

GLASS RECYCLING PROGRAMS & SERVICES



In partnership with:





















814-598-8644



SUPPORT CIRCULAR ECONOMIES

PRISM focuses on collection, consolidation, and transportation in the circular economics of the glass manufacturing and use lifecycle.



- 1. Collection
 - Drop-off
 - Commercial
 - Residential
- 2. Consolidation
 - Depot bunker
- 3. Transportation
 - Logistics coordination









PRISM GLASS RECYCLNG DROP-OFF PROGRAM

Erie County January 2021

- Public Private Partnership
 - Erie County Recycling Program
 - Erie Area Council of Governments
 - CAP Glass
 - Glass Recycling Foundation
- Launched with 15 locations
 - expanded to 19 by the end of 2021
 - 17 current locations
- Prism
 - provides drop-off containers
 - manages local hauling services
 - coordinates processing
 - aggregates data + provides reporting



(20) Switch N Go 8 cubic yard containers

Erie County = 272,000 residents

- City of Erie 96,600
- Millcreek Township 53,000
- Harborcreek Township 17,000















PARTNERS & ROLES







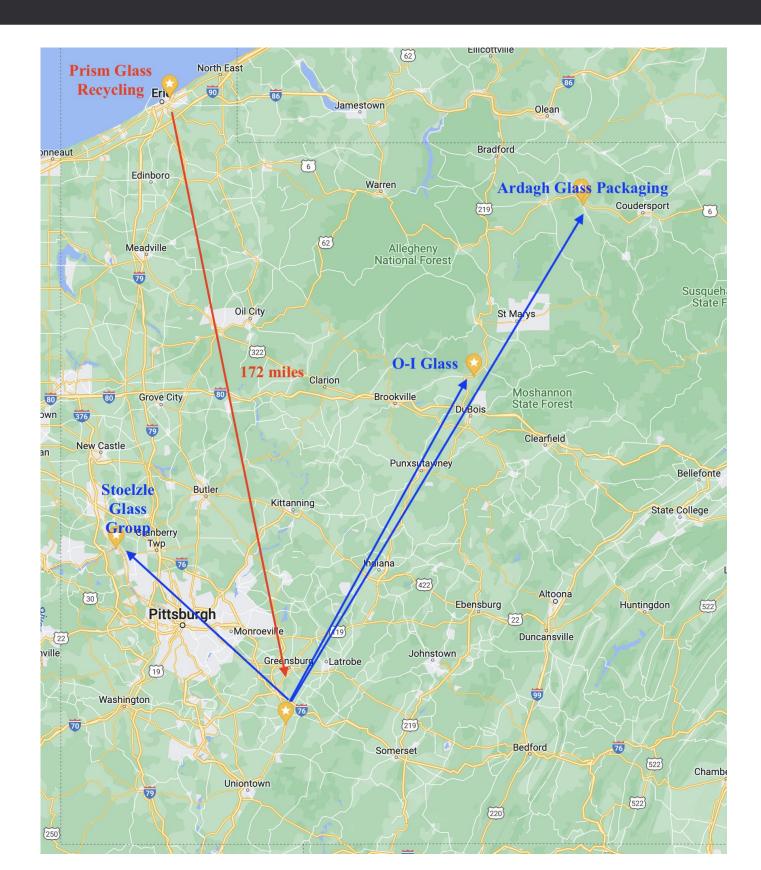






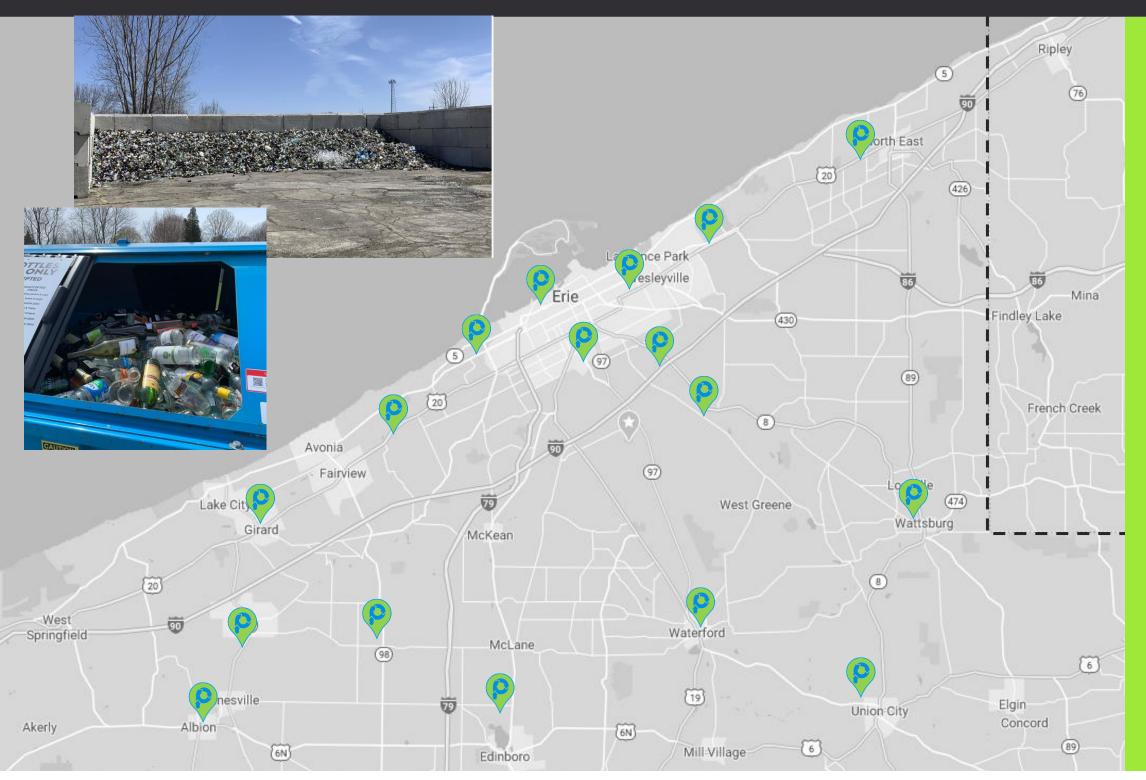


- Buy in
- Seed \$ for 1 drop box; cost sharing
- Web content
- Assistance with information sharing
- Facilitated member municipalities participation
- Web content
- Assistance with information sharing
- Grant dollars
- Relationship building in industry
- Technical support
- Buy in
- Local hauling
- Community support
- Cost sharing
- Beneficiation/Processing
- Industry advocacy
- Infrastructure support (AP/AR, HR)
- Staff time





17 LOCATIONS – ERIE COUNTY



- Albion Borough
- City of Erie (3)
- Elk Creek Township
- Franklin Township
- Girard Borough
- Greene Township
- Harborcreek Township
- Millcreek Township (3)
- North East Township
- Union Township
- Venango Township
- Washington Township
- Waterford Borough







