



SEPARATING GLASS FROM THE MIXED STREAM

Housatonic Resources Recovery Authority
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CT DEEP SWAC January 28, 2020

History

- 2017 Oak Ridge suggested removing glass as a solution to address the HRRRA's concern with increasing tip fees.
- 2018 Substitute House Bill No. 5360 Public Act No. 18-181 Sec. 12. (Passed in June. Effective Oct 1, 2018)
- The HRRRA Director conducted several meetings and surveys to seek direction and presented it to the Full Authority who approved moving forward with the program.
- 2019 The HRRRA started Phase I in March to collect glass separately from the mixed stream at the Bethel, Redding & Ridgefield transfer stations
- CT DEEP issued their official approval of the HRRRA's Glass Pilot Participation Application to remove glass from the mixed stream at the curb and transfer stations.





ACCEPTABLE

Beverage Bottles

Juice Containers



Condiment Bottles



Food Containers



NOT ACCEPTABLE

Mirrors



Drinking glasses



Ceramic cups/plates



Clay flower pots



Crystal



Lightbulbs

Window glass



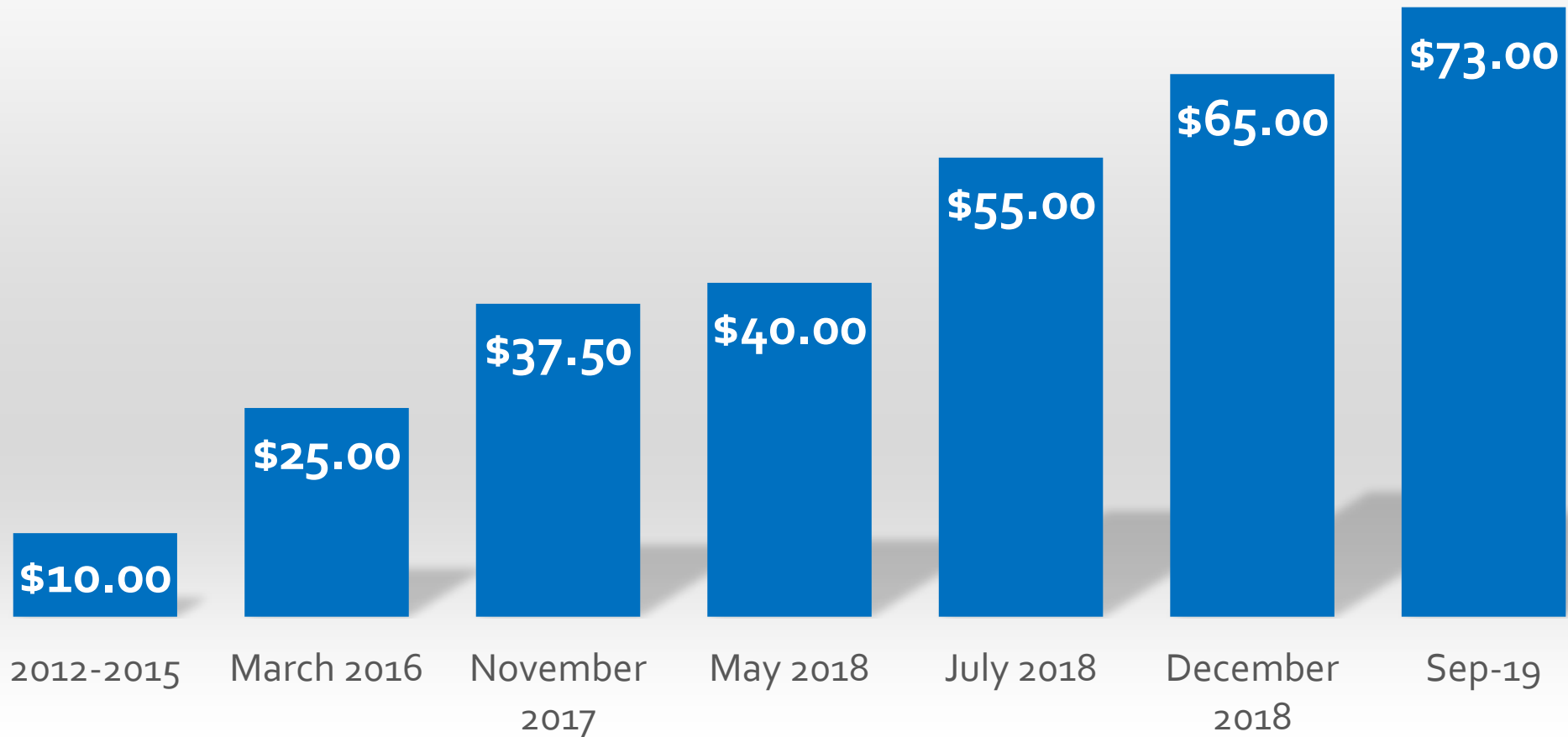
Ovenware





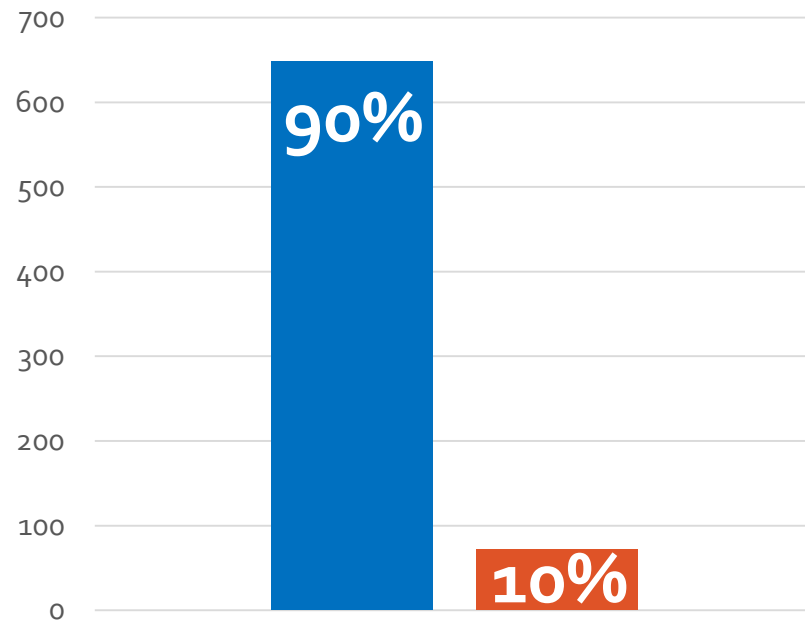
Separating Glass from the Mixed Stream... why?

HRRA Recycling Tip Fee has increased from \$10 to \$73 a ton from 2015-2019



Public Survey November 2018

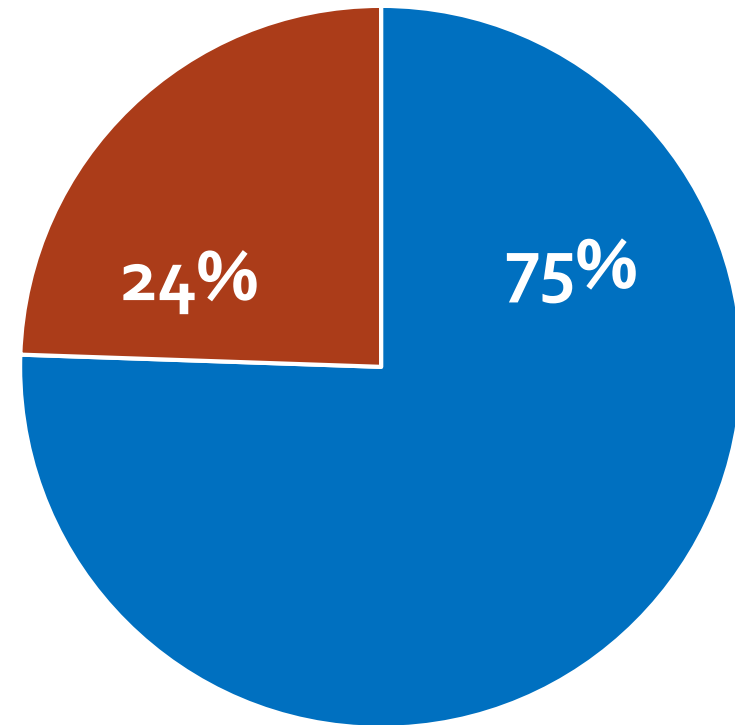
If you were asked to recycle glass separate from your mixed recycling bin, would you?



