West Michigan Sustainable Business Forum

GBENN Summit November 8, 2018



●HH• ■• .ooo







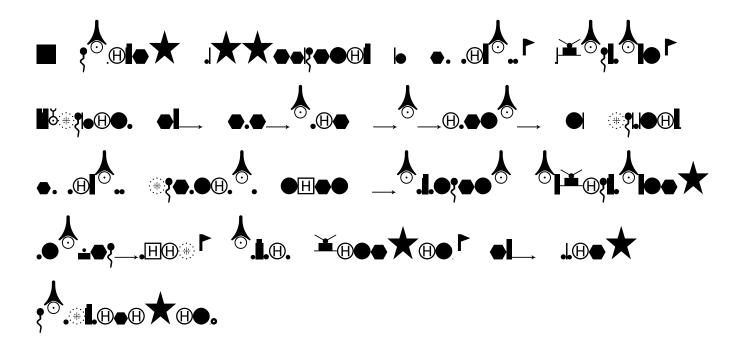




WEST MICHIGAN SUSTAINABLE BUSTNESS FORUM



















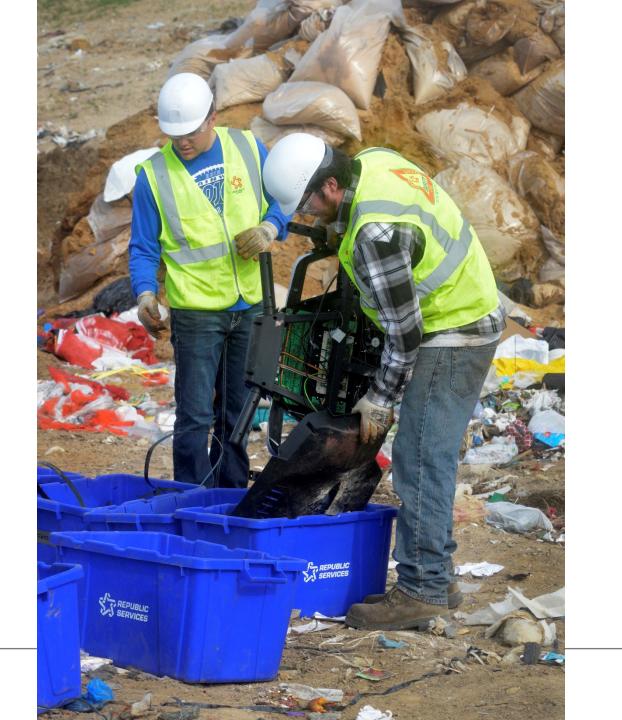




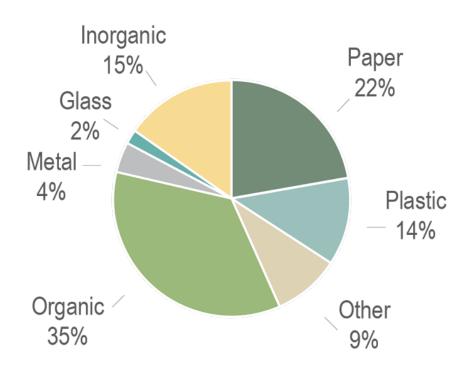




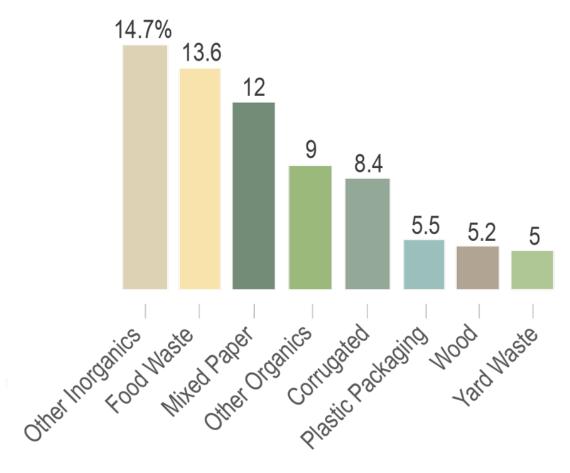




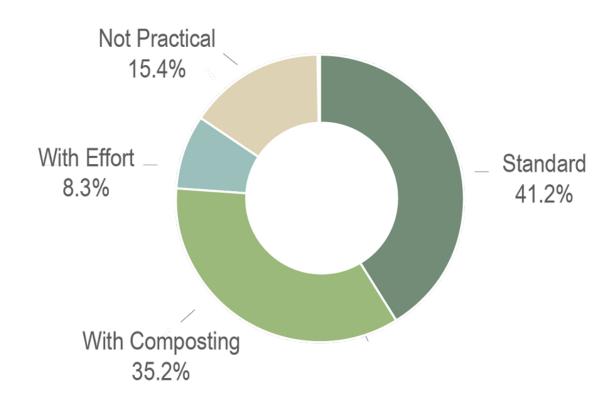
Michigan Municipal Solid Waste Composition (mean % by weight)



