

Federal Clean Water Act Section 319 Grant 2014-0030



Huron River Watershed Council

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Green Infrastructure in Swift Run

October 1, 2014 through August 31, 2018

Swift Run is an urbanized tributary to the Huron River that is impaired by flow alteration, sedimentation, high bacteria, and high phosphorus levels. The goal of the project was to broadly install Green Infrastructure practices throughout a 3-block residential neighborhood with no previous stormwater treatment, to improve flow dynamics, reduce streambank erosion, and reduce phosphorus runoff. The project was significantly altered due to several barriers and constraints, and implementation was broadened to the full Swift Run watershed. In the end, thanks to the work of project partners, three large-scale practices and numerous small-scale practices were implemented that will result in significant progress toward the watershed remediation goals.

Grant Amount: \$623,100 Match Funds: \$196,700

Total Amount: \$819,800

Best Management Practices:

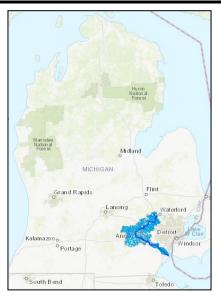
- 9 large bioretention cells infiltrating7,500 cf of runoff
- •4,900 sf of porous paving with 2,400 cf of runoff storage for infiltration

Annual Load Reductions:

- •2½ lbs of phosphorus
- · 10 lbs of nitrogen
- · 1/2 ton of sediment

I&E Activities:

- Social survey of 114 neighborhood residents (52% of population)
- Personal communication with 114 residents. 66% wanted rain gardens.
- 10 residential rain gardens capturing
 610 cf of runoff
- 7 right-of-way rain gardens capturing807 cf of runoff
- · Project brochures, presentations, signs
- · Volunteer monitoring and planting





Partners involved:

- Washtenaw County Water
 Resources Commissioner's office
- · City of Ann Arbor
- Washtenaw County
- · Ann Arbor Public Schools
- Forestbrooke Athletic Club
- · 20+ volunteers
- · Many neighborhood residents





Forestbrooke Before: no stormwater treatment, aging infrastructure, road runoff onto property, direct connection to Swift Run behind pool.



Mitchell School Before: Large parking and roof areas generating runoff. Poorly utilized green spaces.



Mitchell School After: Large bioinfiltration cell to capture parking/roof runoff. Porous sidewalk gravel bed storage and drain to capture parking runoff.



Forestbrooke After: Parking replaced with porous pavers and underground stone basin. 4 bioinfiltration cells receive street and roof runoff.



Hogback Before: Large parking and roof areas generating runoff to street. Poorly utilized green spaces.



Hogback After: 3-cell bioinfiltration to capture parking/roof runoff.