



**Experiential Learning
with Green Infrastructure
*in the Lower Grand River Watershed***

October 6, 2016

Great Lakes Restoration Initiative

- GVMC awarded \$340,065 from EPA
 - Protect the Lower Grand River Watershed from the impacts of stormwater runoff
 - Combine education with opportunities for residents to participate in projects in their watersheds
 - Awareness, Education, Action

Great Lakes
RESTORATION



"We're committed to creating a new standard of care that will leave the Great Lakes better for the next generation."

Michigan's Water Strategy

Protect and Restore Aquatic Ecosystems

- ❖ Holistic approaches to managing water across the landscape including groundwater.
- ❖ Support planning and decision-making at the watershed scale.



Key Recommendations:

- Prevent and manage invasive species.
- Reduce nuisance and harmful algae.
- Promote green infrastructure, low impact development, green spaces to address stormwater.



Michigan's Water Strategy

Inspire Stewardship for Clean Water

- ❖ Grow a water ethic through improved water literacy, volunteerism and civic engagement.

Key Recommendations:

- Integrate water literacy into state of Michigan curriculum standards.
- Build volunteer opportunities and partnerships.



Michigan's Water Strategy

Monitor Water Systems

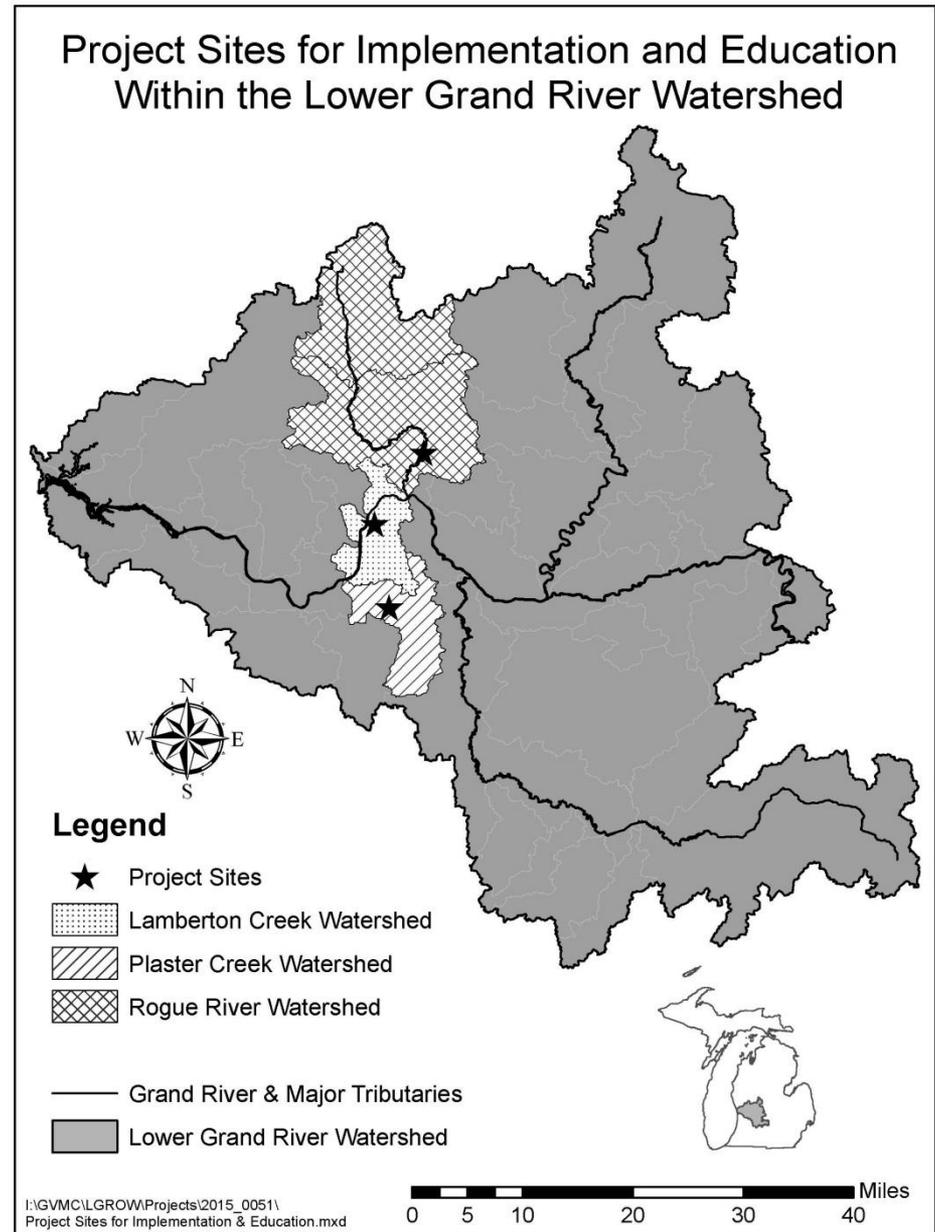
- ❖ Monitor water systems including surface and groundwater to provide information to base decisions and best direct actions and future investments.

Key Recommendations:

- Implement a water resource decision framework.
- Support groundwater and surface water monitoring.



Fostering
upstream–
downstream
partnerships by
engaging
communities,
local schools,
neighborhood
associations,
and businesses
in watershed
restoration



Projects

- Lamberton Creek Bioswale
 - City of Grand Rapids, North Park Montessori
- Rogue River Rain Gardens
 - Trout Unlimited, Rockford, Eastern Rockford Middle
- Plaster Creek Floodplain Restoration
 - Plaster Creek Stewards, Indian Trails Golf Course, Grand Rapids Christian



Deliverables

- Quality Assurance Project Plan
- BMP Designs and Permits
- Water Quality data - before and after
- Classroom and Site Visits
- Student Questionnaires - before and after
- Training Sessions
- Maintenance Plans

Questions?



SAW Grant

- Submitted December 2, 2013
- Approved September 23, 2016
- Grant Award November 2016
 - Start: January 2013, End: November 2019
- Approved Project Costs:
 - MS4 Stormwater Management Plans: \$637,926
 - Local Match: \$63,793
 - SAW Grant Amount: \$574,133