



Cleaning the Recycling Stream

2019 New Jersey Sustainability Summit June 14, 2019

Agenda

- Overview of Sustainable Jersey's Recycling and Waste Reduction Education and Compliance Action
- History of Recycling in New Jersey and Current Recycling Crisis
- 3. Burlington County's Tip N Tag Audits
- Holmdel's Recycling Education & Outreach



Sustainable Jersey Action

Recycling and Waste Reduction Education and Compliance

Goal

Increase quantity and quality of recycling materials collected from residents while reducing amount of solid waste generated





Action Requirements

- 1. Recycling strategy
- 2. Recycling ordinance
- 3. Inspections report
- 4. Accepted materials flyer
- 5. Link to municipal recycling web page
- 6. Four examples of education and outreach on recycling policies/procedures
- 7. Two examples of education and outreach on waste reduction
- 8. GOLD LEVEL: Use of a recycling app



Rutherford Borough Flyer





History of Recycling in New Jersey & Current Markets Crisis

Gary Sondermeyer, Vice President of Operations Bayshore Family of Companies June 14, 2019



Incredibly Exciting Times!

- Recycling Markets are the Most Challenging in History!
- We have **Unprecedented Media Focus** on Recycling and Plastics in our Environment:
 - A "Plastic Ocean"
 - "Bag It Is Your Life Too Plastic?"
- Single Use Plastics Bag Bans, Straws, Polystyrene Food Service Products:
 - New York City Program
 - Sustainable Downbeach and Many Shore Communities
- Food Waste Reduction and Recycling a Primary Legislative Focus
- Recent 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 This May!!!

Where it all began - NJ Recycling

- 1982 "Recycling in the '80's"
- 1987 Mandatory Recycling
 - "Floor" of Recycling "3 Materials, plus Leaves"
- Glass Containers, Aluminum Cans & Newspaper
- NO ONE Exempt!!!
- Down to "Kitchen Level"
- 1993 Plan and Integrated & Waste Management
- 50% MWS and 60% TWS
 Goals Codified by Legislature



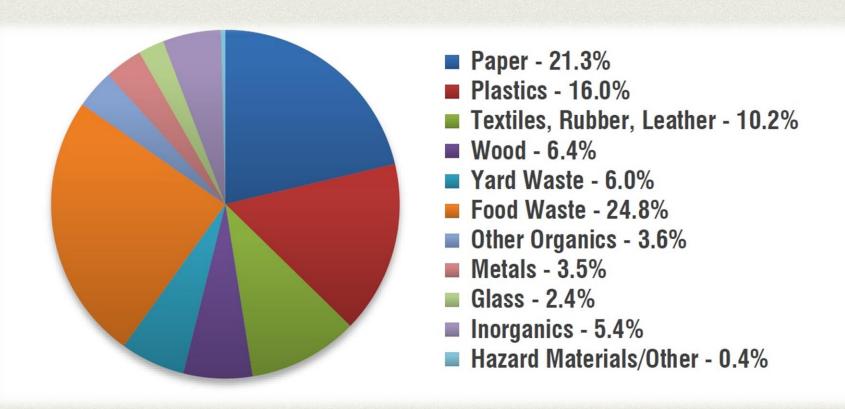


Where Are We Today???

- Recycling Still MANDATORY (Many Forget)
- County-by-County Plans in Place & Current
- 50% and 60% Recovery Goals are Unchanged
- 22.7 Million Tons Generated (2016 Stats)
- 13.91 Million Tons Recycled
- 61% Total Waste Stream Recycling
- 44% Municipal Waste Stream Recycling
- Curbside Recycling VERY Successful
- Commercial/Institutional our Challenge
- Markets for Material VERY Divergent!



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















SO.....What's the Problem???

- Most New Jersey Towns have Gone to "Single Stream" v. "Dual Stream" Collection – Leads to VERY High Contamination and Compromised Markets
- International Market Restrictions from China Green Fence & Green Sword
- Recycling is Confusing Plastics Recycling is NUTS!!!
- "Recycle Mania" EVERYTHING is recyclable!!!
- Total Disconnect between "Supply and Demand" we Got the Stuff Too Few Markets to Send it to!
- **Economics of Recycling** have Left the Building In a Few Years Towns Went from "Getting Paid" to "PAYING" \$65/Ton + North!
- Long Lead Time Necessary to Restore Domestic Markets.
- International Tariff Wars Won't Help Markets!

