



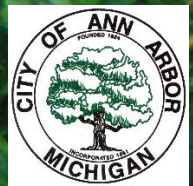
Getting Residential Rain Gardens Built – Applied Behavior Change for the Social Good

Susan Bryan

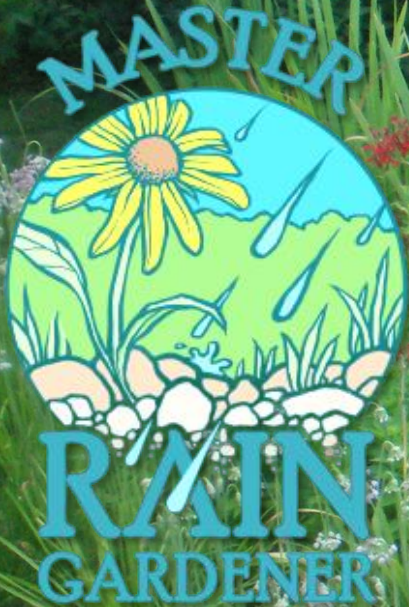
Washtenaw County Michigan

Water Resources Commissioner's Office

Funded by



Crowdsourcing Rain Gardens

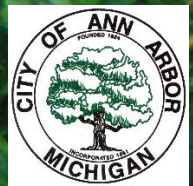


Susan Bryan

Washtenaw County Michigan

Water Resources Commissioner's Office

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Susan Bryan

Washtenaw County Michigan
Water Resources
Commissioner's Office



Master Rain Gardener class



UM Nichols Arboretum
Harvard bioinfiltration



Miller Ave Rain Gardens,
Ann Arbor



Agenda

1. Icebreaker: Who has seen the rain garden sign?
2. Program Objective
3. Results
4. Is this equitable?
5. What stops people?
6. Program elements
7. Parade of pretty gardens
8. Your suggestions & comments



Introduction:

Program Goal

- *Make vegetative infiltration the norm for landscaping practices in Washtenaw County*



Introduction:

More specifically . . .

- *Get Rain Gardens Built*

MS4 water quality permit compliance in:

- 1. Public Education & Outreach*
- 2. Post-Construction Runoff Control implementation*

Ann Arbor has an ordinance requiring rain gardens on new construction. But my program focuses on voluntary action.



Introduction:

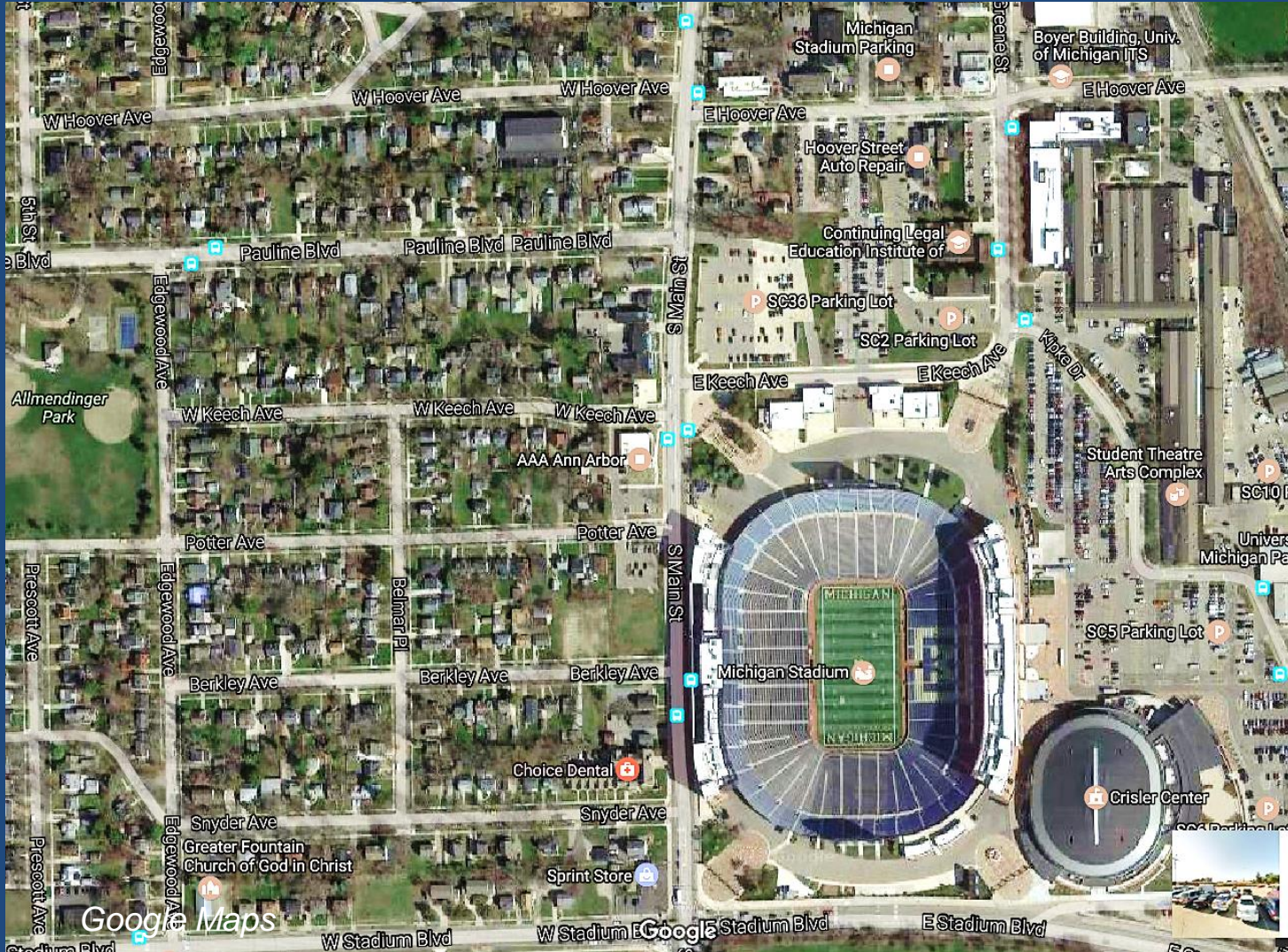
Erin said you are interested in. . .

- *Biodiversity*
- *Water Quality*

That is baked into everything we do.



Where will we put Green Infrastructure?: Retrofits



Benefits: Rain gardens get built!



89



Last year

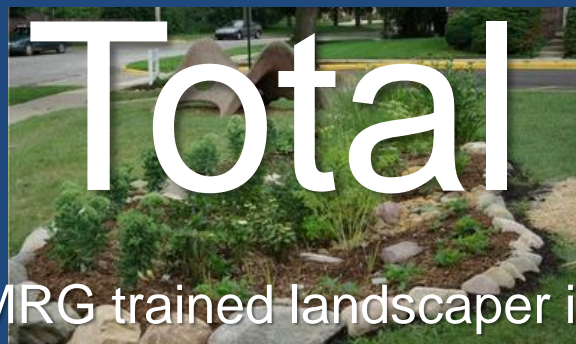
*not including 53 MRG trained landscaper installed RGs



Benefits: Rain gardens get built!



≥ 2,100



*including 804 MRG trained landscaper installed RGs



Regional: Communities Trained to offer MRG classes

Master Rain Gardener Programs



- **Detroit Metro Area** Huron, Raisin, Clinton & Rouge River Watershed Councils, Oakland Co., & Washtenaw Co Water Resources
- **Cleveland** Metroparks, Cuyahoga, Lake, Summit SWCD & Chagrin Watershed Partners, Regional Sewer District, NEOPIPE & Ohio EPA
- **Columbus** SWCD
- **Cincinnati** SWCD in Ohio, Kentucky, Indiana. Hamilton, Butler, Warren, and Clermont Counties in Ohio, and Boone, Kenton, and Campbell Counties in Northern Kentucky. The OKI Regional Council of Governments & Metropolitan Sewerage District.
- **City of Toledo** Rain Garden Initiative Partnership
- **Saginaw Chippewa Tribe** Mt Pleasant, MI
- **Kalamazoo** River Watershed Council & Nature Center
- **Canada** Green Communities of Canada





Introduction: This is a rain garden



*Rain Garden by Denise Held, Master Rain Gardener
Photo by Susan Bryan*



Introduction: Identifying Barriers



Photo credit: Steven Kronenberg. Some of the labor he recruited to build his rain garden.





Sharon Sheldon,
MRG 2012

How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



How are rain gardens built? Hard work!



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How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



How are rain gardens built? Hard work!



Steven Kronenberg, rain gardener



Benefits: Rain gardens get built!

We count rain gardens.

Not:

- Attendance at workshop
- Pledges
- Clicks
- Likes
- Views

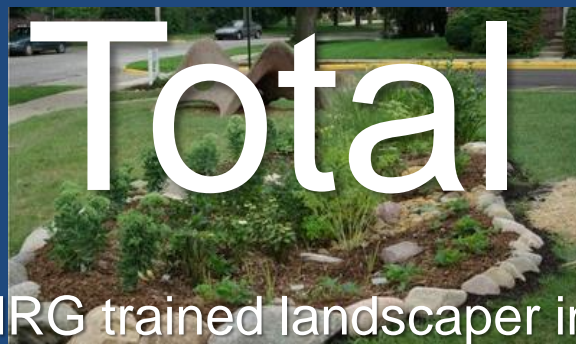
Built. Period.



Benefits: Rain gardens get built!



