



Efficient, Effective, Responsive

Plastic Film Recycling

Agricultural Film & Boat Wrap

Association of Recycling Managers Workshop

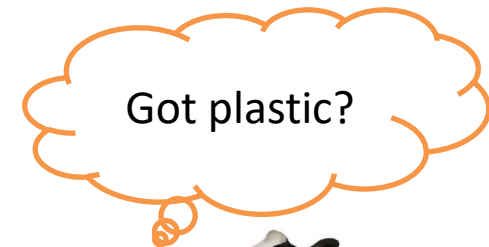
October 13, 2022

Background: County Framework



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- Storage has changed
 - Plastic film use has skyrocketed
- County Ordinance
 - Illegal to burn or bury waste
- MN Stat. §115A.551
 - Achieve a 75% recycling goal by 2030
- Solid Waste Master Plan strategy
 - “Support collection of waste agricultural and marina film plastic until private sector efforts are widely available.”



15-20 lbs of plastic used per cow per year (WI DNR)

Agricultural Film Plastic Recycling Program

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Early Days: Centralized Drop Off



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2015-2017

- County sponsored:
 - 30 yd roll-offs (3 locations)
 - Spring-fall collection
- 15 farms participated
 - No fee
- Collected material recycled
- Challenges:
 - Participation from largest producers
 - Illegal dumping at public locations

Accepted Film Plastic



Collection Method
(Roll-offs)



Current Program: On-Farm Collection



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- Revolution started on-farm collection in 2018
 - Accept more types of plastics
- Collection 4 times/per year:
 - At least 5 ReCapture full bags
- 30 farms & greenhouses participate
 - No fee
- County role:
 - Provide Revolution's collection bags
 - Outreach for participation
 - Education on accepted materials
 - Coordinate list of farms that need pick up, share with Revolution

Additional Materials Accepted



Collection Method (ReCapture bags)



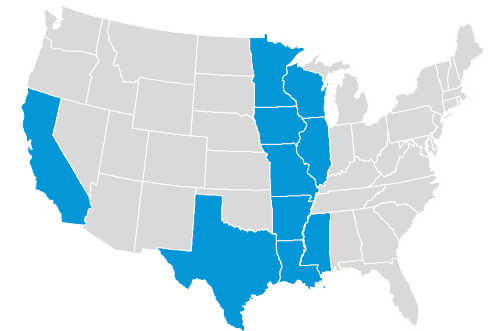
End Market Partnership: Revolution

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- 1996: Delta Plastics
 - Start recycling irrigation tubing
- 2009: Revolution bag launched
 - Up to 97% PCR bag liners
- 2017: Annual acquisitions start
- Today
 - *“Largest recycler of heavily soiled agricultural film in the world”*
 - Circular company - recycled resin products:
 - Agricultural films and bags
 - Consumer bags and liners
 - Irrigation tubing
 - Food prep products
 - More...

