors that could greatly impact recycling
- Tested and proven approach
- Accompanying myth busters/FAQs for those who want to dig deeper



# Microsite Provides Platform Tell People Why







### Education

### **MYTHBUSTERS**

Hover over the center of an image to find out if it is recyclable in your curbside mixed recycling cart.

Click on that same tile to get an Expert Tip for disposal.

#### RECYCLE ALL BOTTLES, CANS, PAPER AND CARDBOARD

# Rule Recycle plastics like empty bottles, jars, jugs and tubs by their shapes. Chasing arrows don't necessarily indicate recyclability.







#### NO PLASTIC BAGS









#### TRASH IT INSTEAD











### YouTube Video





### Resources available at

### www.RecycleOftenRecycleRight.com

RECYCLING BASICS: All the recycling information you'd ever need is just a click away. Need help getting started? Here are some tools to use at home.









Myth Busters

Poster

Brochure

Cart/Bin Signs

EDUCATION: Want to bring recycling education to a school near you? Download the materials below to help you get started.



Curriculum

Overview









Recycling Educational Flyer

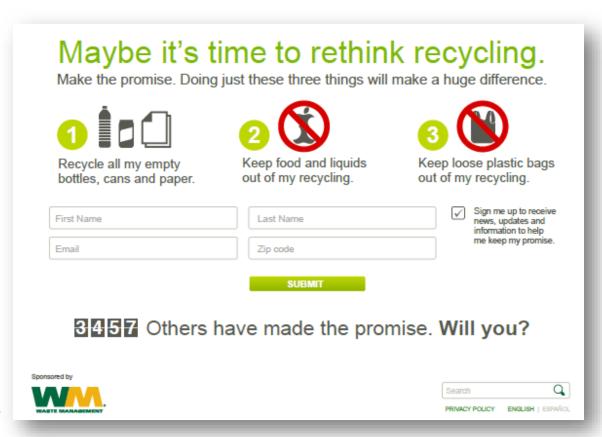
Curriculum: Grades K-2 Grades 3-5 Grades 4-5

Flyer with Kid's Activity

Recycled Art Activities



- Behavior change science shows that people that commit to an action are much more likely to follow through
- The Recycle Often, Recycle Right promise asks people to commit to the 3 simple behaviors
- Then, asks them to share with their friends and family





### Recycle Often. Recycle Right Widget

#### What it is:

A small image that displays a message on your website and links to RORR.com

#### How it works:

- Your city webmaster does a one-time update, dropping the embed code into the recycling page on your city's website and the widget is installed
- Waste Management periodically updates the messaging on the widget to reflect the current RORR strategies

#### Why it's great:

- It's easy to use it just requires a one-time installation from your webmaster
- You can place it wherever makes the most sense on your website and it automatically resizes to fit your page, up to 300 pixels in width
- It helps keep your website current, addressing consumer FAQs and recycling myths
- It provides an easy way for consumers in your city to get the most up-to-date information about recycling



# Curbside Education Program Information Directly on the Cart

Step 1: New acceptable/non-acceptable sticker on lid of recycle cart



Outreach Strategies to Promote Residential Recycling



# Curbside Education Program Information Directly on the Cart

Step 2: Notification tag informing resident of contamination issue

## **WARNING!**



Your neighborhood has been identified as a high contamination area for recycling. Over the next several weeks, we will be conducting individual cart audits to confirm your compliance with recycling properly. **RESIDENTS**WHO IMPROPERLY USE THEIR RECYCLE CART FOR MATERIALS OTHER THAN RECYCLABLES WILL RECEIVE

A SERVICE TAG AND YOUR CART WILL NOT BE EMPTIED. (Su vecindario ha sido identificado como una área de alta contaminación en los reciclables. Durante las próximas semanas, estaremos conduciendo examines individuales de los recipientes de reciclables para confirmar su cumplimiento en reciclar propiamente. Los residentes que no usen sus recipientes de reciclables correctamente, recibirán una etiqueta de información y sus recipientes no serán vaciados).



# Curbside Education Program Information Directly on the Cart

Step 3: Tag cart and do not service recycle cart.

### Quality service is our Goal.

This recycle cart does not meet the following requirements for collection: Este contenedor no cumple con los siguientes requisitos para colección:

- ☐ MATERIAL IS NOT RECYCLABLE

  Materiales no son reciclable
- □ MATERIAL IS BAGGED

   Materiales estan embolsados
- □ CART CONTAINED GARBAGE

  Contenedor contiene basura

PLEASE CORRECT THE CONDITION AND THE ITEM(S) WILL BE PICKED UP ON YOUR NEXT RECYCLE COLLECTION DAY. Por favor, corrija lo indicado y sus reciclables serán recogidos en su próximo dia de colección.