≥ 2,100

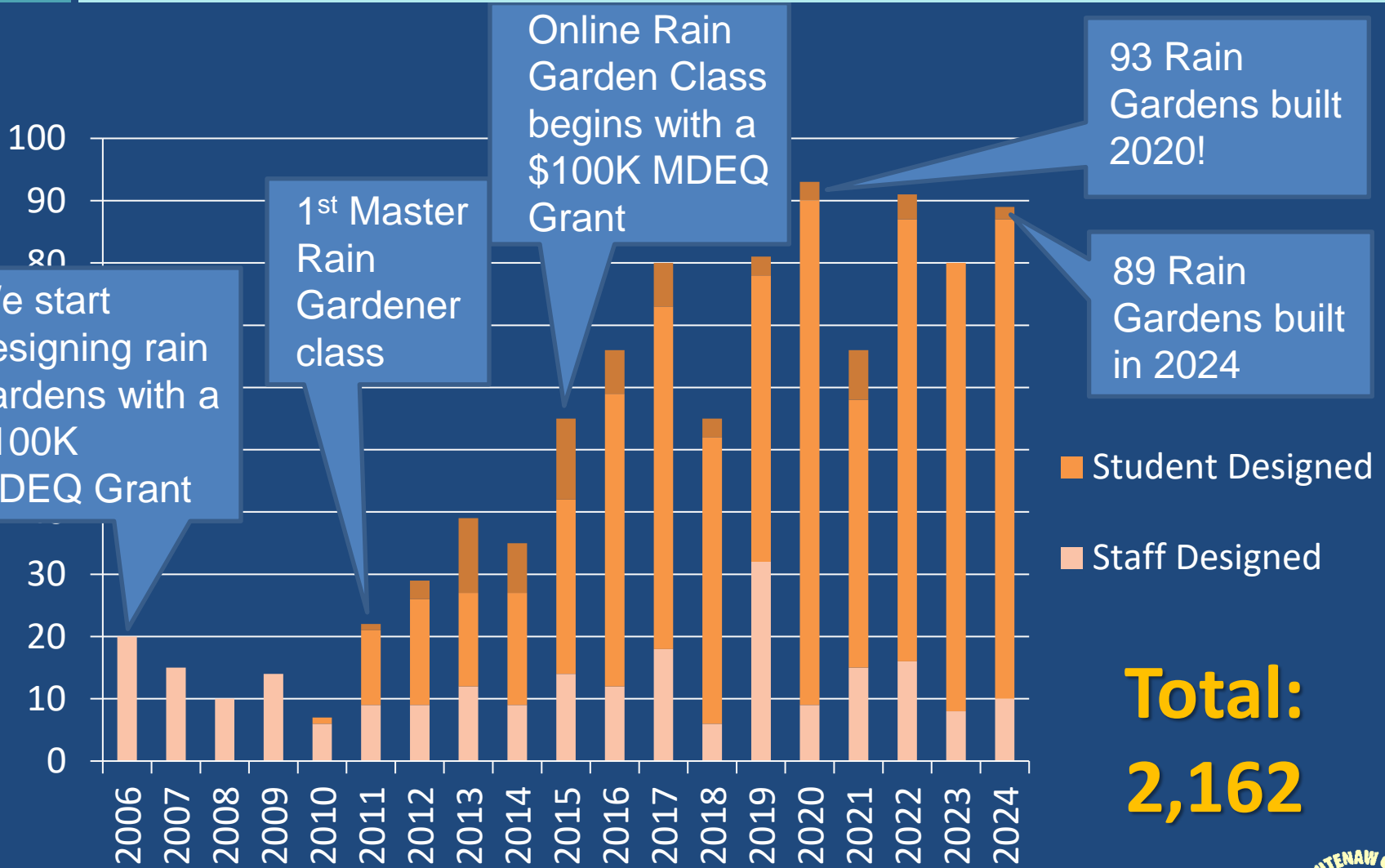


*including MRG trained landscaper installations

Total



Rain Gardens Built in Washtenaw



**Total:
2,162**



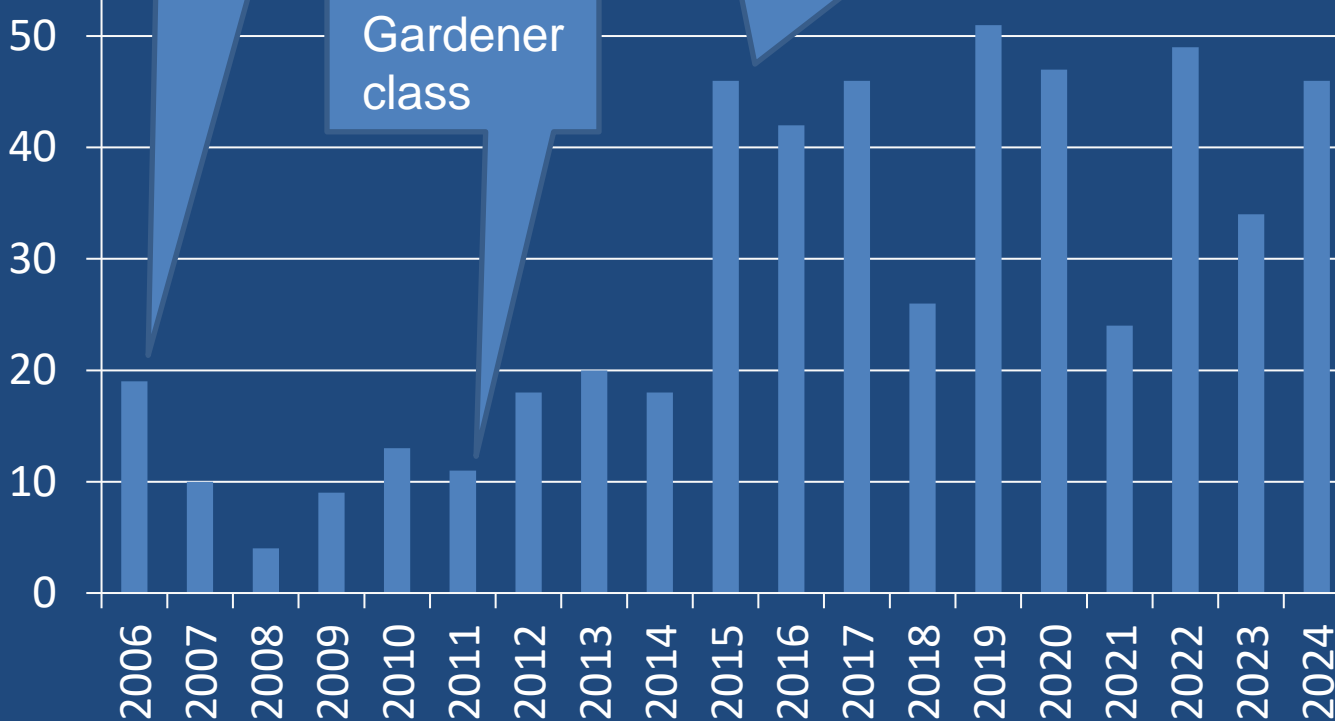
Rain Gardens Built in Ann Arbor

We start designing rain gardens with a \$100K MDEQ Grant

1st Master Rain Gardener class

Online Rain Garden Class begins with a \$100K MDEQ Grant

46 Rain Gardens built last year!

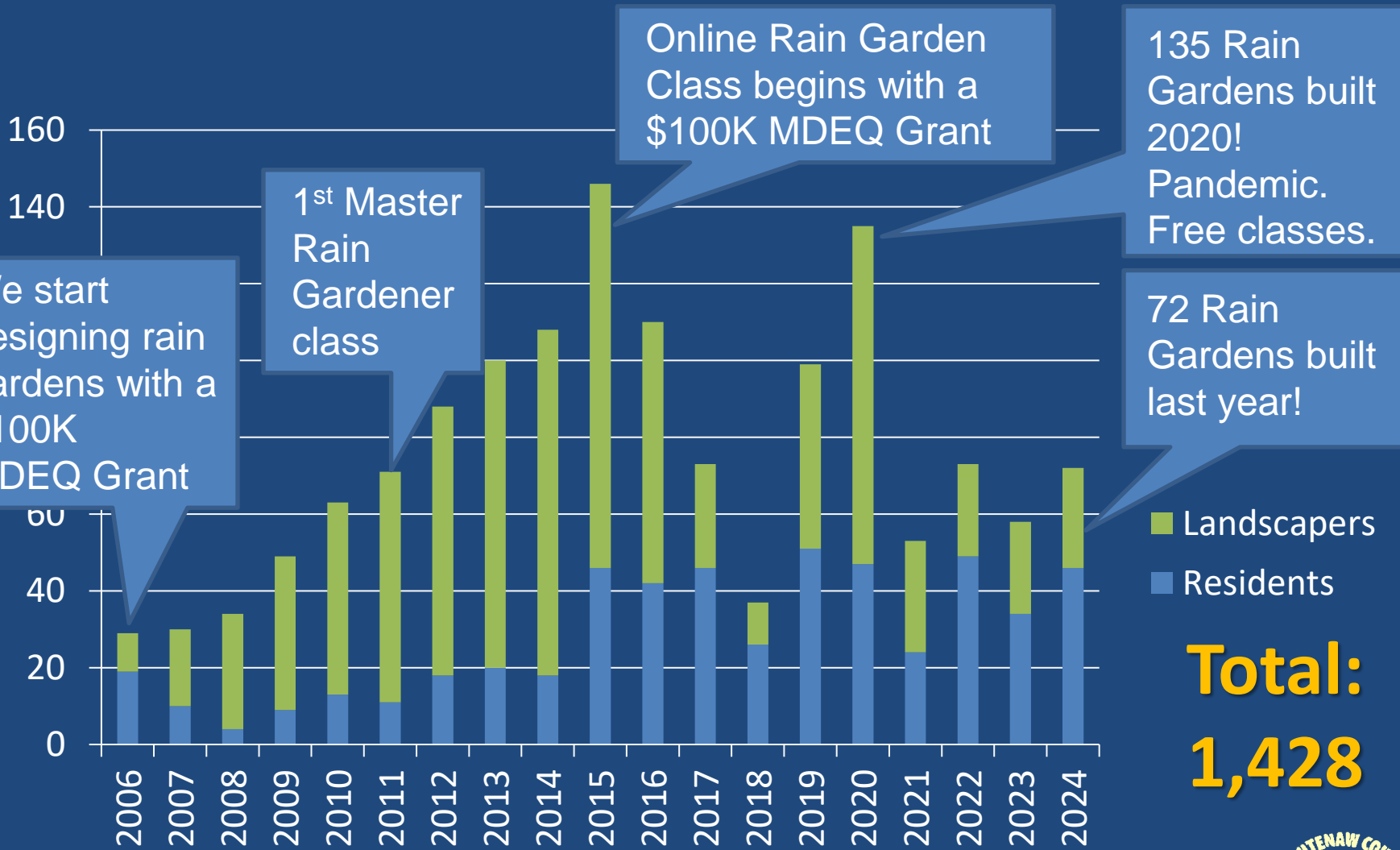


■ AA Residents