SO.....What Can We Do?

 Local Bans on Sale or Use – Straws and Film Plastic Bags;



- Stepped up Education & Enforcement Related to Contamination
- State Leadership (State Plan/County Planning Initiative)
- Incentives for Development of Domestic Markets Business Recycling Loans as in Years Past
- Do we Stop Collecting Some Plastics Just Look at #1 & #2?
- Do we go back to Duel Stream? (California Assembly Bill 815)
- Need a Statewide Markets Development Council
- We Must Reactivate the State SWAC
- Critical to have a Statewide Dialogue!
- Joint Legislative Hearing August 15th





Thank you

BAYSHARE

Your recycling solution.

Burlington County Tip N Tag Audits

Presented by Rachel Barton & Susan Konen



Regional Recycling Program



- ▶ 140,000 Single Family Homes
- ▶ 29,500 Multifamily Units
- 40 Municipal Dropoffs
- ▶ 140 Schools & All County Facilities

Background

- China
 - Green Fence
 - National Sword
 - ▶ Banned all imports of recycled plastic
 - Contamination rate cut from 5% to 0.5% for paper and cardboard
- The Recycling Partnership
 - Contamination Tool Kit
 - Oops Tags
 - Shine On Tags
 - Post Cards
 - Mailers









- Compare recycling rate vs. recycling right
- Identify most common contaminants
- Measure effectiveness of tagging on recycling behavior changes
- Engage residents when possible
- Put single stream labels on cart lids

Awareness, Awareness, Awareness

- ► Team effort with recycling coordinators, township managers, elected officials, police officers, etc.
- Notify residents informing them about audits
 - Recycle Coach
 - Press Release
 - Website Alert
 - Email Lists
 - Mailers for study area
 - Flyers/Posters
 - Social Media Posts
 - "Audits Are Coming" video



















We are finding too many bad, dirty and downright dangerous items in recycling collected in towns across the county.



These put our workers and recycling sorting equipment at great risk.



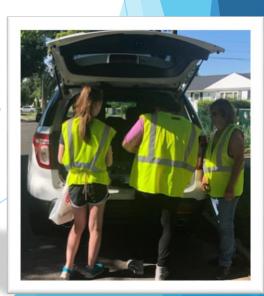
STOP NOW!



Our Tip & Tag Teams will be checking recycling carts this summer, leaving friendly "Oops tags" to help you recycle right!

First Things First

- Picked towns with varied levels of contamination and demographics
 - ▶ High income and low income
- Routes selected with OTC (service provider)
 - ▶ Study route sized for ½ day of field inspections
- Chose routes in engineered communities with clusters of homes as well as older, traditional neighborhoods
- Staffing
 - High school & college students, county assistant recycling coordinators, municipal recycling coordinators, OTC
- Create tags
- Create data sheets



Cart Lid Labels

- ▶ 100,000 older carts had "Paper Only" labels
- New label placed directly on cart lid
- ▶ New carts have "hot stamp" graphic on lid



- · Flatten boxes to fit in carts
- Empty & rinse all containers
- No trasi
- No plastic bags/plastic wrap
- No tanglers (hoses/wires)
- NO SHREDDED PAPER
- NO STYROFOAM



They jam our sorting equipment. Recycle at grocery stores.