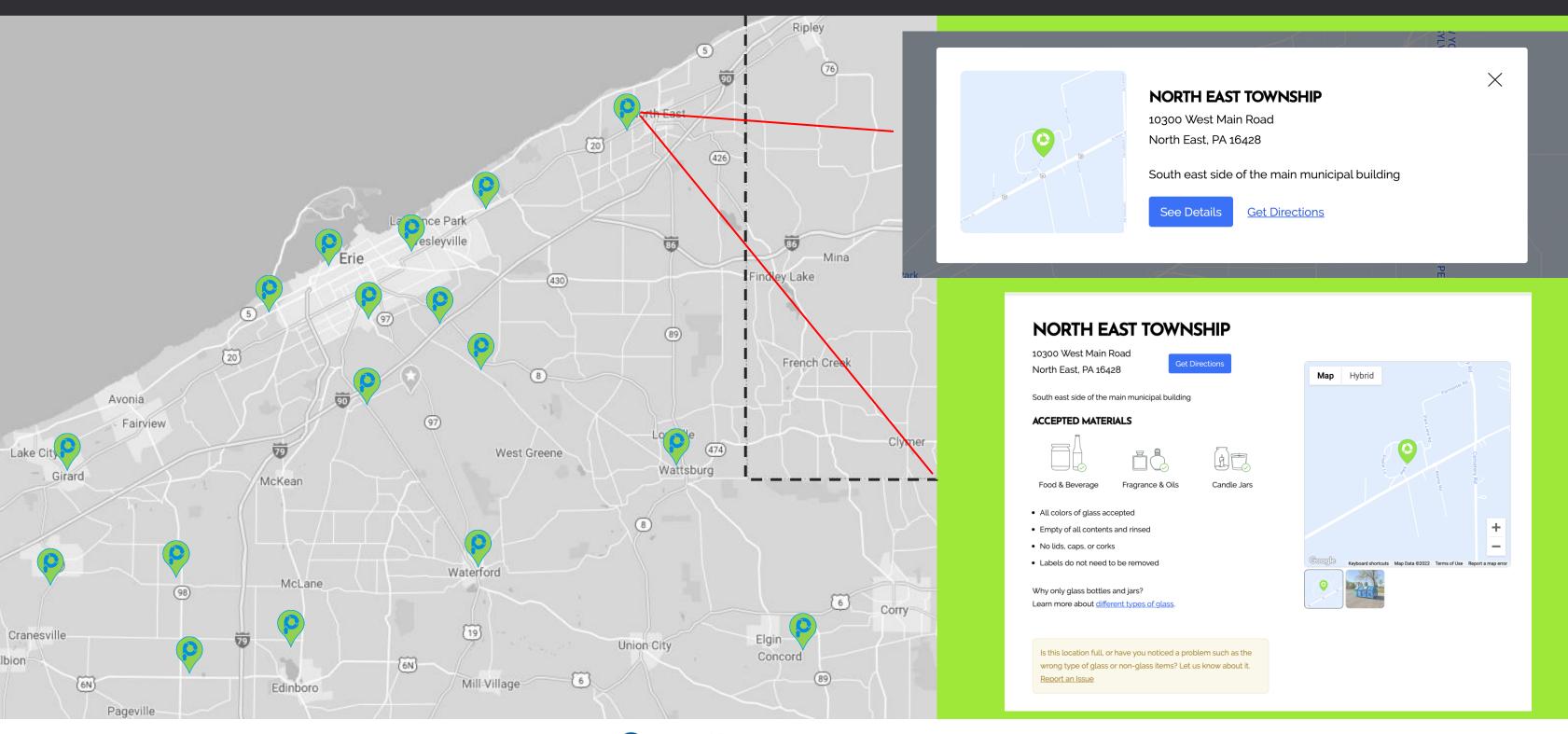








INTERACTIVE WEBSITE

















ACCEPTABLE GLASS TYPE

GLASS BOTTLES AND JARS ONLY

ALL COLORS ACCEPTED

ACCEPTED ITEMS



Food & Beverage



Candle jars Fragrance



UNACCEPTED ITEMS

- Drinking glasses & cups
- Plates, bowls & mugs
- Microwavable glass
- Light bulbs & Tubes
- Monitor & TV screens
- Window & Mirror glass
- Trophies, ashtrays, vases





NO BAGS OR BOXES



Before you recycle, make sure to:

- Empty and rinse items of all residue

For more information on glass recycling visit www.prismrecycling.com



The severity of this #ContaminationCrime perpetrated at Glenwood Park inside a large blue metal container marked "GLASS RECYCLING HERE!" and "Glass bottles and jars ONLY" is very grave. This black stiletto found at the scene inside the Big Blue glass recycling box is neither made of glass nor is it a bottle or jar.

Estimated by the size of this fancy footwear, please be on the alert for a person between 5' 6" and 5' 10" tall wearing the other black stiletto on his/her/their left foot. He/she/they may have a compromised gait (without the other stiletto). If identified, please report to #ContaminationCrime