## Additional Education Program







### Dear North Miami Beach Resident:

### We need your help.

Our Waste Management driver identified garbage and nonrecyclable material in your blue recycling cart. That garbage ruins the good stuff and negates the efforts of your neighbors to

Please see the list of acceptable Recyclables on the back of this postcard. And remember, do not place your Recyclables in plastic bags. Keep them loose, clean, and dry.

In the coming weeks, our team members will continue to check the contents of recycling carts. If your cart has Garbage and non-recyclable material in it again, a Warning Tag will be placed on your cart and it will not be serviced. Please empty the contents into your Garbage cart for service.

Please visit www.recycleoftenrecycleright.com for more

Thank you for your help in Recycling Right.

#### Estimado Residente de North Miami Beach:

#### Necesitamos su avuda.

Nuestro conductor de Waste Management identificó basura y materiales no reciclables en su recipiente de reciclaje azul. Esa basura arruina las cosas buenas y anula los esfuerzos de sus vecinos para reciclar correctamente

Por favor vea la lista de materiales reciclables aceptables en la parte posterior de esta postal. Y recuerde, no coloque sus materiales Reciclables en bolsas de plástico. Manténgalos sueltos . limpios v secos.

En las próximas semanas, miembros de nuestro equipo continuarán revisando el contenido de los recipientes de reciclaje. Si su recipiente tiene Basura y material no reciclable de nuevo, se colocará una etiqueta de Advertencia en este y no se le brindará servicio. Por favor vacíe el contenido en su contenedor de Basura para recibir servicio.

Por favor visite www.recycleoftenrecycleright.com para más información. Gracias por su avuda en Reciclar Bien.

### Chè Rezidan North Miami Beach:

### Nou bezwen èd ou

Chofè Jesyon Fatra nou idantifye fatra ak materyèl ki pa ka resikle nan bin resiklaj ble ou yo. Fatra sa yo gate bon bagay yo epi elimine efô ke vwazen ou yo ap fê pou resikle byen. Tanpri gade lis Resiklaj ki akseptab ki nan do kat sa a. Epi sonje, pa mete Resiklaj cu yo nan sache plastik. Kenbe yo lach,pwòp, epi sèk.

Nan semèn kap vini yo, manm ekip nou yo ap kontinye tcheke sa ki nan bin resiklaj yo. Si bin ou an gen Fatra ak materyel ki pa ka resikle ladan l'ankò, y' ap mete yon Etiket Avètisman sou bin ou an epi yo pap devide'i. Tanpri vide bagay ki ladan'i yo nan bwat

Tanpri vizite www.recycleoftenrecycleright.com pou plis enfòmasyon. Mèsi pou èd ou pou Resilde Byen.



### Hay basura en su reciclaje. Resiklaj ou a gen fatra ladan'l.

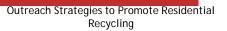
We found one or more of the following Items: Encontramos uno o más de los siguientes artículos: Nou jwenn youn oswa plis nan atik sa yo:

- ☐ Recyclables bagged in plastic bags Artículos reciclables en bolsas de plástico Resiklaj ki andedan sache plastik
- ☐ Dirty/wet items (like food and liquids left in your recycling) Artículos mojados y/o sucios (no deje alimentos o líquidos en sus artículos reciclables) Atik ki sal/mouye (tankou manje ak likid ki nan resiklaj ou)
- Non-recyclable Items (like garden hoses or propane tanks)
- Artículos no reciclables (como mangueras de jardín o tanques de gas propano) Atik ki paka resikle (tankou kawoutchou pou wouze oswa tank gaz pwopán)
- ☐ Other Otro Lòt

### We had to leave your recycling behind. Please empty this material in your garbage cart for service.

No pudimos recolectar su reciclaje. Por favor vacíe este material en su contenedor de basura para recibir servicio. Nou te oblije kite resiklaj ou dèyè. Tanpri jete materyèl sa nan

> When in doubt, leave it out. Si tiene alguna duda, déjelo afuera. Lè w gen dout, pa mete'l.





## How Can We Work Together?

Community events

City Website

Email Blasts

Social Media

Public Access Channel

City Council Meetings

Community Groups

Schools

What Else?