648 Yes v. 72 No

695 answered
32 skipped

If your waste hauler did not provide the collection of glass pick-up, would you drive the glass to your local recycling center to recycle it?



525 Yes v. 170 No

695 answered
32 skipped

Nov. 2018



**The truth about MRF Glass
and my wakeup call**

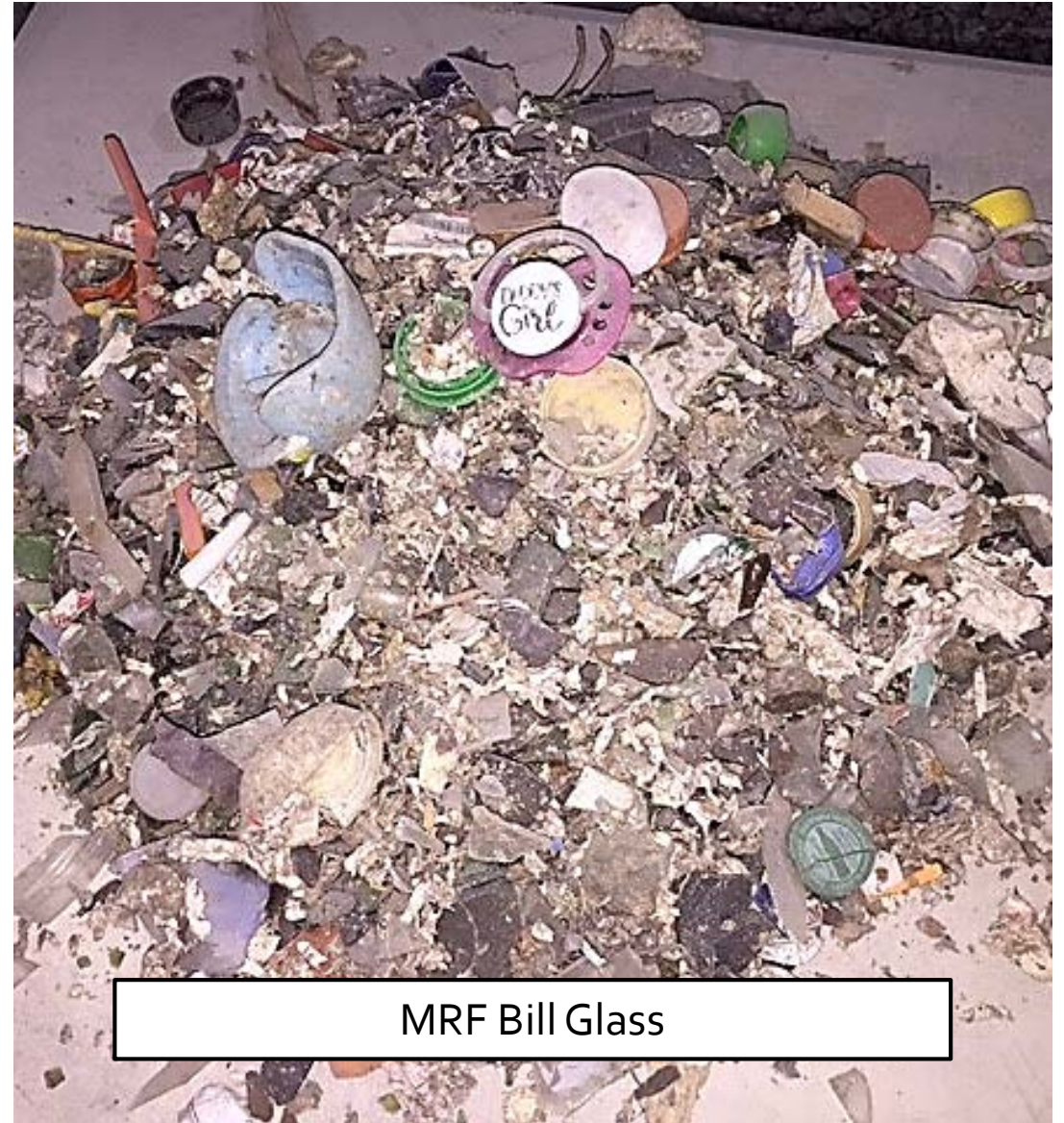
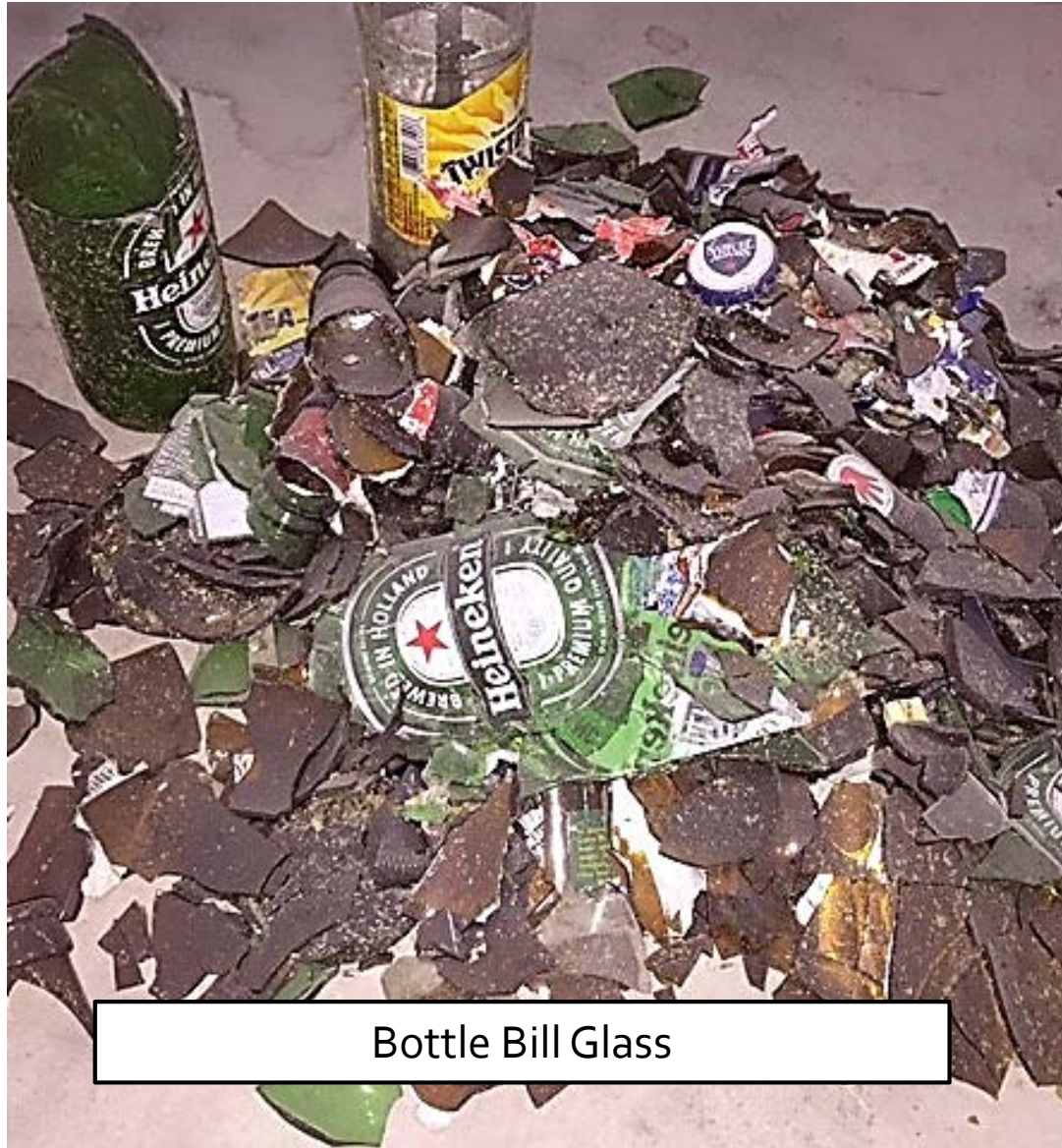