Please be respectful of the glass recycling instructions and place only loose bottles & jars in the bin.

#GlassRecycles #ChooseGlass #RecycleRight #WhenInDoubtFindOut

















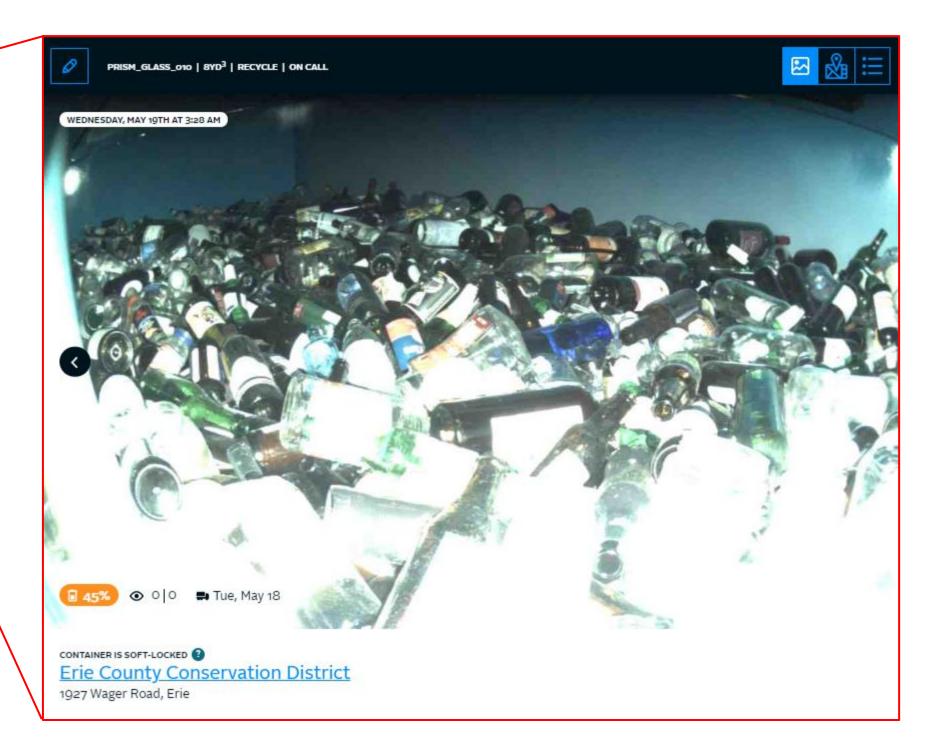
IN-DUMPSTER MONITORING



MONITORING FOR:

- 1. Contamination
- 2. Fill level
- 3. General shenanigans



















HOST SITE RESPONSIBILITIES

Provide

- Flat hard surface
 - easily accessible to the public & service vehicle
 - conspicuous for easy monitoring & to mitigate misuse

Promote

- Website, council meetings, posters, newsletters, or other means
- Prism provides informational material

Manage

- Keep area clean of refuse and debris
- remove & dispose of any non-allowable materials from container



Location ideas

- Municipal Building/Garage
- Municipal Parks/Trail
- Volunteer Fire Department
- Shopping Plaza
- Private Business
- Public Library
- Public Parking area
- Transfer Station/Recycle Station













