



Michigan's
Nonpoint Source
Program

Federal Clean Water Act
Section 319 Grant
2014-0010



Washtenaw County Water
Resources Commissioner
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Rain Garden University

October 1, 2014 - December 31, 2017

The Middle Huron drains 217 square miles primarily within Washtenaw County. The downstream impounds: Ford and Belleville Lakes have Total Maximum Daily Loads (TMDLs) for phosphorus enrichment. As of 2010, the watershed was 50% urban, 20% rural, and 26% forest or wetland. The project site is located within the jurisdiction of Ann Arbor, a Phase I NPDES permit holder; and Washtenaw County (Allen Creek Drain), a Phase II permit holder.

The project goal is to change landscape practices within the Huron River watershed so that the implementation of storm water infiltration practices is the norm - by developing a group of volunteer peer educators. Phosphorus load reductions of 4 lbs/yr were expected for a total of 40 rain gardens. Actual rain gardens built totaled 82 gardens for a reduction of 8 lbs/year. (target is 14,035). This project expanded a successful Master Rain Gardener training program to an online format and evaluated elements of an education program to promote long-term knowledge and behavior change in the community. The online class was taped and can be deployed again.

Grant Amount: \$ 109,000
Match Funds: \$ 62,000

Total Amount: \$ 171,000

Best Management Practices:

- 82 Residential Rain gardens

Annual Load Reductions:

- 8 pounds per year



Information & Education Activities:

- Offered 3 online Master Rain Gardener training classes to residents - 305 people took the class.
- A Facebook Group offered the means for alumni to mentor new rain gardeners.
- Online class is available now on YouTube
- Gathered feedback & social monitoring.
- Hosted 3 visits to rain gardens.
- Hosted 3 field trips to plant nurseries.
- Hosted 3 plant swaps.
- Partner organizations "hosted" a viewing of the class, and a field trip.

Partners involved:

- City of Ann Arbor
- Huron River Watershed Council
- MSU Master Gardener Alumni
- Genesee County Conservation District
- Trout Unlimited
- Hidden Lake Gardens

Huron River Watershed





Resident Pat Martz front yard Before: This yard in Ann Arbor sent the roof runoff directly onto the driveway, past the parked car and any dripped oil there, and into the street where it entered the piped stormwater system which empties into the Huron River.



Pat Martz front yard After: By taking the Master Rain Gardener class, resident Pat Martz designed a 160 square foot rain garden to capture the roof runoff from two downspouts, capturing water from 800 square feet of roof. The rain garden included Nodding Wild Onion, Liatris, Blue Flag Iris, Wild Geranium, Foam Flower, Culver's Root, Wild Ginger and an Alternate-Leaved Dogwood.

Pat also presented the design and implementation during the third online class, teaching and mentoring new students.



Roger Moon front yard Before: This yard in Ann Arbor sent the roof runoff onto a lawn, which then dumped the runoff to the next-door neighbor's driveway. The water then ran down the driveway into a cul-de-sac whose drainage empties into the piped stormwater system and into the Huron River.



Roger Moon front yard After: By taking the Master Rain Gardener class, resident Roger Moon designed and built a 46 square foot rain garden (his fourth on the property) to capture the runoff from a 165 square foot roof.

He photo documented the process and presented it during the second online Master Rain Gardener class. His experience de-mystified and taught other students how. He also shared cost and implementation time, so students could budget their own projects.

He hosted the class in person at his yard, showing his 5 rain gardens and answering questions. This was a key community-building activity for the class.