Not to be overlooked. Is the problem glass or the other contaminates? Or both...?





Glass dust and particles are everywhere



Phase 1

Collection Points

- Bethel Transfer Station
- Redding Transfer Station
- Ridgefield Transfer Station





**STRATEGIC
MATERIALS**

Recycling Earth's Resources

MATERIALS RECOVERY FACILITY

860-289-8480

300 RYE STREET























REJECTED









NEW

APPROACH



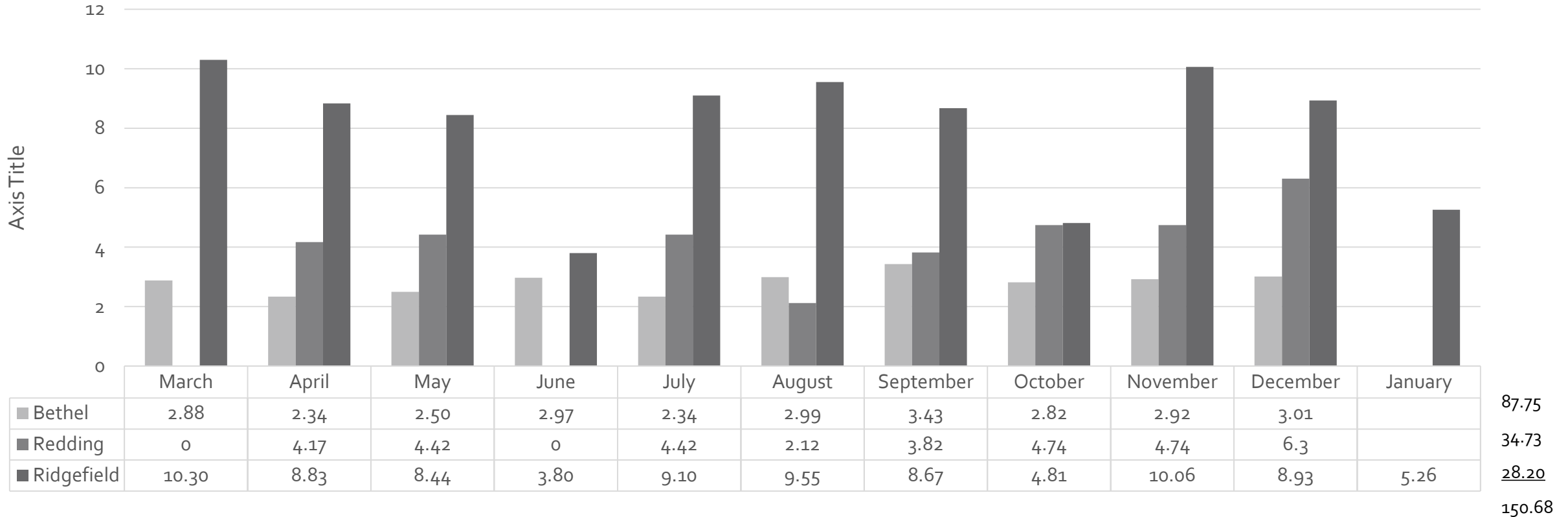
Waste & Recycling

"Our Roots Are In Your Community"