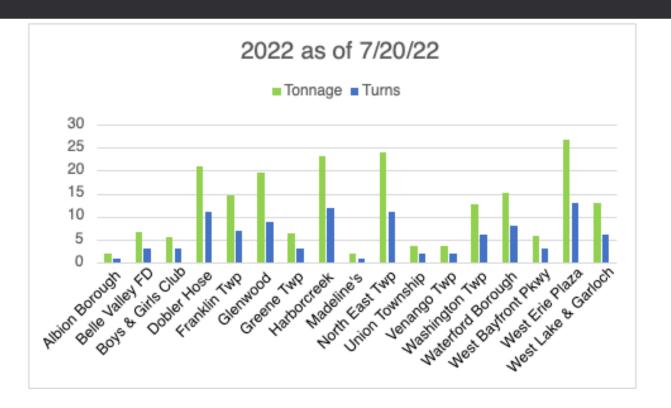


VOLUMES + DOLLARS





- Tonnage: 351.41
- Turns: 156
- Avg tons/turn: 2.02
- Hauling Cost \$12,480
- Material Value \$6,308



2022 Metrics 7/20/22

- Tonnage: 294
- Turns: 103
- Avg tons/turn: 2.03
- Hauling Cost \$8,240
- Material Value \$4,184















FINANCIALS

Profit & Loss by Class

January 2021 - December 2021

| | Municipal |
|---|-------------|
| Income | |
| Glass Sales | 5,946.20 |
| Total Income | 5,946.20 |
| Cost of Goods Sold | |
| Glass Hauling | 11,515.47 |
| Equipment + Repairs | 13,291.95 |
| Depreciation Expense | 6,108.77 |
| Repairs & Maintenance | 43.43 |
| Total COGS | 30,959.62 |
| Gross Profit | - 25,013.42 |
| Expense | |
| Dues & Subscriptions | 4,474.26 |
| Travel Expense | 209.16 |
| Total Expense | 4,683.42 |
| Net Income | - 29,296.84 |

Value of Glass

- \$20/ton
- 8 YD = 2 tons = \$40

Hauling Costs

- 8 YD drop box
- \$80/pull

Loss of \$40 each pull

2022 = cost sharing

















REPLICATION



Considerations

- 1. Is there a need?
 - ✓ Glass no longer accepted in single-stream recycling program
 - ✓ Community demand &/or buy-in from residents and businesses
- 2. Is there support?
 - ✓ Public-private partnerships
 - ✓ Collaborative host locations
 - ✓ Local & municipal hauling
- 3. Is there funding?
 - ✓ Drop-off collection containers
 - ✓ Public education campaigns
 - ✓ Consolidation point/bunker
 - ✓ Local hauling

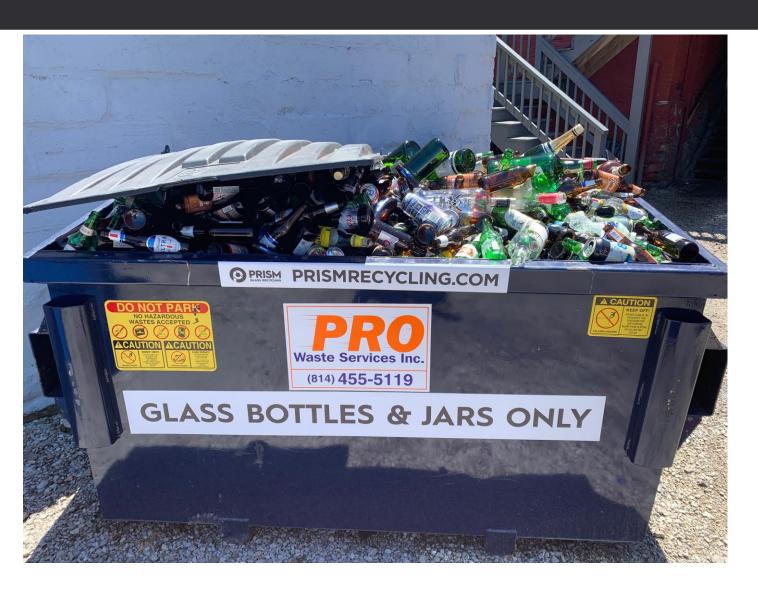


COMMERCIAL SERVICES

- Bayfront Lounge
- Beechwood Golf Club
- Calamari's
- Cascade Park Club
- Cloud 9 Wine Bar
- Colao's
- Colony Pub & Grill
- Compadre's
- Corporate Glass
- Engine House 39
- Erie Club
- Flagship City Foodhall
- Greengarden Lounge
- HERO BX
- Hunter's Inn
- The Cork 1794
- Kahkwa Club
- Lakeside Beach Bar
- La Nuova Aurora Society
- Mc's Bar & Grill
- Molly Brannigan's
- North East Boro
- North East VFW Post 4789
- Penn State Behrend
- Penny's Pub
- Presque Isle Wine Cellars
- Ringside Restaurant
- Rosco's Sports Bar & Grill