Questions? Call (609) 267-6889 or email recycling@otcbc.org

burlcorecycles.com

SET CARTS OUT BY 6AM | LID OPENING MUST FACE THE STREET

Step 1 - Stock Up

- Aprons
- Zip ties
- Oops & Shine On tags
- Rejection stickers
- No plastic bag stickers
- Cart placement stickers
- Pens, pencils, sharpies
- Cart labels

- Soap bottles and rags
- Clip boards
- Data sheets
- Route maps
- Recycling literature
- Giveaway reusable bags
- Safety vests
- Water/Gatorade
- Cold rags



Step 2 - Inspection

- Coordinate with OTC to stay ahead of service trucks
- Rejected addresses called into dispatch
- Interns assigned routes based on efficiency
- Followed highlighted route maps
 - Two interns inspecting perimeter & two interns inspected interior streets
 - Both sides of street inspected at the same time
- No tipping involved lift lid, surface inspect, tag
- Deeper inspection optional
- Removal of contaminants optional
 - Only when trash pickup is the same day, otherwise it's a rejection







Sample Data Sheet

													1		
House #	Street Name	Categories									1st Audit	2nd Audit	3rd Audit	Comments	
		Garbage/ Bagged	Plastic Bags/Film/ Wrap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Napk., Paper Towels, Tiss.	Cups, Plates, Utensils				
721	Bearm Pl											50			
723	Beacon Pl											50			
725	//	1										X			
727	1/											N			
729	11									/		X			
731	/ C		/									X			
733	((50			
735	((SO			
804	Braddock Terr											50			
	Braddock Terr											N			
808	11											SO			
810	(/	,						V				X			
812	H		V.					/				X			
814	11											50			
2			37						/						

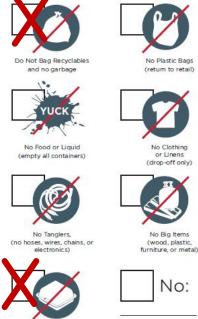
Step 3 - Tag for Problems

- Oops! Tags customizable
 - We used zip ties for attachment other suggestions?
- Pick types of contaminants that are problems for your MRF
- Make messages clear and concise
- Oops tagged carts still collected
- Rejection stickers must be clearly visible for collection driver
 - Pulled cart from curb and turned around
- Rejected addresses reported to collection manager
- Remove contaminants at your own risk





PLEASE LEAVE THESE ITEMS OUT!



packaging/peanuts

Step 4 - Reward Good Behavior

- No contaminants found
- ▶ Tag is customizable to your program
 - Added empty and rinse
 - Added replace water bottle caps only
 - Added Recycle Coach information

YOU ARE A
RECYCLING
ROCK STAR!
SHINE
ON.

We have noticed that you are recycling the right things and leaving out the stuff that belongs somewhere else.

Keep up the great work!



RECYCLE MORE OF THESE:

CANS —
Aluminum
and Steel Cans

Food and Beverage Bottles
and Jars







empty and rinse do not flatten

empty and rir

empty and rinse

PAPER

Clean Mixed Paper, Newspaper, Magazines, and Flattened Cardboard







DI ASTICS

Kitchen, Laundry, Bath: Bottles and Containers









replace water bottle caps only

To learn more, download our free Recycle Coach app!





Graphics provided by The Recycling Partnership

Contaminants Results

- ► Ten contamination categories
- ► Contamination decreased in all towns in each category

	*Program contamination average over all three audits. Excludes all no set outs (1501 Total Homes Recycling)										
									Nap,		
		Plastic							Paper	Cups,	
	Bagged/	Bags/Film/W							Towel,	Plates	
	Garbage	rap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Tiss	Utensils	
Maple Shade	7%	20%	6%	1%	1%	3%	3%	7%	4%	8%	
Medford	3%	15%	8%	1%	2%	3%	2%	5%	6%	7%	
Mount Laurel	6%	17%	5%	1%	1%	4%	2%	5%	7%	7%	
Riverside	6%	22%	9%	1%	2%	4%	5%	8%	7%	7%	
Willingboro	9%	26%	11%	1%	2%	4%	5%	9%	6%	9%	
Total Average	6%	20%	8%	1%	2%	4%	3%	7%	6%	8%	

Contamination Results (Continued)

	Garbage/ Bagged	Plastic Bags/Film/ Wrap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Nap, Paper Towel, Tiss	Cups, Plates Utensils
Week 1 Oops/Rejects	25%	54%	15%	4%	6%	7%	3%	13%	13%	15%
Week 2 Oops/Rejects	11%	41%	10%	1%	1%	10%	10%	11%	20%	23%
Week 3 Oops/Rejects	8%	34%	14%	4%	0%	11%	0%	13%	21%	14%
Average	15%	43%	13%	3%	2%	9%	4%	12%	18%	17%
1st Week Comp to Average	10%	11%	2%	1%	3%	-2%	-1%	1%	-5%	-2%