**Total:
559**

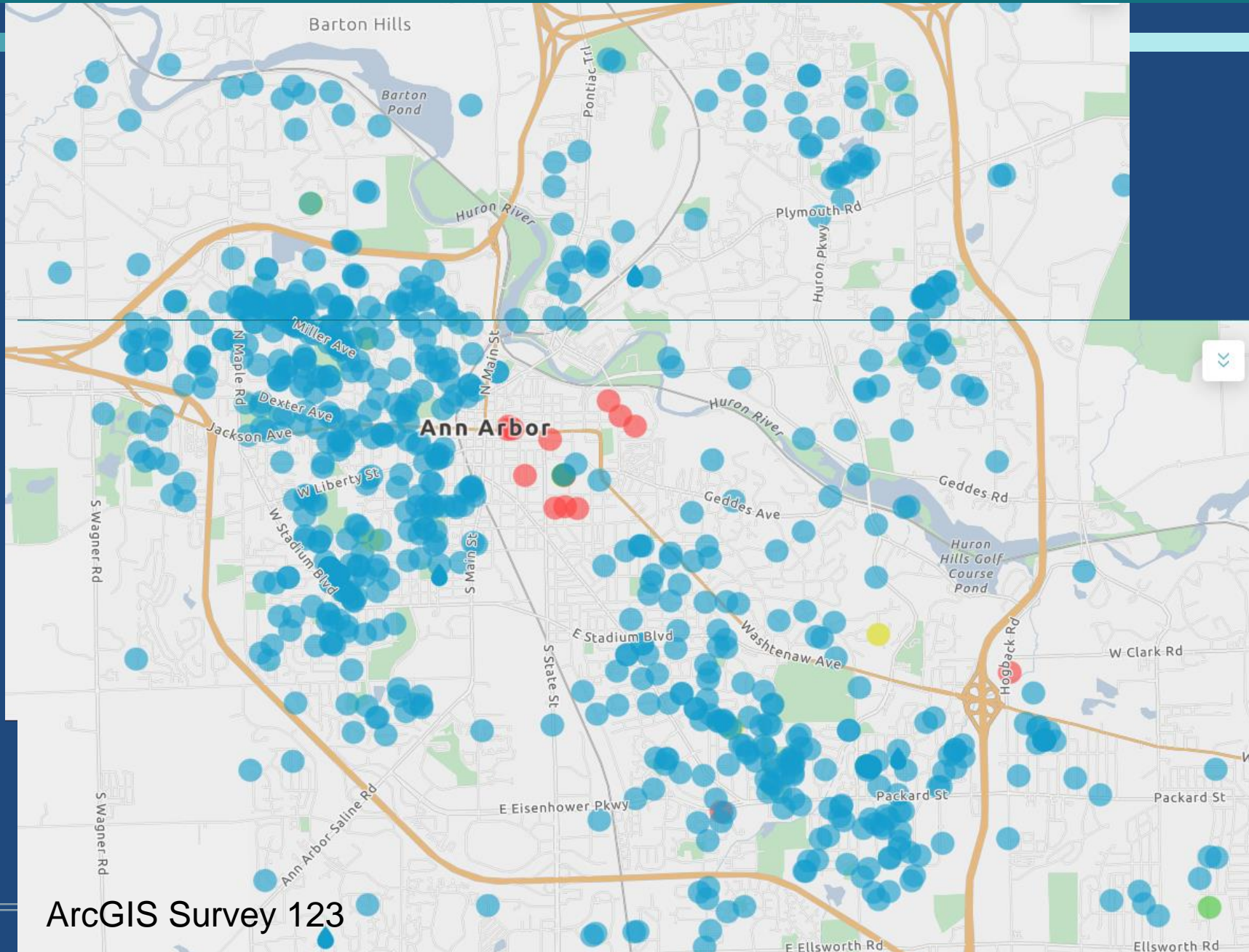


Rain Gardens Built in Ann Arbor





RainScaping in Southeast Michigan



ArcGIS Survey 123



Ann Arbor & Washtenaw Partnership

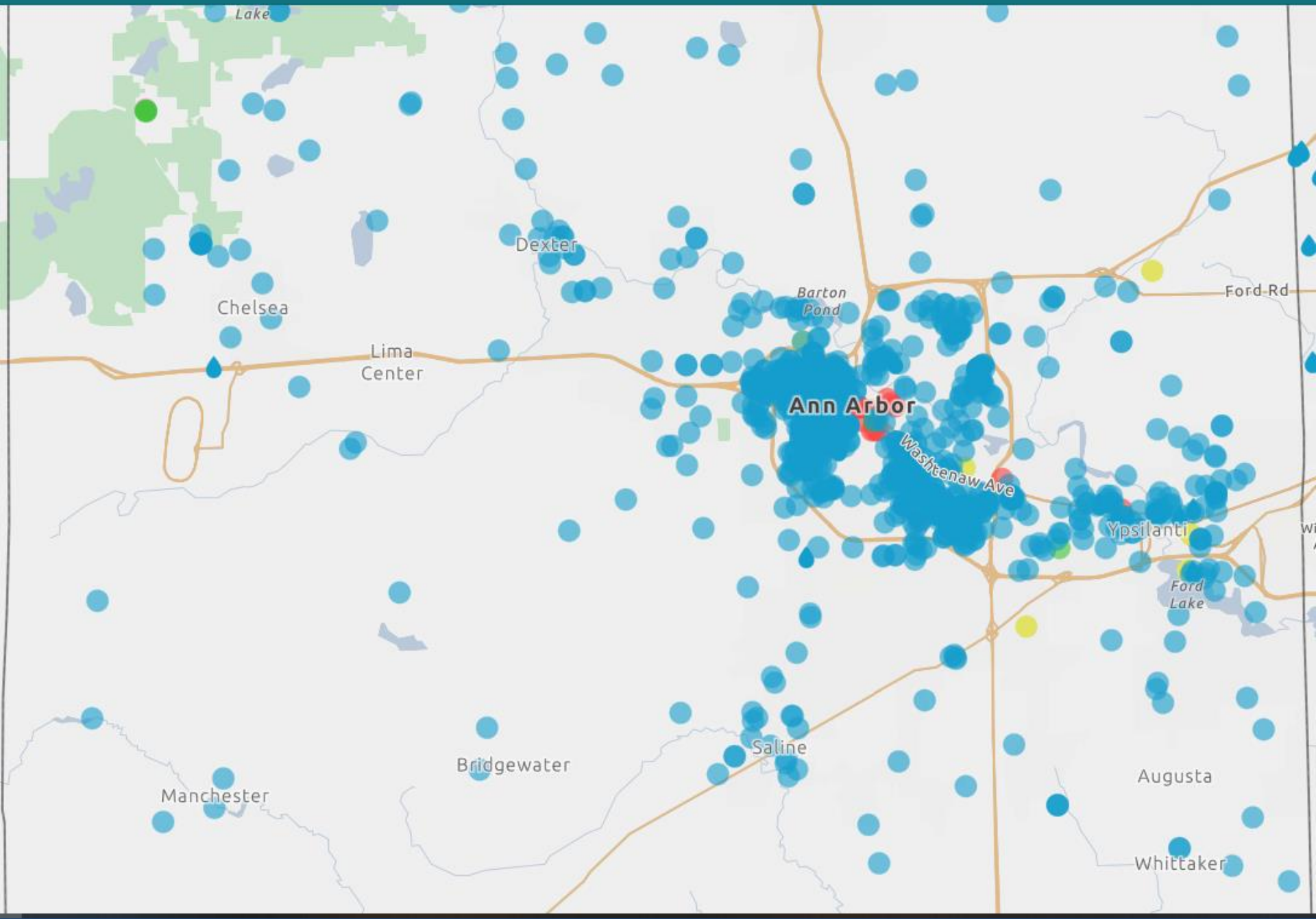
- Ann Arbor Stormwater Utility fee funds a portion of the Master Rain Gardener Program



Ann Arbor Sustainability Grant check accepted by Eberwhite Elementary School. The rain garden was dug by Washtenaw County Water Resources staff and planted by students.