Glass drop-off data to date

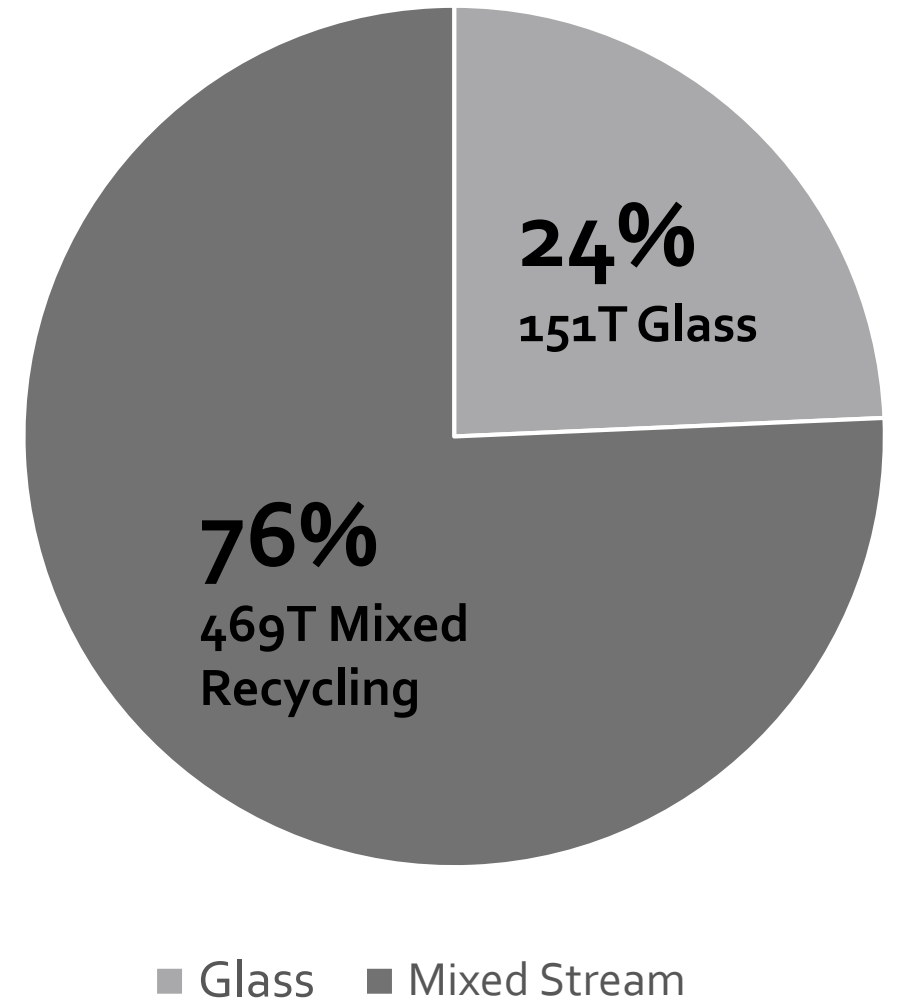