### **Florida Department of Environmental Protection**

Waste Reduction/Recycling

### **Allison Macdonald**

Program Manager St. Lucie County













# IT PAYS TO RECYCLE RIGHT!

Allison Macdonald
Program Manager | Solid Waste Department







## **Presentation Outline**

- 1 Project Implementation/Goals
  - **2** Contracting
    - **3** Construction
      - 4 Marketing and Education
        - 5 Results



## **Geographic Location**

- St. Lucie County, Florida
  - Population Increase
  - Rapid Growth
- Baling and Recycling Facility Site
  - Baling Facility
  - Class I Balefill
  - C&D Debris Processing Facility
  - C&D Debris Landfill
  - Glass Recycling System
  - Yard Waste Processing Site
  - Single Stream Processing Facility
  - Scrap Metal and Tire Collection Sites





# Program Development/Goals

- Educate and encourage people to participate in our integrated solid waste management practices
- Implement innovative technologies for responsible solid waste management
- Divert reusable materials from the landfills
- Maximize the part of the waste stream that can be recovered and marketed





# Single Stream Recycling Timeline







# Innovative Contracting Agreements City of Port St. Lucie

- Establishing private-public partnership between St. Lucie County, City of Port St. Lucie, and the hauler (WastePro)
- Interlocal agreement with the City of Port St. Lucie
- Provides for guaranteed recyclable stream and revenue
- Minimizes risk to St. Lucie County
- Provides County-controlled disposal location for household waste





# Innovative Contracting Agreements – Hauler

- St. Lucie County's tipping fee is \$55/ton (tons delivered) plus \$8/ton processing fee
- Guarantee of 100 tons/day (put-or-pay, \$55/ton)
- Hauler is responsible for marketing and sales of all commodities
- St. Lucie County does not receive revenue from the sales of the commodities
- Minimal impact to St. Lucie County due to market fluctuations
- Hauler is averaging 135 tons/day
- Design capacity of facility is 120 tons/day





# Single Stream Facility Construction

- Construction cost = \$7.4M
- Housed in a 35,000 square foot building
- Equipment rated at 15 tons per hour (operating at 20 tons per hour)





## Single Stream Facility Construction

- Infeed system
- Optical sorter (PET and HDPE)
- OCC screen, News screen
   Finishing screen
- Manual sort stations
- Conveyors
- Magnets
- Bunkers
- Eddy current separator
- Baler



Began operation in October 2014



# Glass Recycling

- System purchased from Andela Products for \$385,000
- Design capacity of 20 tons/hour
- Return on the investment if only used for daily cover = 9 years
- Tipping fee: \$4.50/ton
- Glass is being trucked from West Palm Beach by a South Florida hauler
- Produces a 3/8-inch minus and sand aggregate







# Multimedia Marketing and Education Campaign

- Television SLCTV and 24
   Networks on Comcast
- Radio Top 8 stations in our market
- Digital format Comcast.net,
   Treasure Coast Newspaper
- Print Media local news outlet, brochure







## Recycling Challenge

- Began May 1, 2014
- Funded by Waste Pro through promotional funds per our contract agreement
- Residents are chosen at random
- Staff looks for carts that are placed at the curb properly and then checks to make sure the proper material is in the cart
- Resident is awarded \$100
- Nearly \$90,000 awarded to residents in unincorporated St. Lucie County and the City of Port St. Lucie

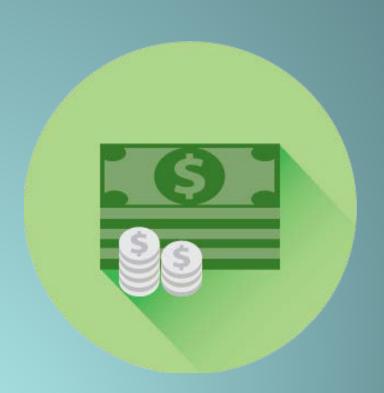






## Recycling Challenge goes to the Fair

- Monthly recycling challenge funds will be used at the fair
- Fair goers will be greeted at the gate and reminded that "It Pays to Recycle Right" at the fair
- Volunteers will reward patrons at the fair with \$10 bills
- The theme for school exhibits is Preserve the FUN...Recycle when done!





# Recycling Participation Rates





## Results

- Single stream recycling facility is processing 20 tons/hour
- Generated 22 new St. Lucie County jobs with no additional cost
- 50% increase in recycling tonnages
- Increase in public awareness
- Ability to target contamination
- Increased participation rate
  - May 2014 participation rate was 42%
  - May 2015 participation rate was 73%
  - December 2015 participation rate was 63%



















## Questions

- Please use the "Questions" tab in in the attendee panel to submit a question
- Use the "Raise Hand" option to be identified for follow up



## **FDEP Waste Reduction Staff**

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### **Florida Department of Environmental Protection**

Waste Reduction/Recycling

## It Begins with the Bin

## **Residential Recycling Education**

**September 15, 2016** 