Contaminants Results (Continued)

- ► Top 5 Contaminants:
 - Plastic Bags/Film/Wrap
 - Yuck
 - (Food waste/liquid left in recyclables)
 - Cups, plates, utensils
 - Garbage/Bagged Material
 - Pizza Boxes





Results

- > 90% of homes are recycling
 - ▶ 57% of homes are recycling right
 - ▶ 43% of homes need more education (includes homes not recycling)
- ▶ 33% of homes consistently recycled right
- ▶ 25% of homes improved recycling behavior
- 22% of homes did not change or improve recycling behavior



Conclusion

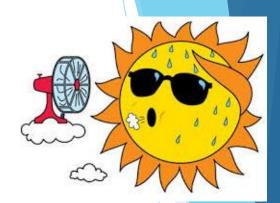
- Types and amounts of contaminants decreased
- Direct outreach needed for residents that did not change behavior, including NOVs
- Traditional recycling efforts do work for recyclers that did it right (mailers, flyers, etc.)

Recommendations

- The study needs a minimum of 4 collections
- Towns must follow up immediately with residents

What would we do differently?

- Data sheet set up
 - ▶ Name of interns, date of data, sheet #'s
- Address list from towns
 - Exclude vacant properties from home count
- Keep interns on same routes throughout the study
- Data review
- Increase number of consecutive weeks for audits
- Schedule audits to avoid extreme weather
- Use same sample size (if comparing routes/neighborhoods)
- Municipality must issue NOVs to repeat offenders
 - Enforcement is key



What's next?



- Letters to coordinators and elected officials
- Follow-up inspections by OTC and municipal recycling coordinators on rejected carts
- Recycling coordinators send thank you letters to residents recycling right
- Recycling coordinators/code enforcement officers to continue the program
- Recycling guideline labels on all recycling cart lids
- Develop effective messaging and message delivery methods

Currently...



WE HAVE NO CHOICE - TO PROTECT OUR PROGRAM, CONTAMINATED CARTS WILL BE REJECTED!

We are



finding too many bad, dirty and downright dangerous items in recycling collected in



WIRE TANK

towns across the county.



These put our workers and recycling sorting equipment at great risk.



ATTERY TARTED A FIRE!

Please remind friends and family to follow the rules and recycle right!

- Top 3 Contaminants
 - Bagged Recycling
 - Bagged Trash
 - Styrofoam

Currently...

RECYCLING WAS NOT COLLECTED TODAY DUE TO CONTAMINATION!

Non-recyclable items:
trash, plastic bags, plastic wrap,
styrofoam, scrap metal, wood, etc.
MUST BE REMOVED
PRIOR TO NEXT COLLECTION.

Questions? Call the Recycling Hotline (609) 267-6889 or recycling@otcbc.org

- Due to market crisis time's up rejections only -> no longer using Oops tags
- 500 carts rejected/week approximately 5% of weekly stops
- Faster results with few repeat offenders
- Rejection lists sent to towns
- Each offender gets brochure
- Repeat offenders 2nd warning
 - Letter from town
- 3rd time offenders
 - Copy of ordinance, explanation of fines
- 4th time offenders
 - Fines at discretion of town

Another Area to Fight Contamination - Multifamilies



72 dwelling units use this 8 cubic yard dumpster

Multifamily Recycling Formula

1 cubic yard/9 dwelling units/week



Convenience, Capacity, Clear labeling

Vinyl Signs for Dropoff Areas





Easy to hang signage!





County provides brochures for every unit

Recycling and Hazardous Waste Guidelines for Apartment and Condominium Complexes

YOUR RECYCLING PROGRAM:

- · Helps turn trash back into useful products, saving natural resources and landfill space.
- . Is run by the Occupational Training Center, providing jobs to people with

RECYCLING IS THE LAW!

- . It is illegal for you to mix recycling with trash.
- It is illegal for trash haulers to pick up trash that contains recycling.