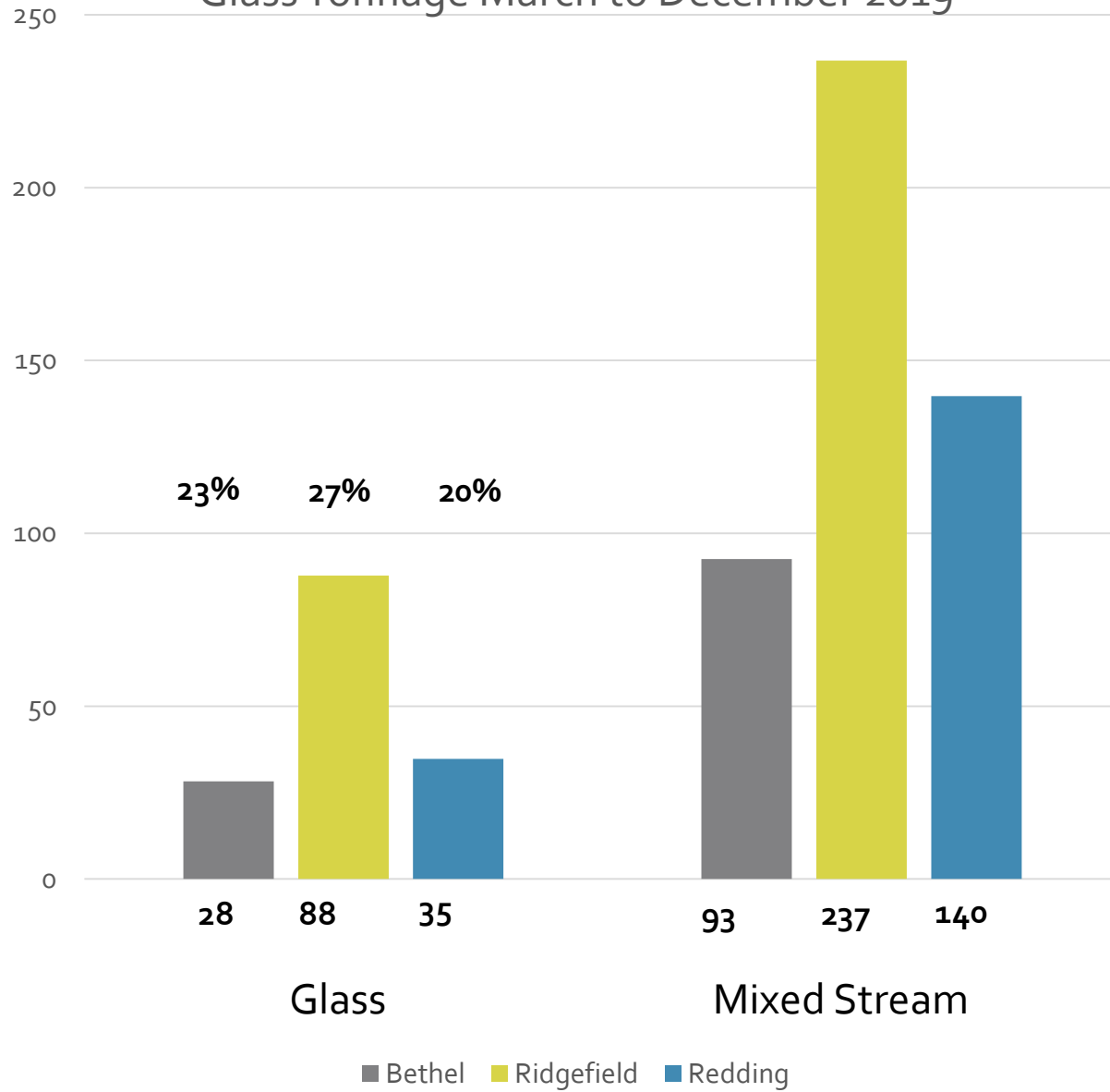
Town	Population
Bethel	18,584
Redding	9,158
Ridgefield	24,648