- Scooter's Lounge
- Society of Holy Trinity
- Syd's Place
- That Place on 26th
- Usher's Club
- Treehouse/Bay Valley Foods
- 12th Street Beer
- Airport Beer
- Beer & Pop Discount Warehouse
- Beverage Shop
- Boro Beer
- Waterford Bev





Monthly Service

\$53.75 for 2yd, 4yd, 6yd container at 1x month pick up

Pro hauling fee \$50 Prism service fee \$3.75



Recycle4PA

Recycle4PA

2022 Partnership with O-I Glass

- 20 locations
- 1 year of service







GLASS RECYCLING IS SUSTAINABLE FOR **OUR ENVIRONMENT AND ECONOMY**

Prism Glass Recycling and O-I Glass have teamed up to sponsor 1 YEAR of glass collection at 20 high-volume bars, restaurants, social clubs, and PLCB-licensed beverage distributors in Erie County. Participants will receive a glass-only dumpster with monthly collection FREE of charge for 12 months. Prism may also market businesses through public relations, social media, and promotional materials.



BARS, RESTAURANTS, AND **SOCIAL CLUBS**

Glass recycling can help you better manage your waste disposal costs by eliminating glass weight and volume.



PLCB-LICENSED BEVERAGE **DISTRIBUTORS**

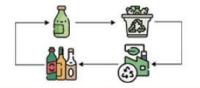
Glass recycling can help you encourage repeat business by providing customers a location to bring back empty bottles for recycling.

PROMO CARD #1 (Bars, Restaurants, and Social Clubs)



DID YOU KNOW GLASS IS AN INFINITELY RECYCLABLE MATERIAL?

Together, we can help reduce the waste sent to our landfills and make a positive environmental impact. We'll also support thousands of jobs within the bottle-to-bottle glass recycling and manufacturing industry in Pennsylvania.





Back

ANOTHER ROUND, PLEASE!

Join us in keeping glass out of the trash and supporting our local economy. Every glass bottle purchased and consumed at this location will be recycled. *Please drink responsibly.

Front

PROMO CARD #2 (PLCB-Licensed Liquor Distributors)



DID YOU KNOW GLASS IS AN INFINITELY RECYCLABLE MATERIAL? Together, we can help reduce the waste sent to

our landfills and make a positive environmental impact. We'll also support thousands of jobs within the bottle-to-bottle glass recycling and manufacturing industry in Pennsylvania.





BRING 'EM BACK!

Join us in keeping glass out of the trash and supporting our local economy. Bring back your empty glass bottles to this location to be recycled.

Front

Back



BRANCHING OUT

1.3m cobalt blue

bottles, 500 skids

Odds &

Ends

Window **Glass**



Events



HOW IT WORKS

We can only accept the glass panes from windows. The frames and banding must be removed. Residual adhesive or caulking does not need to be removed.

- FREE drop-off (no tipping fees)
- Unframed window glass only (broken glass is accepted)
- · Tempered and regular glass accepted
- NO automotive glass
- · NO laminated glass

- NO mirrors

Windshields?

Italian Festival North East Wine Fest Blues & Jazz Fest **Erie Food Truck Festival** Wine, Brews, Spirits & Food Truck Festival

NO



O A

Sherri "Sam" Mason is a sustainability professor at Penn State-Behrend who is researching whether a glass/food compost recycling program makes sense for the city of Erie. She was photographed on July 12, 2022. KEVIN FLOWERS/ERIE

Curbside Pilot



280 tons wine bottles, 282 skids





Cat Wine **Bottles**





CURBSIDE PILOT – CITY OF ERIE



Sherri "Sam" Mason is a sustainability professor at Penn State-Behrend who is researching whe recycling program makes sense for the city of Erie. She was photographed on July 12, 2022. *KE TIMES-NEWS*

July 2022

Penn State Behrend, City of Erie Public Works, Conservation Compost, Prism Glass Recycling