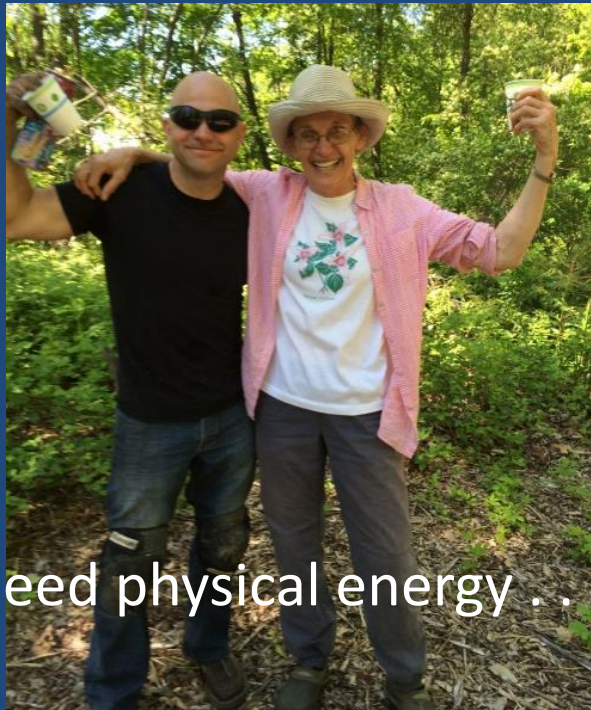
RainScaping in Southeast Michigan



Is this Equitable?

Building a Rain Garden can be Free / Low Cost

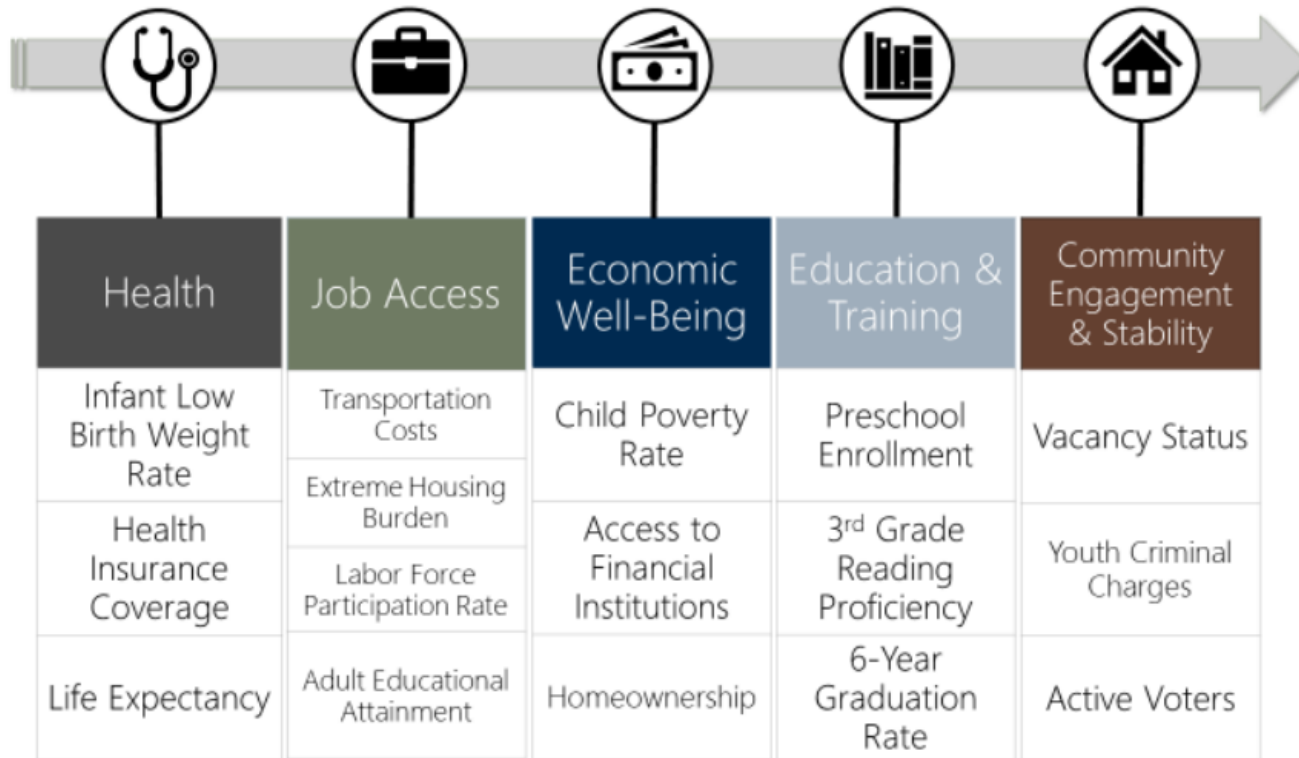
- Free on-demand video class
- Plant Swaps
- Seed Starting workshops (Seeds to Community)
- Municipal compost
- Chip drop



- But you do need physical energy . . .

Is this Equitable?

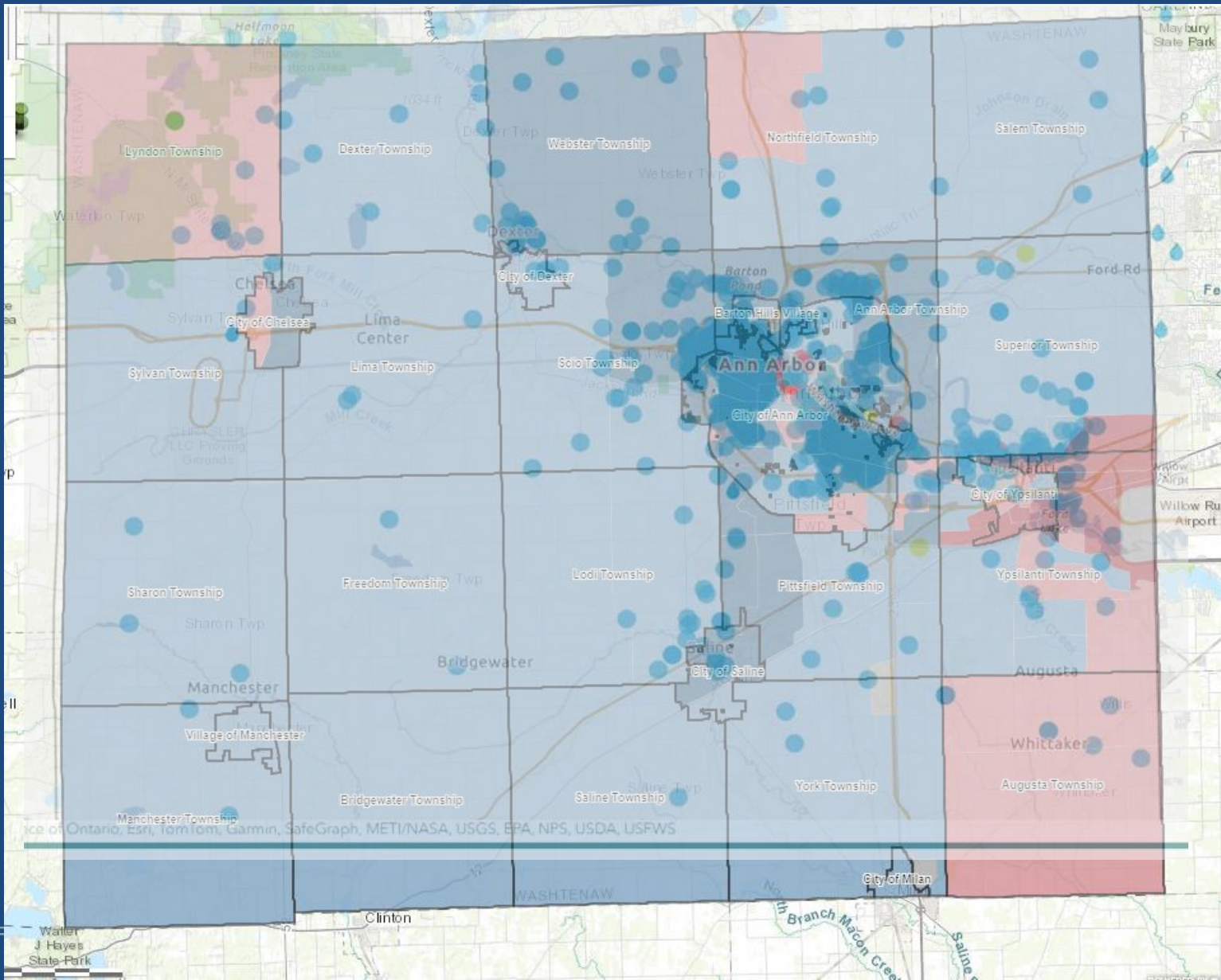
- The Opportunity Index measures access to opportunity by combining 16 indicators into five categories of opportunity:



2020 Washtenaw County Opportunity Index

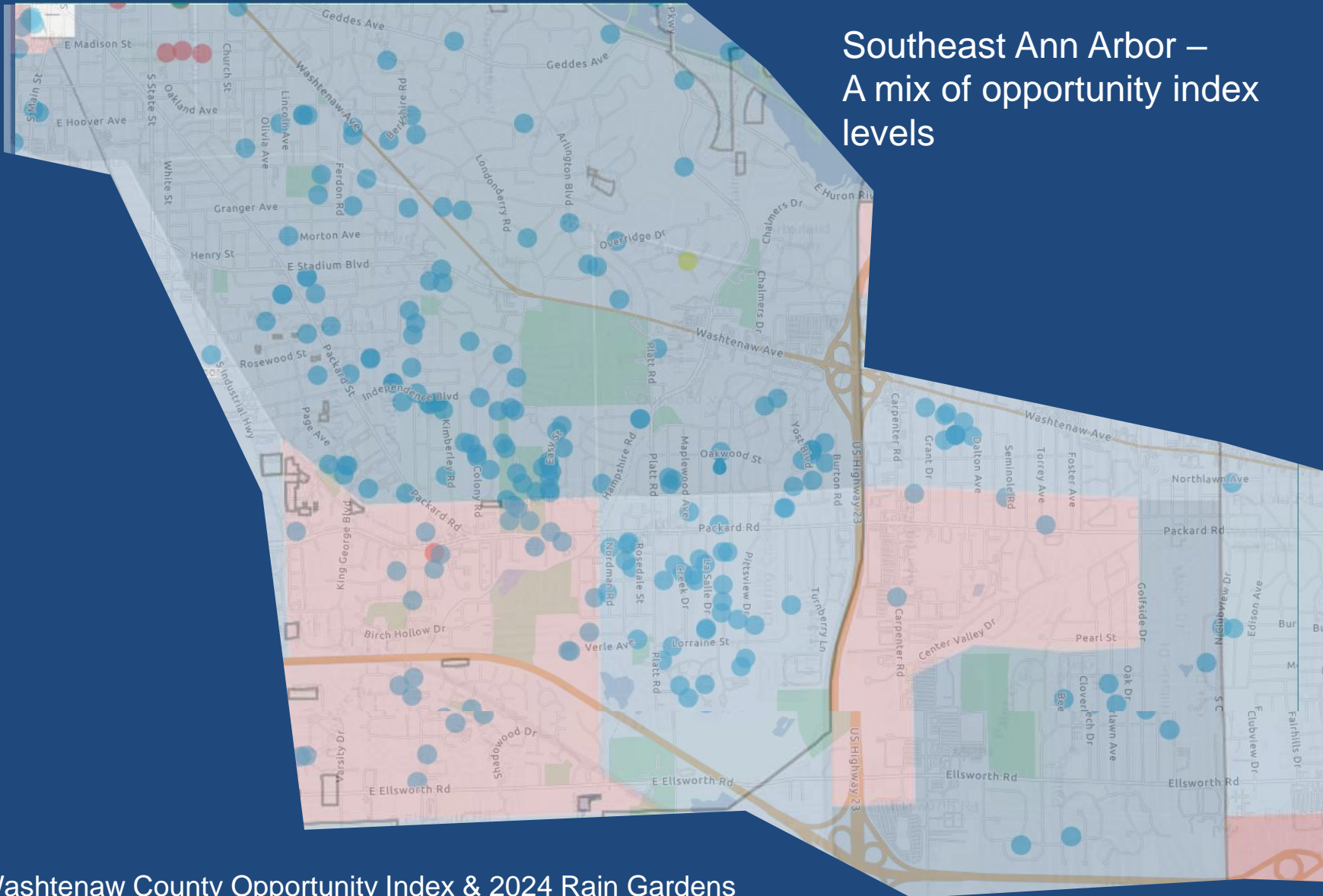


Washtenaw County Opportunity Index

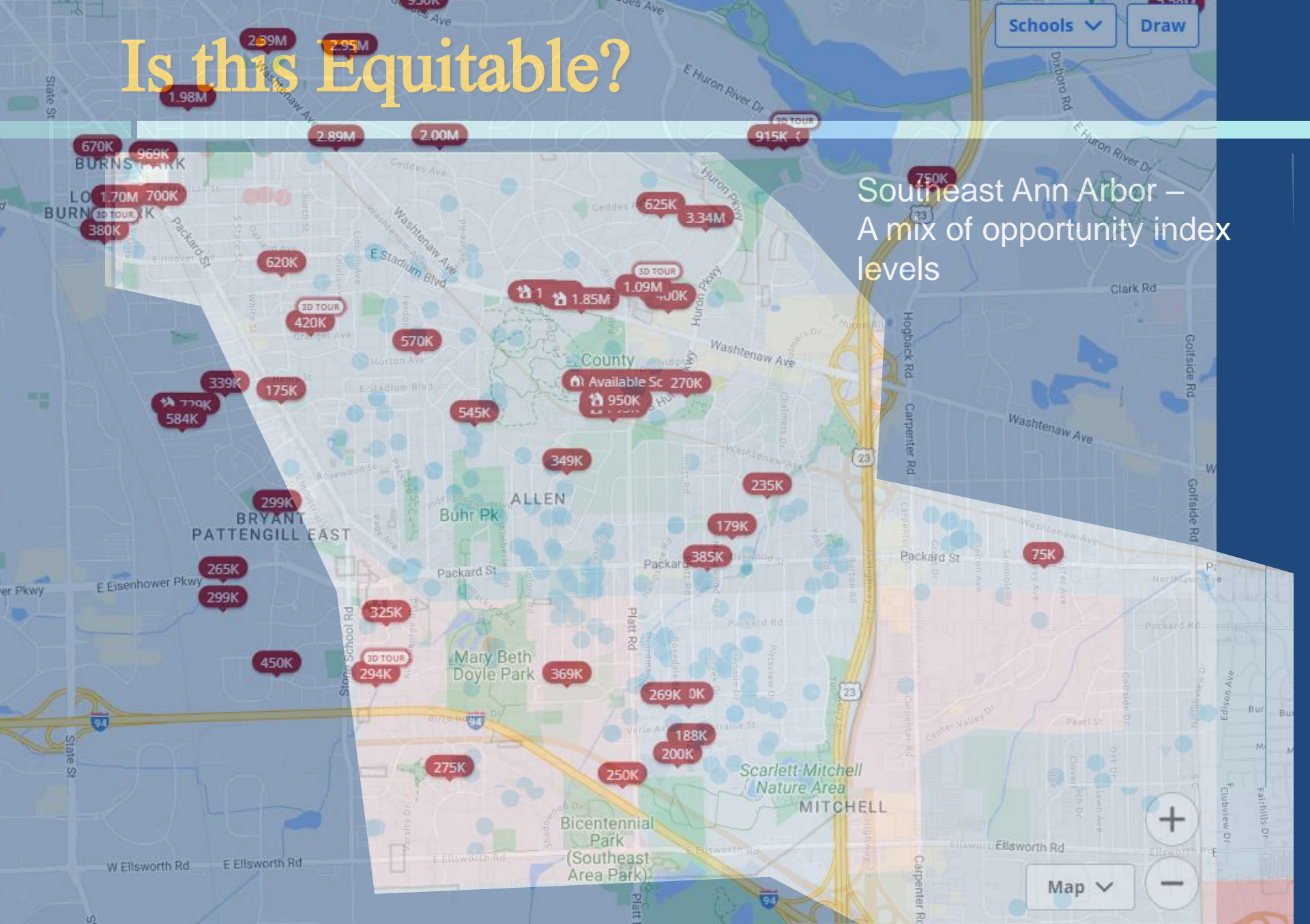


Is this Equitable?

Southeast Ann Arbor –
A mix of opportunity index
levels

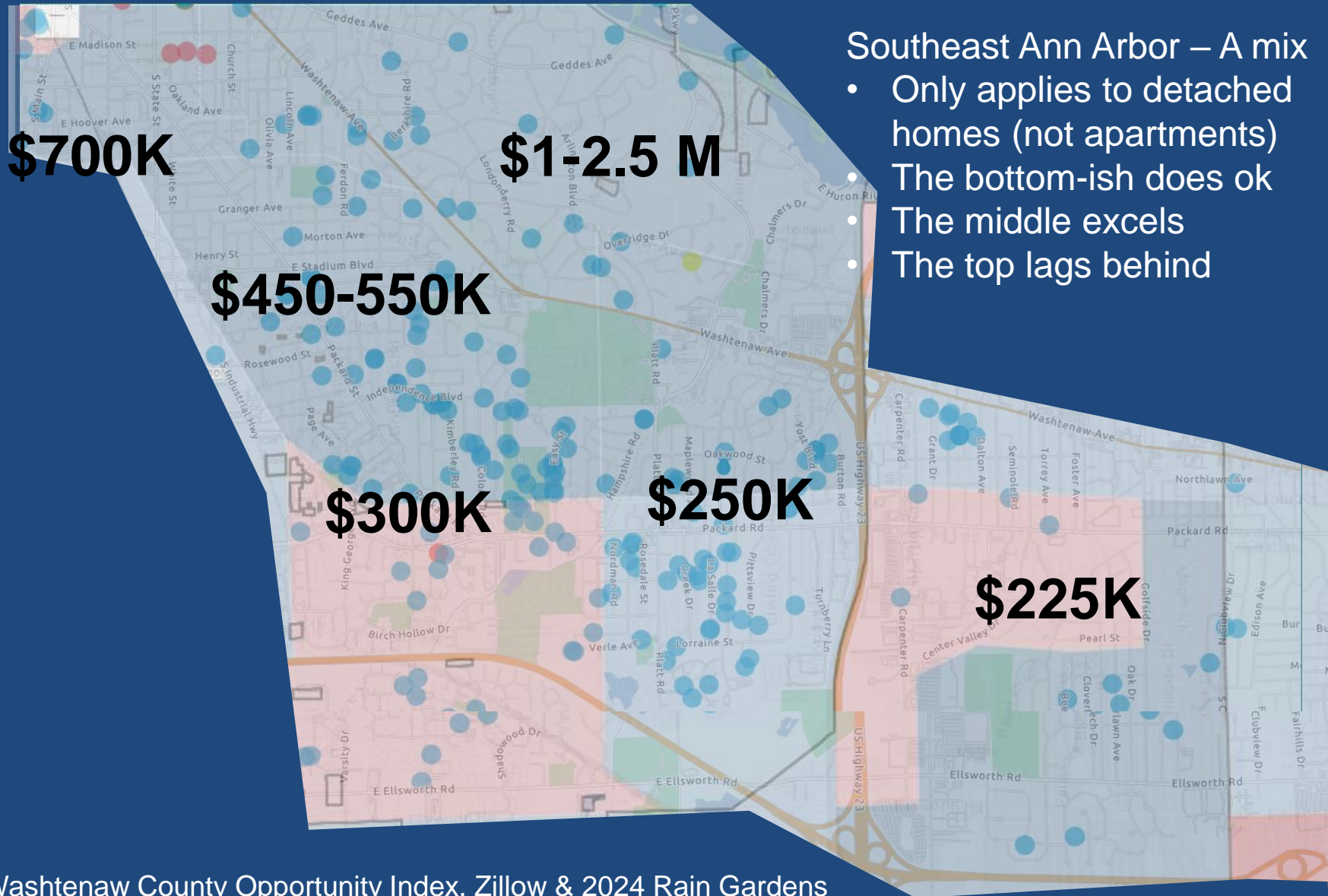


Is this Equitable?