Phase I – Transfer Station Drop-Off



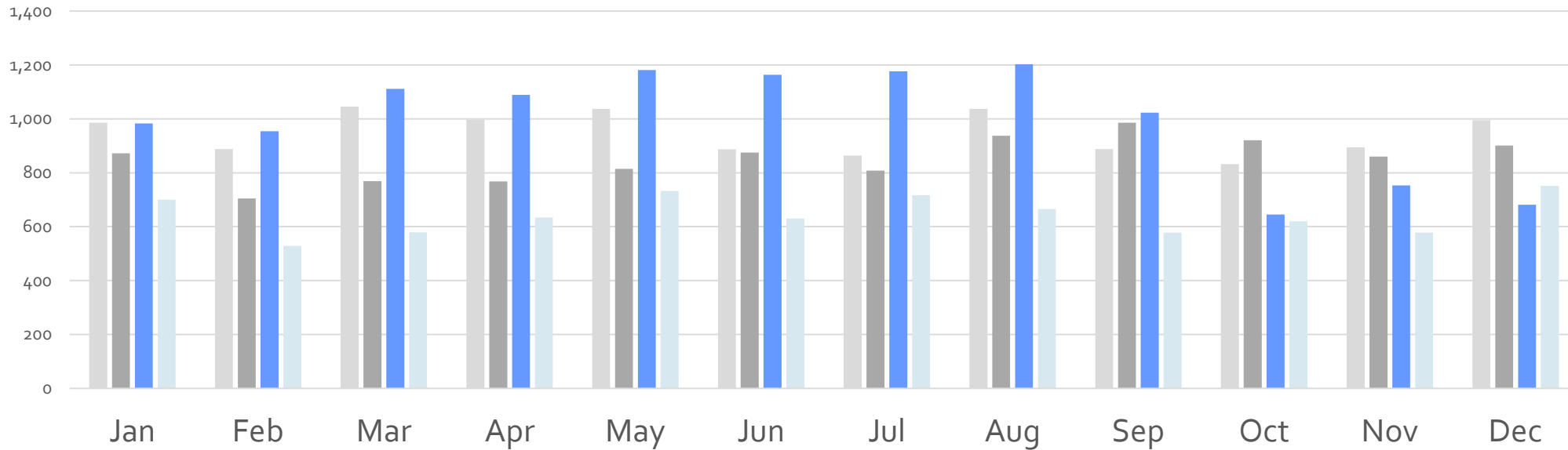
87.75
34.73
28.20
150.68

Glass Tonnage March to December 2019



HRRRA - Regional Recycling Mixed Recycling Tonnage Trend

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Jan	681	746	625	771	554	729	702	944	971	986	872	983	700
Feb	534	630	566	616	537	656	566	756	759	888	705	954	529
Mar	692	675	593	742	558	715	652	869	901	1,045	769	1,112	579
Apr	697	604	606	727	518	693	600	995	988	997	768	1,089	634
May	738	672	729	674	584	742	692	1,089	1,026	1,037	815	1,181	732
Jun	709	637	832	607	640	790	647	1,010	1,059	887	875	1,163	630
Jul	681	660	823	543	616	745	975	1,043	1,070	864	808	1,176	717
Aug	755	609	753	562	721	811	980	975	979	1,037	937	1,202	666
Sep	638	639	763	563	708	691	998	1,050	1,016	888	986	1,023	578
Oct	746	639	742	540	656	684	956	1,043	949	832	920	645	620
Nov	791	640	804	569	715	737	868	915	1,025	895	861	754	578
Dec	775	837	866	653	801	677	982	1,180	1,229	995	901	681	751
Total Tons YTD	8,437	7,988	8,702	7,567	7,608	8,670	9,618	11,869	11,972	11,351	10,217	11,964	7,715



Average tonnage in CY over 4 years 10,312. The HRRRA experienced a significant drop in tonnage when Phase I was implemented October 2018

Possible Impact to hauler tip fees

10,312	Average CY of mixed tons over 4 years
\$73.00	Current tip fee for mixed tons
\$752,776	Annual cost to haulers to tip mix stream x \$73
2475	# of tons of glass in mixed stream (24%)
7837	Remaining mixed tons
\$470,219	Remaining mixed tons reduced to \$60
\$86,625	Source separated glass tons at \$35 tip fee
\$556,844	Total cost of mix and glass
\$195,932	Cost savings from glass removed from mixed stream

Additional impacts to be considered

- Wear & tear on equipment
- De-value of other material (paper, boxboard, cardboard)
- Lack of markets
- Contamination
- Space
- Worker safety
- Change in the carbon footprint of the glass. fewer number of times it is handled and processed.



NERC MRF GLASS SURVEY

WE ARE NOT ALONE, READ THE HEADLINES...

Recent article in Resource Recycling regarding Fairfax County, VA

January 25th article from New Jersey regarding Clifton, NJ



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RECYCLING**

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Moving forward

- Waiting for Urban Mining to open (*summer*) 2020 before implementing a full regional program (curbside & all 9 transfer stations.)
- The HRRA will change registration requirements in 2020 to require that all haulers comply with the pilot program when it launches.
- The HRRA will give quarterly updates to CT DEEP to help them gain insight on the effectiveness and suitability of an alternative approach to glass collection.
- Educational material will be shared with CT DEEP.
- Including more glass bottles in the deposit law.
- Looking into additional alternatives for glass recycling to lower carbon footprint