- Food Waste
- Glass

Frontier Park = 53 households Our West Bayfront = 48 households

| | | Г | | ٦ | | | | | \neg | | | | | | |
|---|---|------------------|--|------------------|--|---|--------------------|---|-------------------|---|---|--------------------|--|--|--|
| WEEK 1 | | Frontier Park | | | | | | West Bayfront | | | | | Totals | | |
| | Compost | 96 | Glass | % | Total | Compost | % | Glass | % | Total | Compost | % | Glass | % | Total |
| Total (kg) | 149.84 | 43% | 200.45 | 57% | 350.29 | 140.95 | 49% | 144.15 | 51% | 285.10 | 290.79 | 46% | 344.60 | 54% | 635.39 |
| Total (lbs) | 330.34 | | 441.92 | | 772.26 | 310.74 | | 317.80 | | 628.54 | 641.08 | | 759.71 | | 1400.80 |
| # of household | s 46 | | 45 | | 53 | 41 | | 38 | | 48 | 87 | | 83 | | 101 |
| Avg Lbs per HH | 7.18 | 42% | 9.82 | 58% | 17.00 | 7.58 | 48% | 8.36 | 52% | 15.94 | 7.37 | 45% | 9.15 | 55% | 16.52 |
| nd | | | | | | | | | | | | | | | |
| WEEK 2 | | Frontier Park | | | | | West Bayfront | | | | Totals | | | | |
| ING Standard | Compost | 96 | Glass | % | Total | Compost | % | Glass | % | Total | Compost | % | Glass | % | Total |
| Total (kg) | 130.05 | 53% | 115.10 | 47% | 245.15 | 114.25 | 33% | 233.55 | 67% | 347.80 | 244.30 | 41% | 348.65 | 59% | 592.95 |
| Total (lbs) | 286.72 | | 253.75 | | 540.47 | 251.88 | | 514.89 | | 766.77 | 538.60 | | 768.64 | | 1307.23 |
| # of household | s 46 | | 39 | | 53 | 42 | | 35 | | 48 | 88 | | 74 | | 101 |
| Avg Lbs per HH | 6.23 | 49% | 6.51 | 51% | 12.74 | 6.00 | 29% | 14.71 | 71% | 20.71 | 6.12 | 37% | 10.39 | 63% | 16.51 |
| . KE\ | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| WEEK 3 | | F | rontier Par | k | | | W | est Bayfro | nt | | | | Totals | | |
| | Compost | F | rontier Par Glass | k | Total | Compost | W | est Bayfro Glass | nt | Total | Compost | | Totals Glass | | Total |
| | Compost 149.63 | F 56% | | 'k 44% | Total 266.41 | Compost 105.90 | W (58% | | ont 42% | Total 183.50 | | 57% | | 43% | |
| WEEK 3 | · | | Glass | | | • | | Glass | | | | 57% | Glass | 43% | 449.91 |
| Total (kg) Total (lbs) # of household | 149.63 329.89 s 46 | 56% | Glass 116.78 257.45 45 | 44% | 266.41 587.34 53 | 105.90 233.47 39 | 58% | Glass 77.60 171.08 30 | 42% | 183.50 404.55 48 | 255.53 563.36 85 | | Glass 194.38 428.53 75 | | 449.91 991.89 101 |
| Total (kg) Total (lbs) | 149.63 329.89 s 46 | | Glass 116.78 257.45 | | 266.41 587.34 | 105.90 233.47 | | Glass 77.60 171.08 | | 183.50 404.55 | 255.53 563.36 85 | 57% | Glass 194.38 428.53 | 43% | 449.91 991.89 101 |
| Total (kg) Total (lbs) # of household | 149.63 329.89 s 46 | 56% | Glass 116.78 257.45 45 | 44% | 266.41 587.34 53 | 105.90 233.47 39 | 58% | Glass 77.60 171.08 30 | 42% | 183.50 404.55 48 | 255.53 563.36 85 | | Glass 194.38 428.53 75 | | 449.91 991.89 101 |
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| Total (kg) Total (lbs) # of household Avg Lbs per HH | 149.63 329.89 s 46 | 56% | Glass 116.78 257.45 45 5.72 | 44% | 266.41 587.34 53 | 105.90 233.47 39 | 58% | Glass 77.60 171.08 30 5.70 | 42% | 183.50 404.55 48 | 255.53 563.36 85 | | Glass 194.38 428.53 75 5.71 | | 449.91 991.89 101 |
| Total (kg) Total (lbs) # of household Avg Lbs per HH | 149.63 329.89 s 46 l 7.17 | 56% 56% | Glass 116.78 257.45 45 5.72 | 44% 44% | 266.41 587.34 53 12.89 | 105.90 233.47 39 5.99 | 5 3% 5 1% | Glass 77.60 171.08 30 5.70 | 42% 49% | 183.50 404.55 48 11.69 | 255.53 563.36 85 6.63 | 5 <mark>4</mark> % | Glass 194.38 428.53 75 5.71 | 46% | 449.91 991.89 101 12.34 |
| Total (kg) Total (lbs) # of household Avg Lbs per HH | 149.63 329.89 s 46 7.17 | 56% 56% FI | Glass 116.78 257.45 45 5.72 Frontier Par | 44% 44% *k | 266.41 587.34 53 12.89 | 105.90 233.47 39 5.99 | 5 3% 5 1% We | Glass 77.60 171.08 30 5.70 est Bayfro | 42% 49% ont | 183.50 404.55 48 11.69 | 255.53 563.36 85 6.63 | 5 <mark>4</mark> % | Glass 194.38 428.53 75 5.71 Totals Glass | 46% | 449.91 991.89 101 12.34 Total 658.22 1451.13 |
| Total (kg) Total (lbs) # of household Avg Lbs per HH Average Total (kg) | 149.63 329.89 s 46 7.17 Compost 150.38 331.54 | 56% 56% FI | Glass 116.78 257.45 45 5.72 Frontier Par Glass 172.01 379.21 | 44% 44% *k | 266.41 587.34 53 12.89 Total 322.39 710.75 53 | 105.90 233.47 39 5.99 Compost 139.77 | 5 3% 5 1% We | Glass 77.60 171.08 30 5.70 est Bayfro Glass 196.07 | 42% 49% ont | 183.50 404.55 48 11.69 Total 335.83 | 255.53 563.36 85 6.63 Compost 290.15 639.67 | 5 <mark>4</mark> % | Glass 194.38 428.53 75 5.71 Totals Glass 368.07 | 46% | 449.91 991.89 101 12.34 Total 658.22 1451.13 |
| Total (kg) Total (lbs) # of household Avg Lbs per HH Average Total (kg) Total (lbs) | 149.63 329.89 s 46 7.17 Compost 150.38 331.54 | 56% 56% FI | Glass 116.78 257.45 45 5.72 Fontier Par Glass 172.01 379.21 | 44% 44% *k | 266.41 587.34 53 12.89 Total 322.39 710.75 | 105.90 233.47 39 5.99 Compost 139.77 308.13 | 5 3% 5 1% We | Glass 77.60 171.08 30 5.70 est Bayfro Glass 196.07 432.25 | 42% 49% ont | 183.50 404.55 48 11.69 101a 335.83 740.38 | 255.53 563.36 85 6.63 Compost 290.15 639.67 | 5 <mark>4</mark> % | 19 42 5 To 36 81 | 6lass 94.38 98.53 75 6.71 9tals 6lass 68.07 | 6lass 94.38 43% 98.53 75 6.71 46% 9tals 6lass % 68.07 56% 1.46 |