Revolution®



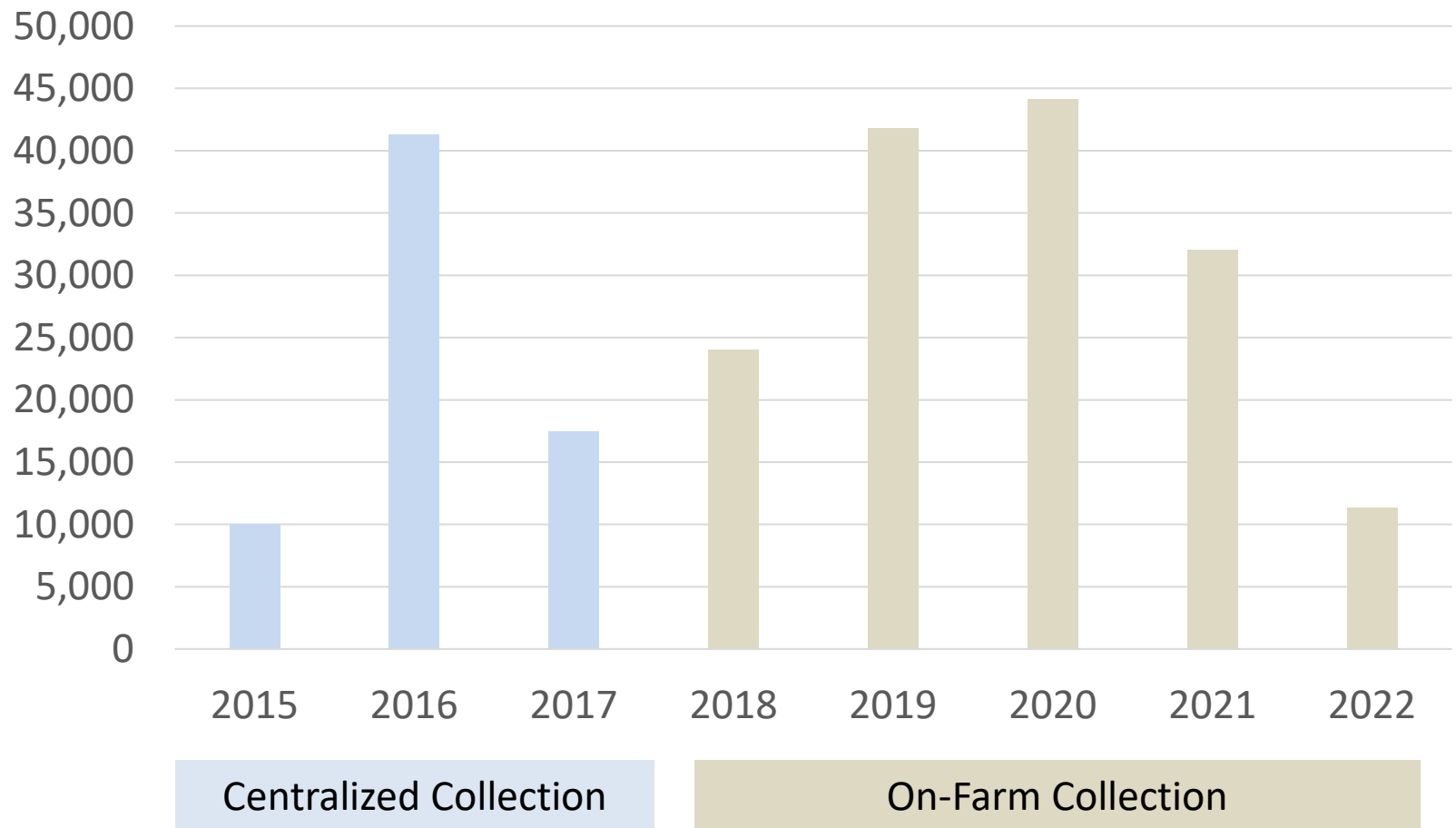
2018 collection areas for dirty
agricultural film plastic and
irrigation tubing

Agricultural Film Plastic Collected



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Pounds Collected



Successes and Challenges



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Successes

- Nearly 223,000 lbs. collected
- Farmers and greenhouse owners supportive
- Closing the loop on recycling



Challenges

- Low participation from largest producers
- End-market issues
 - Reduced collection schedule
 - Ongoing changes in what is accepted
 - Spring 2022: Dropped bale wrap (~50% of our volume)
 - Fall 2022: Dropped irrigation drip tape

Boat Shrink Wrap Recycling Program

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Current Program: Centralized Collection



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2016 - present

- County sponsors:
 - Seasonal collection (April-June)
 - 20 yd roll-off (1 location)
- Centralized collection location partnership
 - Lighthouse Sport and Marina, Rosemount

Accepted Film Plastic:



Collection Method (Roll-off)



Participation from:

- Residents
- Marinas
- Boat dealerships
- Winterization storage locations

A flyer with a dark blue background and white text. The top right features a stylized illustration of a blue lake, white clouds, and three white birds in flight. The main title "RECYCLE YOUR BOAT WRAP" is in large, bold, white capital letters. Below the title is a paragraph of text, followed by a section titled "It's easy" with a bulleted list of instructions. At the bottom left is the address for Lighthouse Motorsports and Marine. At the bottom right is contact information for Renee Burman, the Dakota County logo, and a recycling symbol.

RECYCLE YOUR BOAT WRAP

After protecting your boat, protect our environment — recycle your blue or white shrink wrap for free this April and May.

It's easy

- Place all straps and cords in your garbage
- Remove rocks and gravel
- Schedule a drop-off time at 651-322-4420
- Place shrink wrap in the labeled container at:
Lighthouse Motorsports and Marine
3316 151st Street
Rosemount

Plastic wraps with a fabric layer and "Transhield" wraps are not recyclable and are not accepted.