Southeast Ann Arbor –
A mix of opportunity index
levels

Is this Equitable?



- Southeast Ann Arbor – A mix
- Only applies to detached homes (not apartments)
 - The bottom-ish does ok
 - The middle excels
 - The top lags behind

Total Rain Gardens Built: Including Contractors

	of All Time	2024
Rain Gardens built TOTAL	2162	142
Washtenaw County	1100	89
City of Ann Arbor (included in Washtenaw)	559	46
Landscape contractors trained by us	895	53
Train the Trainer communities	167	

Landscape Contractors who took the Master Rain Gardener class. These numbers aren't reflected on the map.

(I haven't figured out how to convince landscapers to fill out my map form...)

Wealthier people – hire contractors. So they might be building more than the map reflects.



Audience Barriers & Benefits: Theirs, not yours

**What is stopping people?
What is motivating them?**

*- In Behavior Change/ Social Marketing this is a
Barriers & Benefits analysis -*



Have you ever tried to change your behavior?

- Why should a rain garden rise to the top? When we could . . .
- Exercise more
- Invest retirement money
- Clean out the junk closet
- Volunteer at your kid's school
- Arrange the kitchen in a rainbow



Audience Barriers & Benefits: Theirs, not yours

Benefits

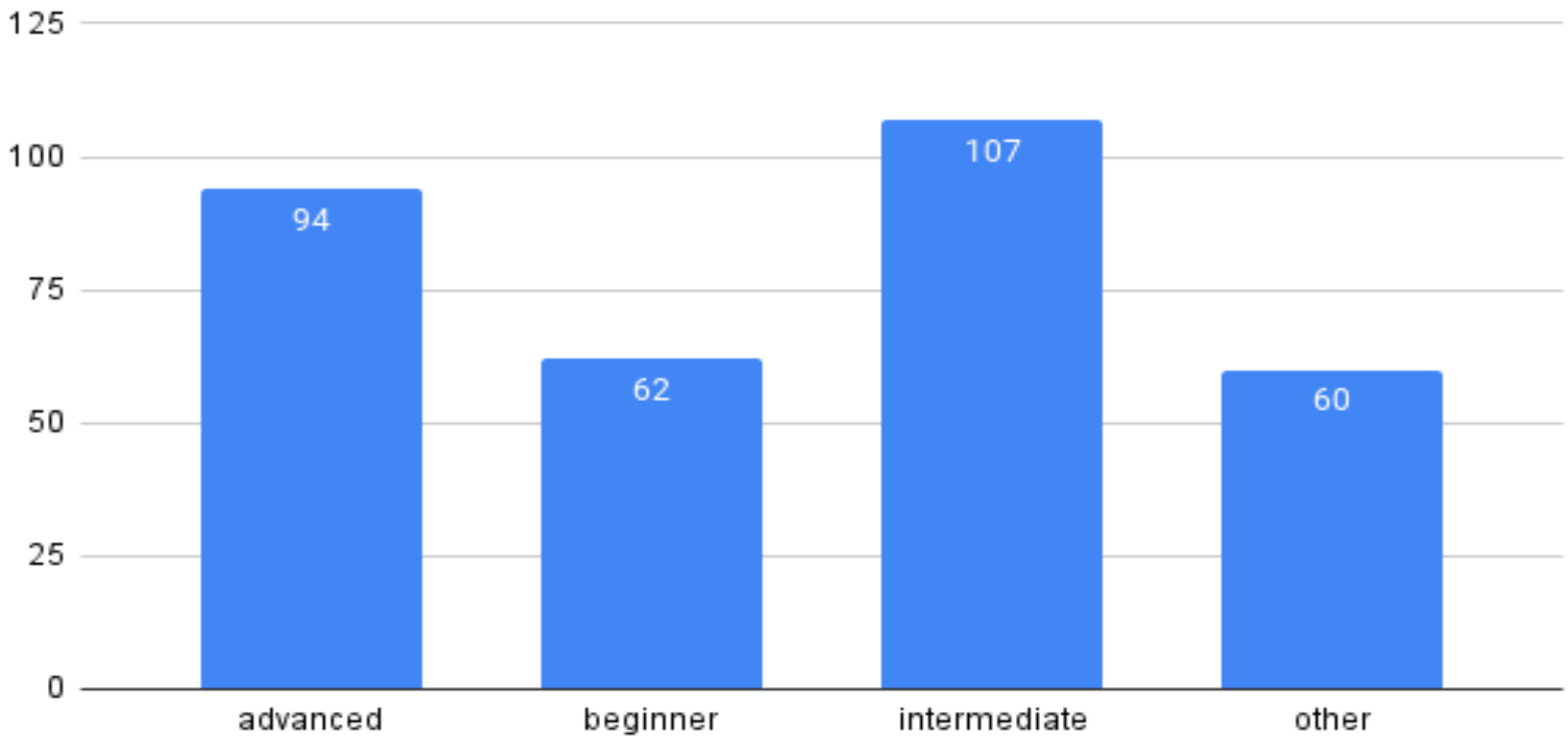
1. Cool new garden project
2. Solving a basement water problem
3. Pollinators
4. The satisfaction of a job complete & well done
5. Having a Purpose & meaningful work
6. Professional development
7. The t-shirt





UofM Data Deep dive

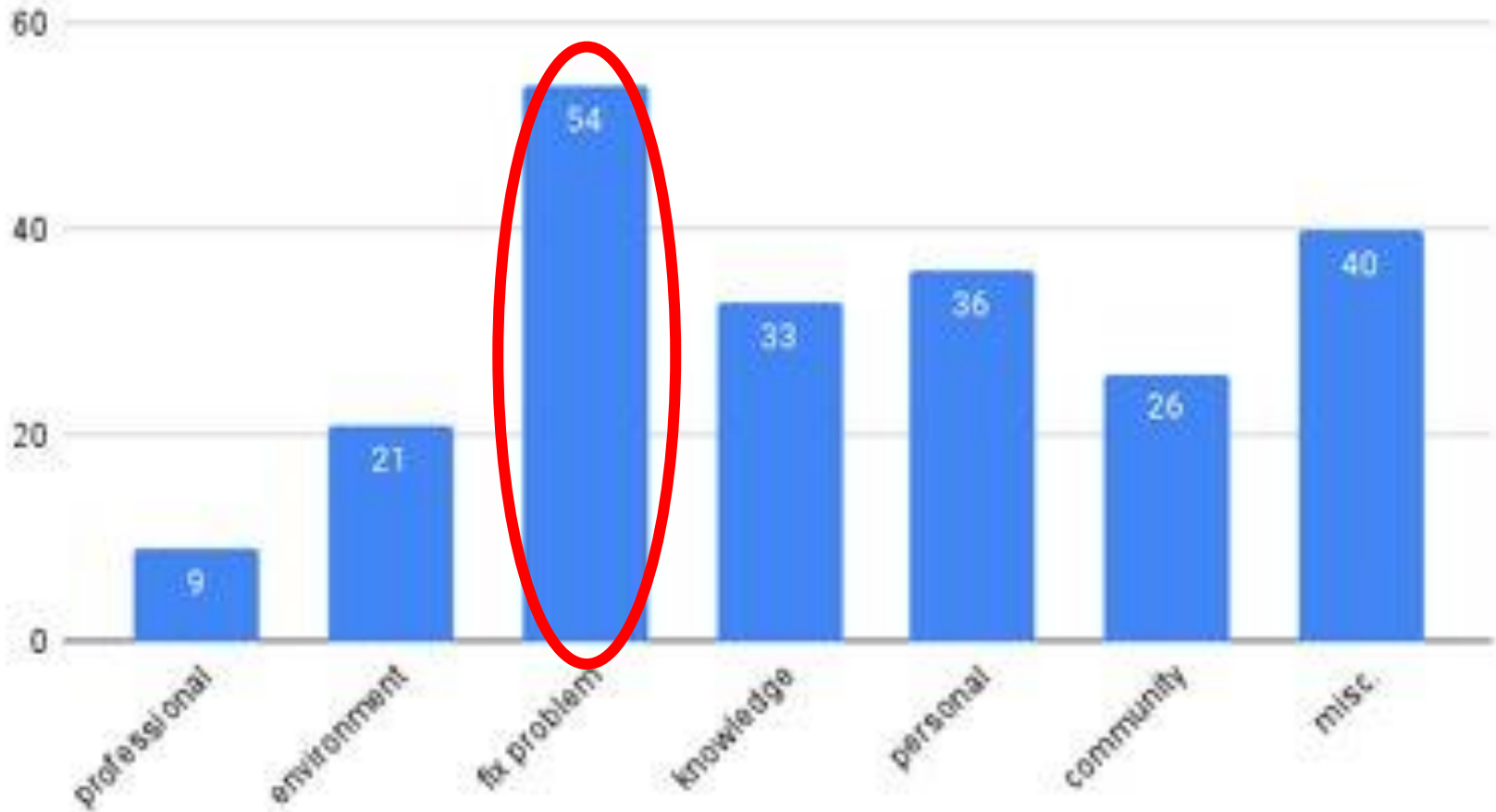
Skill Levels (Built)