Your complex has one or more recycling areas for you to use. The BLUE recycling containers/dumpsters are only for paper, flattened cardboard, bottles, cans and containers.

See inside for a full list of items you can and cannot recycle!



Apartment and Condominium Recyclers - check out Burlington County's FREE "Recycle Coach" Phone App and learn how to recycle right!



Receive paper shredding event notices, find out where to recycle televisions, and more! No smartphone? No problem! Visit buricorecycles.com Search

Recycle Coach* for the personal computer/laptop version!

GENERAL RECYCLING INFORMATION

Take a Virtual Tour of the County's Single Stream Recycling Center and find more information on recycling at www.burlcorecycles.com Burlington County Recycling Office - recycle@co.burlington.nj.us



NEEDLES ARE DANGEROUS

We are finding medical needles on recycling sort lines - PLEASE PROTECT OUR WORKERS -KEEP NEEDLES OUT OF RECYCLING

Safe Syringe Disposal Program - Lourdes Medical Center (Willingboro)

Put a warning label on container "Used Syringes" Put in household trash - DO NOT RECYCLE







Fluorescent Lights and Used Motor oil must be

Do not put them in trash or recycling

HAZARDOUS WASTE?

Recycling Totes for new "move-ins"



Easy to use!







Graphics . . . get the message to all



Hauler Tag for Contamination



Enforcement

Board of Chosen Freeholders County of Burlington New Jersey

Burlington County Health Dept. Raphael Meadow Health Center 15 Pioneer Boulevard P.O. Box 6000 Mount Holly, NJ 08060



Tele: (609) 265-5548 Fax: (609) 265-5541

File #		
PI#		

NOTICE OF VIOLATION

Program Interest:	Site Address:		
Municipality: Walley	County: Burlington	Zip:	

Person Interviewed: Title: Property Manager

On 09/26/18_a representative from the Burlington County Health Department (BCHD) conducted a compliance evaluation of the above Program Interest. This NOTICE is issued based on facts observed by or known to the BCHD representative issuing this NOTICE, to warn you that a violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and rules at N.J.A.C. 7:26-1 et seq., has been found.

<u>EXPLANATION OF THIS NOTICE</u> - Violations with citation(s) to the specific rules issued under the Solid Waste Management: N.J.S.A. 13:1E-99.11

Description of Noncompliance: The person failed to recycle in accordance with the district solid waste management plan required pursuant to the provisions of the "Solid Waste Management Act." P.L.1970, c.39 (C.13:1E-1 et seq.) Specifically, facility failed to Keep Trash Waste out of the recycling containers by commingling waste with recycables in accordance with the Burlington County Waste Management Plan.

County Health Department and/or Local Code Official

Recycle Coach

Town Brochures



Newsletters



Truck Wraps



Website Plug-In



Event Posters

PRST STD

U.S. Postage

PAID Bellmawr, NJ

Permit #80

ECRWSS







Never miss a recycling day again.

Download the **FREE** app on your app store today!





Holmdel Township's Educational Efforts and Recycle Coach App

Victor Stevens, Holmdel Township Recycling Coordinator Janet Jackel, Holmdel Green Team



Some Goals

- Make it easy for community members to find recycling information
- Respond to resident inquiries
- Notify community members

