



Recycle Program Update

Solid Waste Division

02/28/23





Presentation Overview

- Background
- Program Challenges
- Program Initiatives
- Funding
- Implementation Plan



Background

- Curbside recycling program started in late 90's
- Service approx. 57,000 homes per week
- Recycle sector is a branch of Solid Waste
- Division is Responsible for:
 - Container Inspection
 - Bulk Trash Inspection
 - Public Outreach
 - Commodity Audits
 - Developing Education Materials



Program - Challenges

- MRF Closure – Equipment and efficiency issues (March 2021)
- Market Volatility – Large swings in material value
- Commodities – Cardboard decrease, more non-recyclable plastics
- Increased cost of processing – Inflation, hauling, and labor
- Limited Processing facilities – PHX MRF down, Fire at other sites.



Program - Initiatives

Collection

- Blue Barrel Program
- Recycle Education and Outreach Plan

Processing

- Processing Contract
- Transfer Station - Evaluation



Blue Barrel Program

- Pilot started in May 2018
- Blue Barrels placed in 6 neighborhoods
- Contamination Decrease Over 4 Years
 - With Education and Outreach: 15.50%
- Participation Average Over 4 Years
 - With Education and Outreach: +4.16%
- Program results show that clearly identifying container helps improve the Recycle stream.



Blue Barrel Program

- **Option 1** – Blue Barrels City-wide
 - Cost - \$4.9M to swap 57,000 containers
 - Grant Available – Application was submitted on 02/16/2023
 - Timeline – 9-12 months



Blue Barrel Program

- **Option 2** – Blue Barrel – Through replacement (3,000 per year)
 - Cost – \$114,000 for stickers to identify existing container as recycle only.
 - Timeline – 15-20 years



Blue Barrel Program

- **Option 3** – Sage Container with Blue lids - Through replacement (3,000 per year)
 - Cost – \$114,000 for stickers to identify existing container as recycle only.
 - Timeline – 15-20 years



Consensus



Recycle Education and Outreach Plan

- Goals
 - Increase participation
 - Reduce Contamination
 - Divert Materials from Landfill
- Education Materials
 - Update Accepted item (add glass, plastics 4 & 5)
 - Use images, and symbols to clarify message
- Website
 - Update website with images, videos, and symbols
 - Update Accepted items
- Education and outreach
 - Perform Container tagging saturation, with and without inspections
 - Improve “Good Job” tags to recognize good behavior
 - Consistent colors to identify recycle containers



Recycle Processing Agreement

- Material Processing with Waste Management
 - Contract approved – December 2022
 - Guarantees processing of material collected
 - Improved public confidence in where the material goes
- Increased recycle commodity list
 - Paper, Cardboard, Plastics 1,2, Steel cans, Aluminum
 - Add glass recycling and Plastics 4 & 5 to the stream
- Education and outreach
 - Partnering with WM to unify messaging



Retrofit MRF to Transfer Station

- Material Recovery Facility
 - Closed in March 2021 due to equipment failures and efficiencies.
 - Building and Infrastructure is still intact.
 - Location is ideal for routing collection equipment.
- Improve Transportation – Compactor
 - Compactor will turn loose recycle material into cubes
 - Cubes will be loaded into a transfer trailer
 - Maximized weight and efficiency for hauling - 7 sideload trucks in one load
- Current Transportation Contract In Place
 - Will allow us to re-bid hauling contract, reducing costs
- Cost of retro-fit - \$1,000,000 (\$500,000 in FY23, \$500,000 in FY24)



Funding

- The Cost of Recycling
 - \$103 per ton for processing cost
 - \$38 per ton for hauling cost
 - MRF Annual Budget**
 - \$1,200,000 for processing
 - \$500,000 for hauling
- Current Material Costs
 - Tags - \$11,000
 - Calendars - \$20,000 (other departments provide additional funding)
 - Magnets - \$17,000
- Additional Material and Outreach Costs
 - \$120,000 education distribution (\$31,000 in FY23, **\$89,000** in FY24 Supplementals)
 - Stickers - \$2 per sticker X 57,000 = \$114,000



Summary

- We are implementing a Recycle Education and Outreach Plan
- Add Glass and Plastics 4 & 5 to Recycle Stream
- Finalizing the Blue Barrel Program
- Retrofit MRF to Transfer Station - \$500,000 FY24 CIP
- Increase education and outreach funding by \$89,000 in FY24



- Questions and Comments