For Dakota County residents and businesses only. For more information, contact Renee Burman at 952-891-7042 or renee.burman@co.dakota.mn.us



End Market Partnership: Up North Plastics



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Collected wrap goes to Up North Plastics,
Cottage Grove

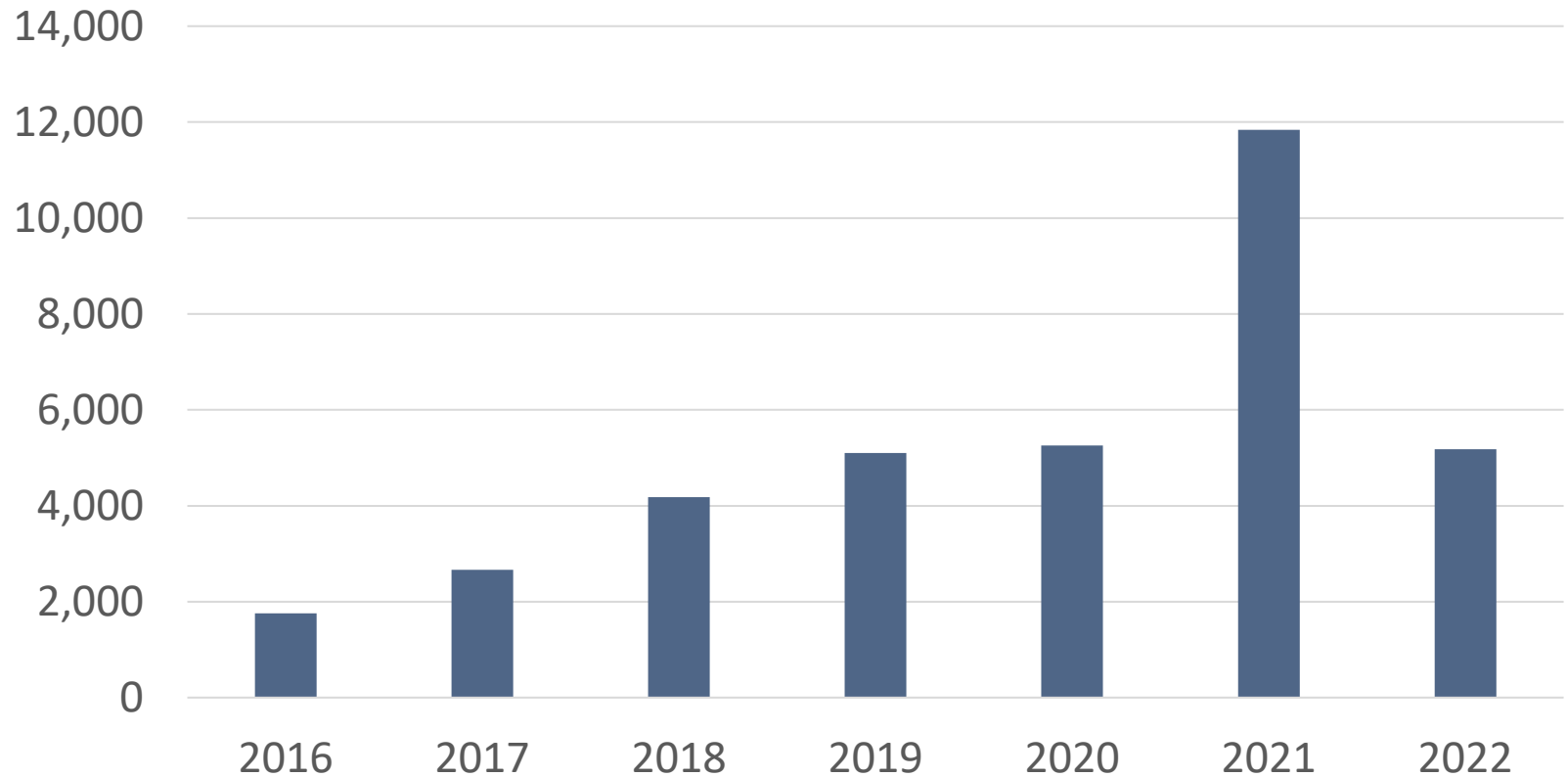
- Accept large quantities at no cost
 - **MUST BE CONTAMINATION FREE**

Boat Wrap Collected



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Pounds Collected



Successes and Challenges



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Successes

- Closing the loop on recycling
 - Recycled locally
 - Manufactured into construction grade film
- Partnership for collection at winter storage business
 - Committed to remove contaminants
- 36,000 pounds recycled

Challenges

- Contamination
 - Not removing vents
- End-market issues



Next Steps for Film Collection



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- Continue collection of agricultural film plastic and boat wrap
 - Onboard new sites
- Ongoing program improvements
 - Reduce contamination
- Look for alternative end-markets



Questions



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