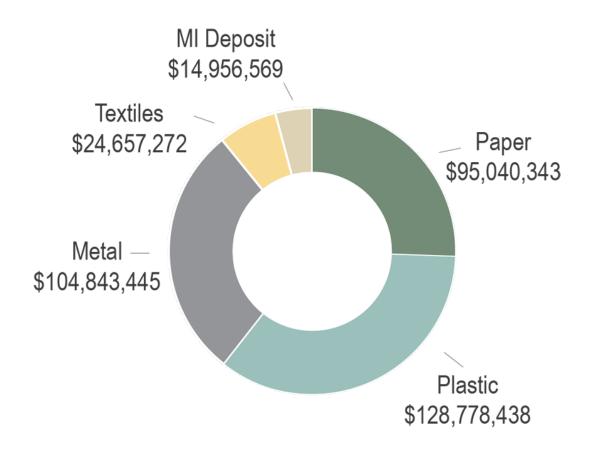
Top Materials in Michigan MSW Composition (mean % by weight - 5% or greater)



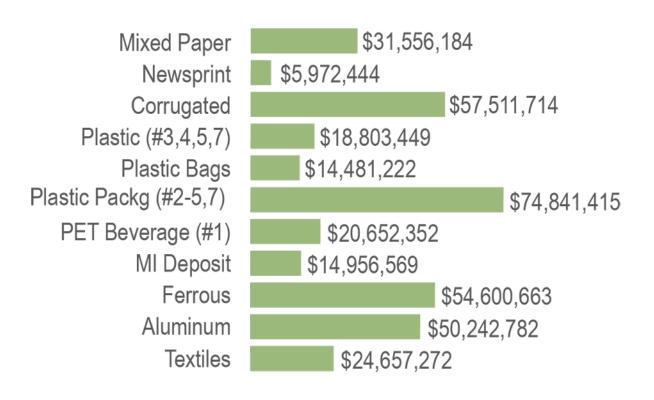
Michigan MSW Material by Ease of Recycling (mean % by weight)



Total Value of Michigan MSW Material Disposed (\$)



Total Value of Michigan MSW Commodities Disposed (\$)



Potential Economic Impact



\$399 MILLION 2,619 jobs

IMAGINE TRASH PARTNER PROGRAM

Assessment Report

Prepared for:

Atwater Brewing Co.

September 2017









SUMMARY RESULTS

While complete data for waste generation has not been collected, we estimate that your current diversion rate is approximately 0%. At present, we do not yet have a benchmark from which to compare your organization against others in the West Michigan area. However, based on our experience, we believe that your facility's waste reduction efforts are below average.

We estimate that in a year your facility generates a total of 5.5 tons of waste material.

You can reduce the amount of waste sent to landfill by at least 80% by implementing a recycling composting program, following the waste reduction and optimization action items recommended in this report. This would give you an estimated diversion rate of at least 80%.

West Michigan Waste Diversion Challenge

Atwater Brewing Co.

Company Name:

Recyclable metal containers & foil

Recyclable plastics 1-7

Organics/Food Waste



Contact Name:



No recyling for metal exists, all metal goes in the trash dumpster

No recyling for plastics exists, all plastic goes in the trash dumpster

other compostables go into the trash dumpster

No opportunties to compost organic waste exists, all food waste and



General Manager - Sean

Address:	201 M	ichigan (Street NW G	rand Rap	oids, MI 49	503		Audit Date:	8/25/2017
	> Landfill (Arrow Waste): 4 cu.yd. Dumpster, 1x/month @ 100% full = 48 cu.yds./year @ 225 lbs./cu.yd. = Approx. 10,800 lbs./year								
Waste Data:	> Cardboard-Only (NA): Opportunity for Improvement (OFI) > Mixed Recyclables (NA): Opportunity for Improvement (OFI)								
> Organis/Compostables (NA): Opportunity for Improvement (OF					=1)				
Waste/Recycling Streams	Reuse / Return	Shred	Paper / Corrugated Only	Single Stream	Compost	Trash	Other		Notes:
Returnable beverage containers							X	Not Applicable	
Corrugated cardboard						х		No recyling for cardboard dumpster	d exists, all cardboard goes in the trash
Office paper						х		Not a large waste stream in the trash dumpster	- no recyling for paper exists, all paper goes
Recyclable glass containers	x							1	not a large waste stream otherwise. Howeve all glass goes in the trash dumpster