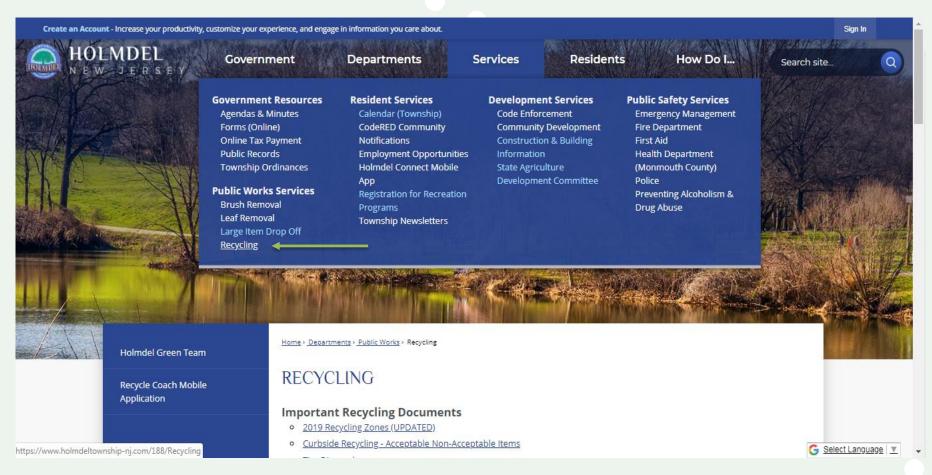


Where residents can locate information

	Search for information	Make inquiries	Get Notifications
Municipal Website	√	√	
Township Facebook Page	√	\checkmark	
Township Newsletter (monthly & seasonal)	√		
Recycle Coach App	\checkmark	\checkmark	√



Making Information Available: Holmdel's Recycling Web Page





On the Township recycling web page

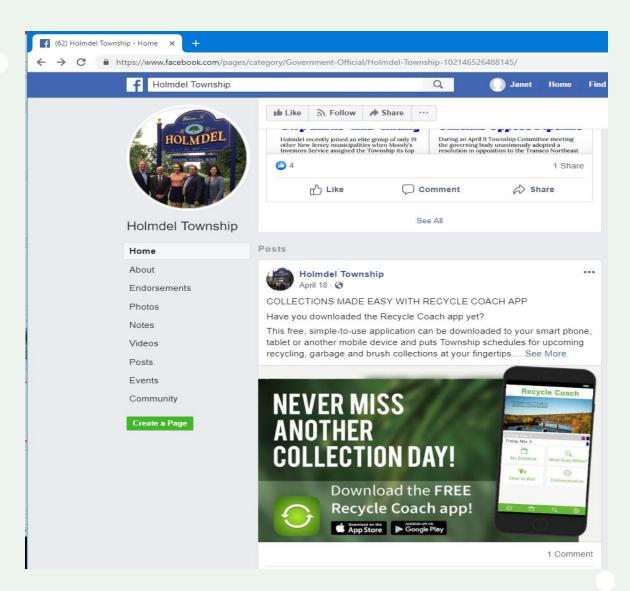
- Collection dates by zone
- What is and is not permitted to be recycled
- Recycling beyond curbside pickup like
 Styrofoam, plastics
 and plastic toys



Links to useful information ... and to the Recycle
 Coach App



Recycling
Information
on the
Holmdel
Township
Facebook
Page





The Township began using the free and easy-to-use Recycle Coach mobile application in the summer of 2018.





The app supplies residents with a municipal calendar for recycling, garbage, bulk item, and brush and leaf collections.

After downloading the app to their smart phone or mobile device (or accessing it on the municipal website www.holmdeltownship-nj.com/579/Recycle-Coach-Mobile-Application) the resident is prompted to enter their home address.

The application then identifies the resident in the Township's collection zones and places a personalized collection calendar at their fingertips.

Notifications

To ensure residents never miss a collection date, the app sends a push notification to their smart phone, tablet or another mobile device with upcoming collection dates.

The application also allows residents the ability to export their personalized collection calendar to the calendar on their mobile device, which provides a second level of notifications.

The Search Tool

The app also supplies residents with a search tool that allows them enter the name of an item (television, plastic bags, Styrofoam, etc.) and receive tips about how to safely and responsibly dispose of the item.

The search tool also offers a list of nearby Township, County or State-operated drop-off locations, and further information about what happens to the item once it is disposed of.



Tracking searches helps the Township plan and respond.

Examples:

- Searches for Christmas trees spike in December and January, alerting us to distribute timely information to residents concerning these items, ensuring that items are disposed of properly.
- Recently (April 23 to May 23), "generally acceptable recyclable materials" has been the most searched for item, followed by "oversized items," "furniture materials" and "aerosol cans."

Understanding when our residents need to dispose of specific materials can help our Department of Public Works plan special collections, such as the spring and fall Styrofoam collections and annual paper shredding events.