PRISM GLASS RECYCLNG DROP-OFF PROGRAM

McKean County

April 2022

Public Private Partnership

- McKean County Conservation District
- Ardagh Glass Packaging
- McKan Trucking
- RecycAll
- Launched with 9 drop-off locations
- Prism
 - manages local hauling services
 - coordinates processing











SMETHPORT, PA 814-598-8644



PARTNERS & ROLES



- Buy in
- Web content + info sharing
- Municipal support
- Staff time



- Program funds
- Relationship building



SMETHPORT, PA 814-598-8644

- Buy in
- Local hauling
- Community support





Beneficiation/Processing



- Infrastructure support (AP/AR, HR)
- Staff time





Launch of New McKean County Glass Recycling Program

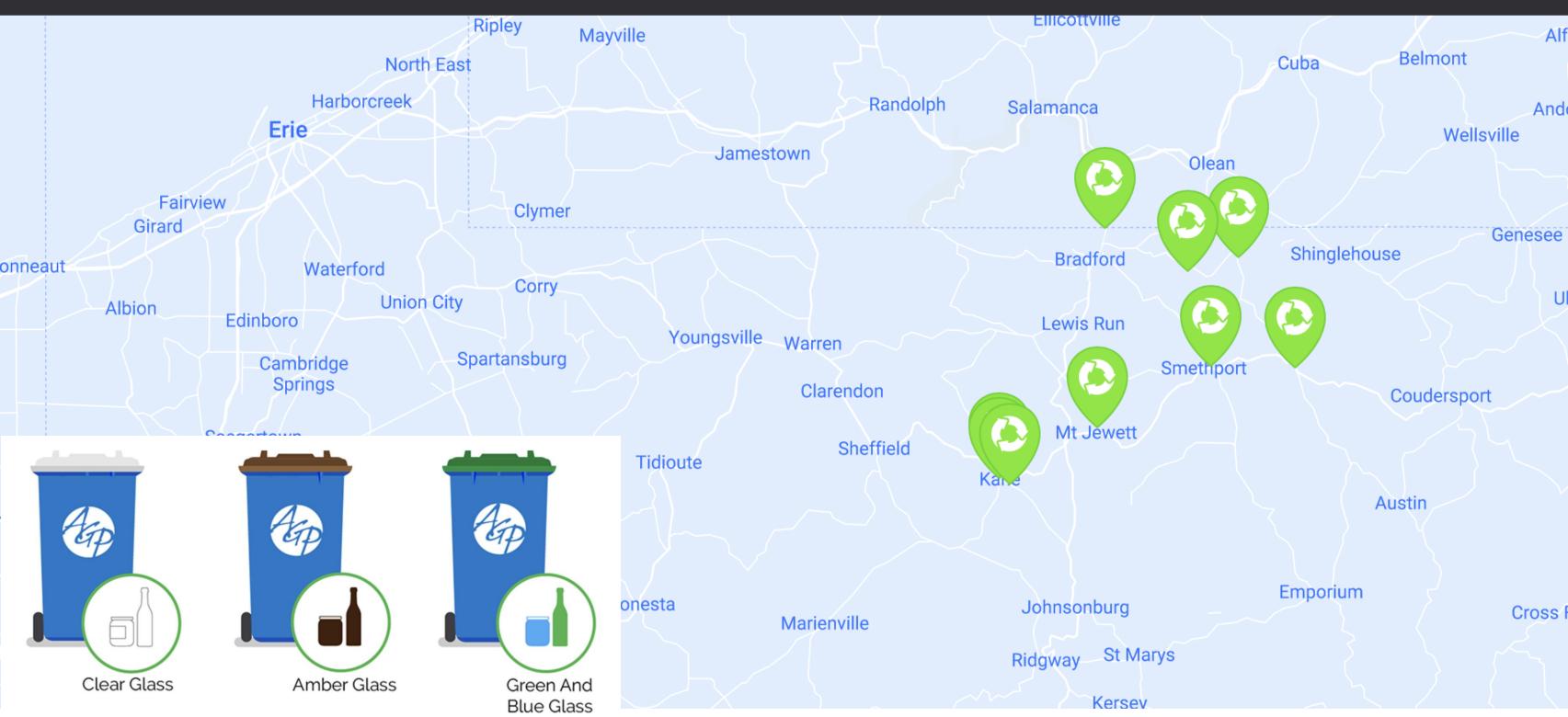








9 LOCATIONS McKEAN COUNTY













ALLOWABLE MATERIALS

WHAT CAN YOU RECYCLE?