UofM Data Deep dive

Motivations (Built) (Motivators of people who ended up building their RG)



Audience Barriers & Benefits: Theirs, not yours

Ann Arbor code requires a rain garden (or dry well)

If a homeowner has a building project that increases the area of impervious surface on their property

1. AA Staff know to give residents our card – for free rain garden advice!
2. Please send any homeowners to us!

www.washtenaw.org/raingardens



Make an Appointment: Advice right in their yard



book now
🔄 appointlet

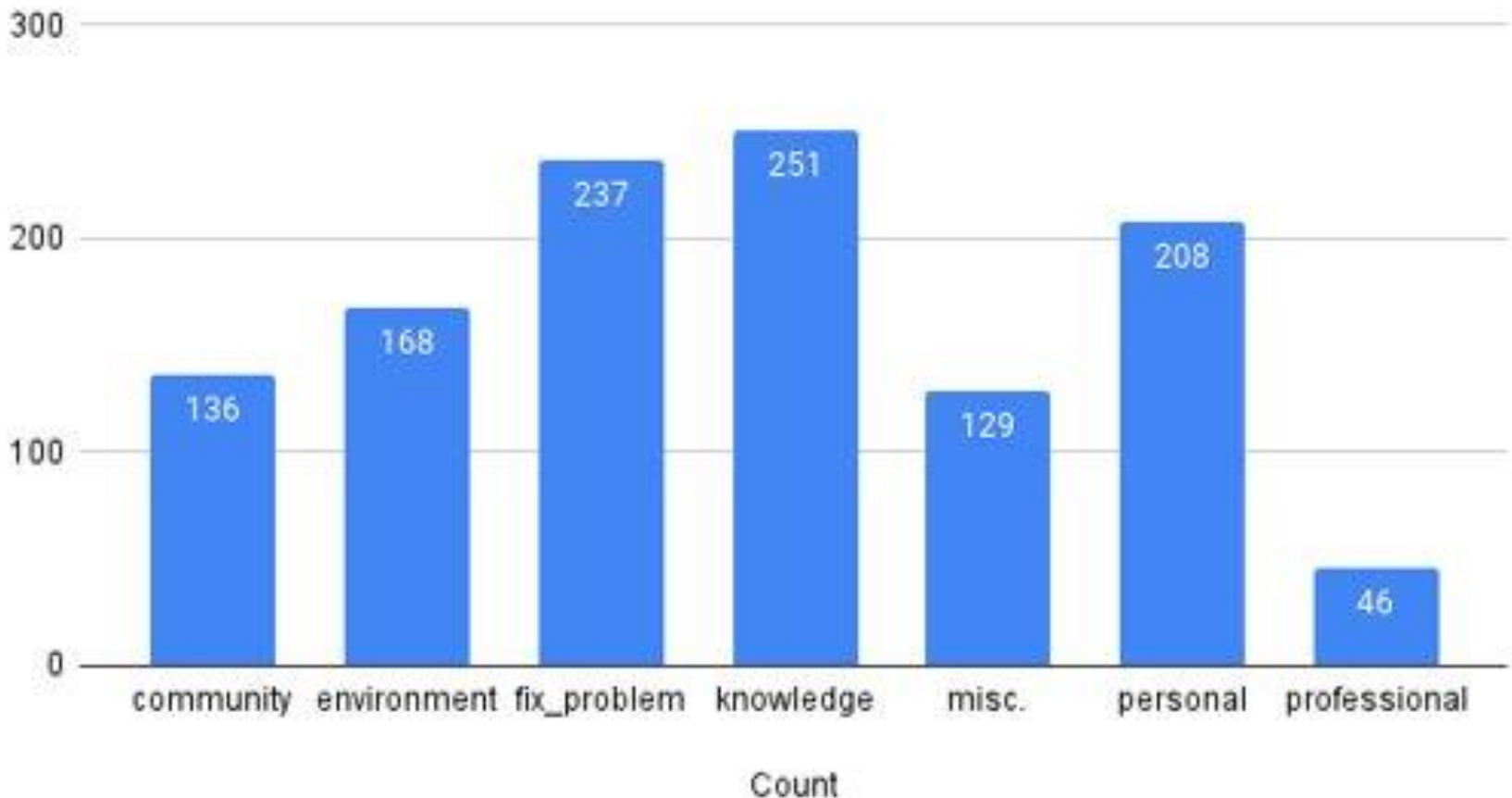
www.washtenaw.org/raingardens





UofM Data Deep dive

Motivations (Motivators of all people who started a rain garden)



Audience Barriers & Benefits: Theirs, not yours

Barriers

1. Knowledge – how to do it
2. Confidence – am I doing it right?
3. Neighbor approval – what will the neighbors think?
4. Time – do I have small children?
5. Money
6. Energy – can I wield a shovel?



Pathway of a rain gardener:



Volunteer leadership

- Advice to new Rgers
- Host tours
- Plant Sales / Swaps
- Volunteer

Facebook Group

Master Rain Gardeners



Master Rain Gardener class



Garden Tours



Consultation Visits



Washtenaw County Rain Garden Programs

- Design Assistance Program
We give advice - you dig
- Master Rain Gardener Class
In-person – April
Live Online – January
Online on demand – **FREE!**



www.MasterRainGardener.org



How did this happen?

A lot of ~~trial and error~~!

"iterative process"

(and Social Marketing


&

Volunteer Management

Best Practices)



Iterative Process

1. Lead by Example
 2. Have patience for . . .
 3. Their interest – the teachable moment!
 4. Support – easy, convenient & fun!
 5. Build Community
- 

Step 1:

Lead by Example

SB



Lori
Sprague

Rain Garden by Lori Sprague & sons. Photo by Susan Bryan



Step 1:

Lead by Example

Char
Tavarozzi
MRG 2013



Rain Garden by Char Tavarozzi. Photo by Susan Bryan



Step 1:

Lead by Example



Rain Garden by Alicia Davis. Photo by Alicia Davis



Step 1:

Lead by Example



Rain Garden by Denise Held. Photo by Susan Bryan



Pay it Forward: Spend your Social Capital



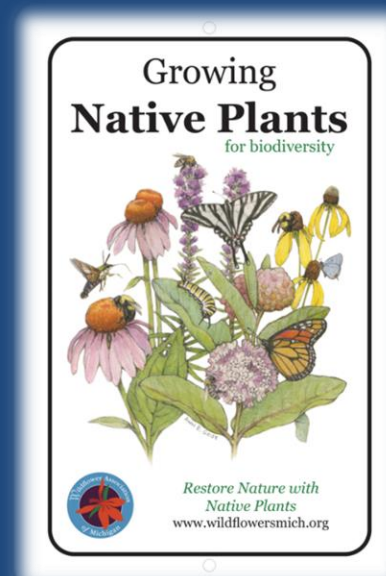
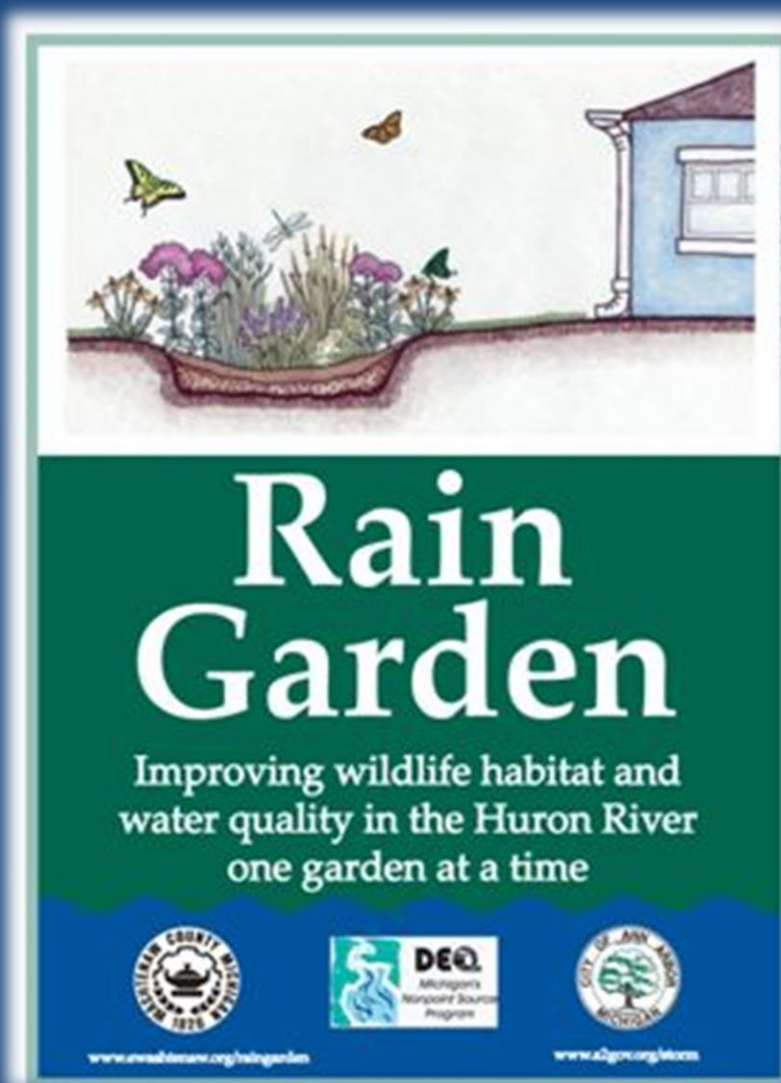
Barb Tiews hosting at her rain garden 2021

What other ways can we be great hostesses?