Χ

Χ

X

Why A ZZ → State on L⊕★?



West Michigan =

Southwest Michigan = ¥↓ ™



West Michigan Food Recovery Council









Climate Resiliency Framework Initiative Phase 1 Context of Interest (2012-2013)



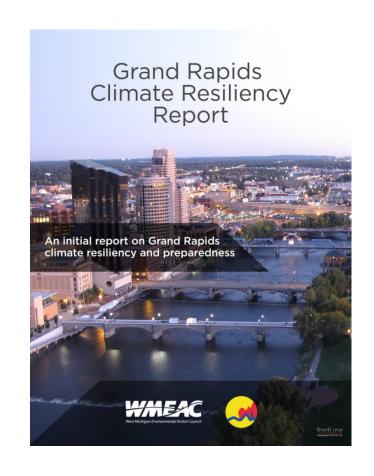
Wicked Problems

City of Grand Rapids Resiliency Report

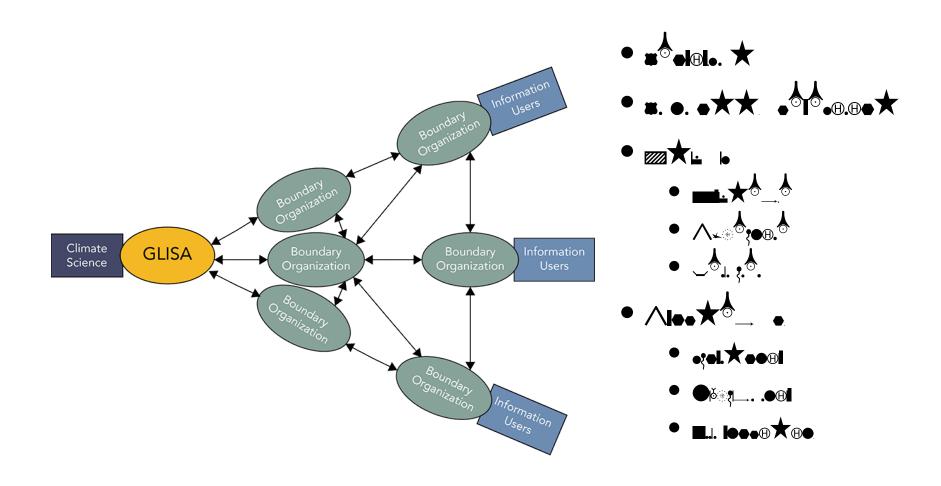
- West Michigan Environmental Action Council
- Highlighted 22 potential impacts

Context of conspicuous climate impacts

- Flooding
- Drought
- Blizzard
- 100-year-storm events

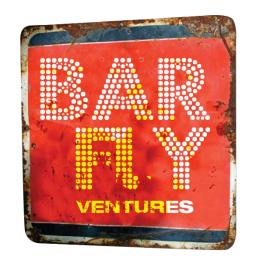






Developing a Toolkit Partners











Developing a Toolkit

Vulnerability Survey: Impact Categories



	Product & Services	Administration & Processes	Facilities & Equipment	Supply Chain
Weather Events				
Hot days	0	0	0	0
Cold days (wind chill or real temp)	0	0	0	0
Blizzards (high winds for 3+ hrs)	0	0	0	0
Wind events	0	0	0	0
Tornadoes	0	0	0	0
Freeze-thaw cycles	0	0	0	0
Resource Scarcity				
Electricty prices	0	0	0	0
Natural gas prices	0	0	0	0
Transportation costs	0	0	0	0
Water supply & disposal costs	0	0	0	0
Agricultural costs	0	0	0	0
Resource Deterioration				
Energy infrastructure	0	0	0	0
Agricultural yeilds	0	0	0	0
Communication Infrastructure	0	0	0	0