The Statistics (As of August 1, 2018)

- Total App Downloads and Municipal Website Users:
 4,498 residents
- Total Subscribers (those receiving regular notifications):
 624 residents
- Resident Interactions (searches and clicked content in app or online):
 - 11,656 interactions



How to get the Recycle Coach App

https://www.nj.gov/dep/newsrel/2019/19_0017.htm

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Governor Phil Murphy • Lt.Governor Sheila Oliver

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news releases

FOR IMMEDIATE RELEASE

March 21, 2019

Contact: Lawrence Hajna (609) 984-1795 Caryn Shinske (609) 292-2994

DEP'S RECYCLE COACH APP IS MAKING RECYCLING EASIER THAN EVER IN NEW JERSEY

(19/P017) TRENTON – A little more than a year after its launch, the Department of Environmental Protection's recycling app, Recycle Coach, continues to expand its reach, making recycling easier than ever for many New Jersey residents.



The free <u>Recycle Coach</u> app is providing information on recycling programs in more than 200 municipalities and 19 of 21 counties across the state. Downloads have surpassed more than 860,000. The DEP launched Recycle Coach in January 2018.

"Recycling remains one of the best ways for residents to help protect the environment and natural resources every day," DEP Commissioner Catherine R. McCabe said. "Sometimes one of the hurdles to recycling can be a simple lack of understanding about what can be recycled in each community and what cannot. Recycle Coach puts this important information right at your fingertips in a fun and fast way. We look forward to even more communities signing up and helping their residents be better stewards of the environment."



Holmdel's Green Team

How We Help

- Placing recycling articles in Township Newsletters
- Creating exhibits for local Earth Day festivals
- Initiating Styrofoam recycling (with township DPW)
- Working with Sustainable Jersey to reduce single-use plastics
- Better than recycling!



Holmdel's Green Team

Reduce/Reuse/Recycle

MAY 2019 Pg. 12

The Recycling Spot

Green Team Grant Means New Water Bottle Station

A second Holmdel Township Park now has a water filling station.

Phillips Park, located at the top of Telegraph Hill, joins Cross Farm Park as place for residents to enjoy cool, filtered water from a state-of-the-art water bottle refilling station



In cooperation with the Holmdel Green
Team, which received a \$2000 grant from Sustainable Jersey – a non-profit
organization.dedicated to enhancing sustainability efforts around the state – the Township's
Departments of Public Works and Recreation installed these new water refilling stations at no
cost to taxpayers.

These water refilling stations are part of the Green Team's drive to reduce single-use plastics in the community, an effort Recreation Department Director Bob Ward is on board with.

"The best way to reduce our use of single-use plastics is to completely cut them out. Doing this is not only a method to cleaning our recycling stream, but also reducing the clutter around our fields and parks, as well as the manpower it takes to clean up our facilities. We can't thank the Green Team enough for their efforts," said Ward.

According to the Green Team leader Janet Jackel, the all-volunteer group planned to use its grant for improved recycling bins at township parks. The Green Team hoped that better bins would increase the recycling of the many single-use plastic water bottles discarded at the

Reduce/Reuse/Recycle

All on the Same Page

Giving Toys A Second Chance

In cooperation with the non-profit organization, Second Chance Toys, the Township is collecting your family's gently-used, plastic toys for distribution to in-need children around the area.



In December the Township announced its partnership with Second Chance Toys and acquired large shipping container it hopes to fill with donated plastic toys.

The toys are now being collected every Friday from 9 a.m. to 1 p.m. at the Department of Public Works yard at 14 Crawfords Corner Road.

The donations will cleaned up, refurbished and distributed to local families by Second Chance Toys later this year. For more information on acceptable toys and the program please visit www.holmdeltownship-nj.com/188/Recycling



The Recycle Coach App is just one of many approaches
Holmdel is using to educate and motivate its residents to REDUCE / REUSE / RECYCLE



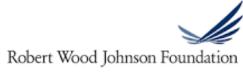
Sustainable Jersey Supporters & Sponsors

Program Underwriters











Grants Program





Corporate Sponsors







* 10th **Anniversary** Sponsor























Bronze



















Sustainable Jersey for Schools Supporters & Sponsors

Program Underwriters









Grants Program







Corporate Sponsors

Platinum







Silver