Step 1:

Lead by Example



Step 1:

Lead by Example



Rain Garden by Graciela Rubalcava. Photo by Susan Bryan

“The #1 influence on what people do with their yards – is what their neighbors do with their yards.”

-American Green: The Obsessive Quest for the Perfect Lawn



Access to Native Plants: Removing Barriers



Lisa Denys volunteering at the WCCD Native Plant Sale & Expo

One of the reasons we love the Expo!



Access to Native Plants:

Removing Barriers




www.SeedsToCommunity.org

Seeds to Community – bringing it to a whole ‘nother level



How did this happen?

1. Lead by Example
 2. Have patience for . . .
 3. Their interest – the teachable moment!
 4. Support – easy, convenient & fun!
 5. Build Community
- 

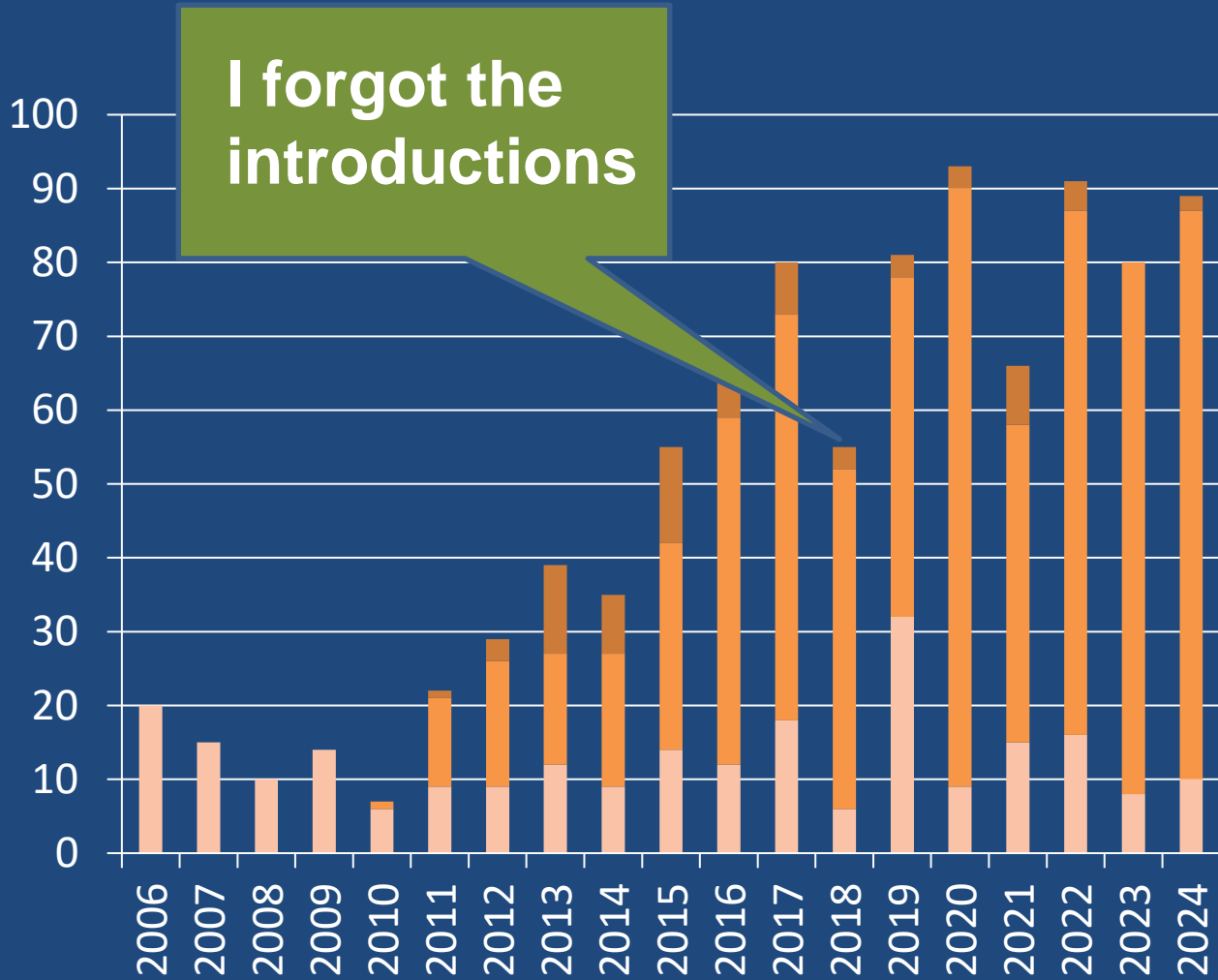
Building Community is key!



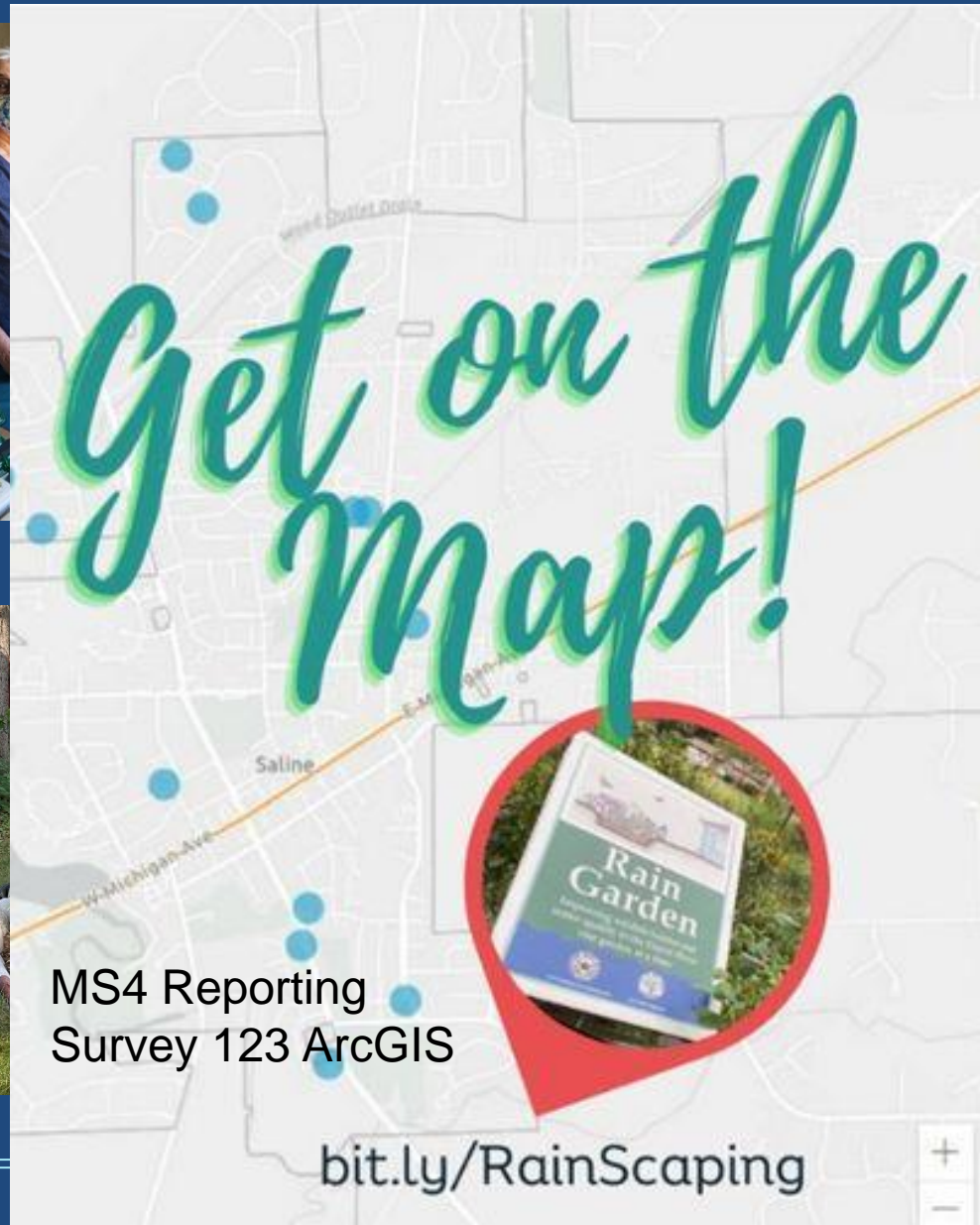
bit.ly/RainScaping



Rain Gardens Built in Washtenaw



Reporting the Pathway of a rain gardener:



MS4 Reporting
Survey 123 ArcGIS

bit.ly/RainScaping



How did this happen? Resources

Behavior Change:

- *Social Marketing to Protect the Environment: What Works*. Doug McKenzie-Mohr. c. 2012
- iSMA International Social Marketing Association
- SPARKS Conference by the Pacific Social Marketing Association
- *Social Marketing*. Nancy R. Lee & Philip Kotler.
- *Atomic Habits*. James Clear.
- *This is Marketing. You Can't be Seen Until you Learn to See*. Seth Godin.

Volunteer Management:



Conclusion:

Thank you!

**Let me know if you have questions
about the Master Rain Gardener class.**

Or suggestions!

Susan Bryan

Washtenaw County Water Resources Commissioner's Office

Ann Arbor, Michigan, USA

Funded by: bryans@washtenaw.org



Photo of Lake Superior by Lisa Moutinho, Washtenaw County