GLASS BOTTLES AND JARS ONLY

- Bottles and jars must be sorted by color into the clearly marked carts at each collection station
- Remove lids, caps, and corks; labels can stay on
- Bags and boxes you use to bring your glass must be disposed of elsewhere



Food & Beverage



Fragrance & Oils



Candle Jars

ABSOLUTELY NO window glass, mirrors, ceramics, lab glass, baking dishes, light bulbs or tubes, safety glass, auto glass, drinking cups, mugs, or glasses.

















CURBSIDE 'ZERO SORT' vs DROP OFF

FREQUENTLY ASKED QUESTIONS

What is Zero-Sort* Recycling?

Zero-Sort Recycling is Casella's state-of-the-art process which enables paper, cardboard, plastic, glass, and metal to be collected together in one bin eliminating the need for you to separate recyclables.

Can I throw trash and recyclables into my Zero-Sort Recycling bin?

NO. Your Zero-Sort Recycling bin is for Zero-Sort recyclables only. Items that can't be recycled should be tossed into your trash bin.

Can I put grocery bags into my Zero-Sort bin or place recyclables in plastic bags?

NO. Plastic bags of any kind are not accepted in Zero-Sort Recycling. To recycle grocery bags, please bring them to a participating grocery or retail store.

How should I prepare my recyclables?

Recyclables should be rinsed clean of any food waste. Corrugated cardboard boxes should be broken down into 2' max pieces. Lids and caps can remain on empty plastic bottles. **DO NOT** tie newspaper or cardboard with twine.

What type of metal can I recycle?

Aluminum and tin cans are acceptable. Pots, pans, and scrap metal such as automotive parts, motors, and appliances are **NOT ALLOWED**.

What are la

soda crates, l plastic chairs general hous



GIVING RESOURCES NEW LIFE®

Zero-Sort* Recycling puts your discarded materials back into the world and not into the landfill.





WELCOME TO CASELLA'S

This reference guide provides detailed information about your residential curbside trash and recycling collection service.











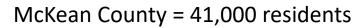




TONNAGE

| | Α | В | С | D | Е | F | G | Н |
|----|------------------|--------|--------|--------|----------------|--------|---|-------------------|
| 1 | | 13-May | 18-May | 24-Jun | 7-Jul | 26-Jul | | |
| 2 | | | | | | | | |
| 3 | Route total | | | | | | | Total Tons |
| 4 | Flint | 0 | 2.1 | 0 | 2.31 | | | 4.41 |
| 5 | Green | 0 | 0 | 0 | 0 | | | 0 |
| 6 | Brown | 1.54 | 0 | 1.4 | 0 | 1.75 | | 4.69 |
| 7 | | | | | | | | |
| 8 | Extra Pickups | | | | | | | |
| 9 | Flint | | | | | | | |
| LO | Green | | | | | | | |
| l1 | Brown | | | | | | | |
| 12 | | | | | | | | |
| 13 | Total | 1.54 | 2.1 | 1.4 | 2.31 | 1.75 | 0 | 9.1 |
| L4 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| L7 | Costa's | | 3 | 2 | 4 | 4 | | 9 |
| 18 | Smethport Legion | | 1 | 4 | 2 | 6 | | 7 |
| 19 | Mt Jewett | | 2 | 5 | 2 | 1 | | 9 |
| 20 | Wetmore Twp | | 2 | 1 | ${\sf closed}$ | closed | | 3 |
| 21 | Haberberger | | 1 | 1 | 2 | 1 | | 4 |
| 22 | Kane Save A Lot | | 8 | 5 | 10 | 4 | | 23 |
| 23 | Foster Township | | 4 | 1 | 4 | 1 | | 9 |
| 24 | Otto Eldred | | 6 | 0 | 1 | skip | | 7 |
| 25 | Eldred Boro | | 1 | 4 | 4 | 5 | | 9 |
| 26 | Port Allegany | | 5 | 2 | 7 | 4 | | 14 |
| 27 | | | 33 | 25 | 36 | 26 | | |
| 28 | | | 4,200 | 2,810 | 4,620 | 3,580 | | 94 |
| 29 | | | | | | | | |





- Bradford 8,200
- Kane 3,500
- Port Allegany 2,400
- Smethport 1,600
- Eldred 637













PRISM From our Strategic Materials friends...













Laura E. Guncheon, M.S.

Vice President

Project Management Office

Erie Management Group

Iguncheon@eriemg.com

814.464.3677





