Developing a Toolkit

Vulnerability Survey: Business Divisions



	Product & Services	Administration & Processes	Facilities & Equipment	Supply Chain
Weather Events				
Hot days	0	0	0	0
Cold days (wind chill or real temp)	0	0	0	0
Blizzards (high winds for 3+ hrs)	0	0	0	0
Wind events	0	0	0	0
Tornadoes	0	0	0	0
Freeze-thaw cycles	0	0	0	0
Resource Scarcity				
Electricty prices	0	0	0	0
Natural gas prices	0	0	0	0
Transportation costs	0	0	0	0
Water supply & disposal costs	0	0	0	0
Agricultural costs	0	0	0	0
Resource Deterioration				
Energy infrastructure	0	0	0	0
Agricultural yeilds	0	0	0	0
Communication Infrastructure	0	0	0	0

Example Applicable Climate Data: Closings



#8l -8# ±

- •B** BL; ••.

- •B** _\$;\$•.\$

OL F MALES OL . See ABL.

- •B** _\$.\$



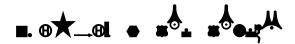






Social Equity Goal	Goal Brief Description	Benchmarks	Status
External			
		Mutually defined and created project(s) making positive impact for diverse and/or vulnerable communities.	Working to collaborate with partner organizations, members and stakeholders to plan projects through Equitable Sustainability pilo
		3 external WMSBF activities per year at racially/ethnically diverse cities or neighborhoods.	Several meetings at LINC, CCT, Urban Roots.
		1 sponsorship per year of an organization event serving ethnic and racially diverse communities.	WMSBF sponsored LEDA's annual summit.
#1: Socially Equitable Community Engagement	Work with communities on partnerships that adapt to their cultural preferences and conduct forum activities in their locations.	1 charitable contribution of at least \$100 minimum to an organization serving ethnic and racially diverse communities and/or 200 community service/volunteer hours with such organizations.	WMSBF is a member of the Hispanic Chamber of Commerce and time as a member of the LINC faciliated Environmental Justice Co
	Creating social equity initiatives and initiative outcomes in mutual design with diverse and/or vulnerable communities and launch	WMSBF partnerships and projects with organizations serving cultural, racial, ethnic, gender, etc. diverse communities leading to positive social equity impact in the environment, health or economic equity per their standards and perspectives.	In pursuit.
	existing/planned forum projects with their concurrence/input.	WMSBF technical assistance partnerships between organizations serving vulnerable communities that provide them technical assistance and expert judgement.	In pursuit.
	WMSBF connections between excluded individuals/communities and forum members	5 social/business network points established between individuals of a cultural, racial, ethnic, gender, etc. diverse community and a WMSBF member each fiscal year.	Need to develop mechanism to track this.
#3: Promoting Socially Equitable Networks	that have expanded meaningful social Promoting Socially networks for those excluded individuals based	New annual forum members and new board members representing professionals of color established through a specific board leadership pipeline programs.	Will add two professionals of color to board this year.
Creating positive environmental outcomes and/or reduction of health inequities for diverse and vulnerable communities via WMSBF programs, member technical assistance and joint forum/external organization partnership initiatives.		1 to 3 partnership projects between WMSBF and diverse communities designed initiatives that have reduced at least one environmental inequity experienced by cultural, racial, ethnic, gender, etc. diverse communities per the standards, data or perspectives of those communities.	Serving as climate change subject matter lead for LINC Environme Coalition.
	Creating positive environmental outcomes	1 to 3 projects developed and managed by the forumwith a preference of developing the project in partnership with cultural, racial, ethnic, gender, etc. diverse communitiesthat makes a positive contribution to resource ecosystems and climate change that are in direct proximity of/or in that community's defined neighborhood, census tract or zip-code.	In pursuit.
	and/or reduction of health inequities for diverse and vulnerable communities via WMSBF programs, member technical	WMSBF participation project reducing an environmental inequity affecting vulnerable communities of color in Health, Urban Gardening, Local Food, Lead Paint Testing and Remediation, Monitoring and Cleanup of air and Water Quality and Development and Maintenance of Green Space and Recreational Facilities to promote healthy living and childhood play.	In pursuit.
		20 businesses headed by racially, ethnically, etc. diverse individuals participating in a WMSBF business technical assistance program by the end of each fiscal year starting in 2018	In nursuit





XIII DOOR

Almold opposed

