

Illinois Groundwork Website

illinoisgroundwork.org/

Calumet Stormwater Collaborative (CSC)

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Background

- Calumet Stormwater Collaborative
- Hydrogeologic Soil Research for Green Stormwater Infrastructure Planning and Design Replicable Research from the Chicago-Calumet Region (Illinois-Indiana Sea Grant Program (NOAA) 2018-2019)
- Calumet Soils Green Infrastructure



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Background

- Red Oak Rain Garden Renovation
2019
- Rainscaping Education Program
2020

**University of Illinois
Extension Collaboration Grant
*2021-2022***



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Theory of Change

The purpose of Illinois Groundwork is to... provide green infrastructure research, tools, and resources to stormwater professionals, local leaders, and community members

So that they understand... GSI design & research /tools/resources

And will be able to... integrate research/tools/resources into GSI design projects

Resulting ultimately in... reduced flooding and improved water quality



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GSI DESIGN

Start here to explore green stormwater infrastructure (GSI) design

LEARN MORE →

Illinois GROUNDWORK provides green infrastructure research, tools, and resources to stormwater professionals, local leaders, and community members.



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GSI Design

GSI DESIGN

DESIGN PROCESS

What is GSI?

What is GSI Design?

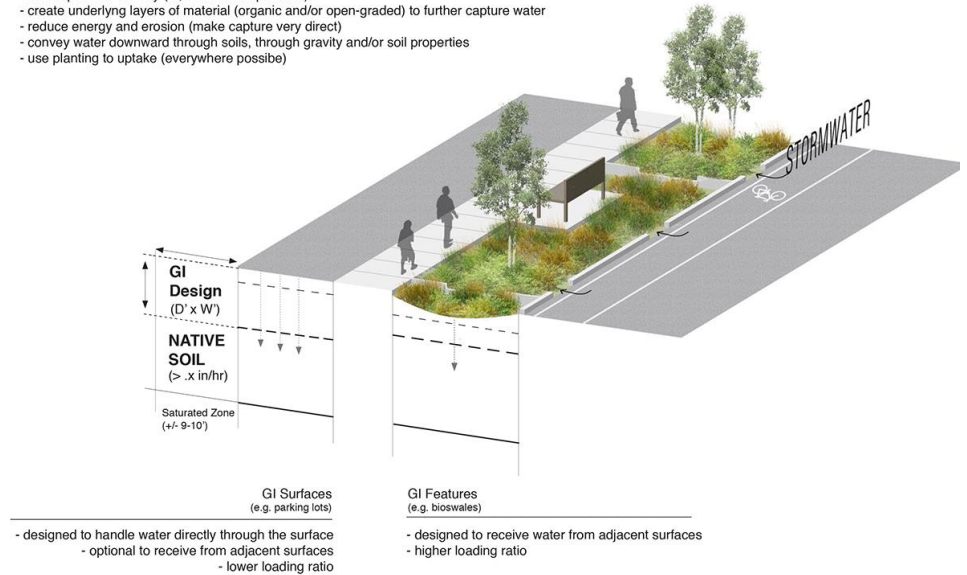
Why are Soils Important in GSI Design?

Who Might be Involved in GSI design?

Green Stormwater Infrastructure Design, based on underlying soils

key principles:

- intercept water directly (or, as close as possible)
- create underlying layers of material (organic and/or open-graded) to further capture water
- reduce energy and erosion (make capture very direct)
- convey water downward through soils, through gravity and/or soil properties
- use planting to uptake (everywhere possible)



Illinois-Indiana Sea Grant Program (NOAA) 2018-2019 #NA18OAR4170082
Hydrogeologic soil research for green stormwater infrastructure planning and design: new methods for adapting urban coastal communities
(Drawn by M.P. McGuire)



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Design Process

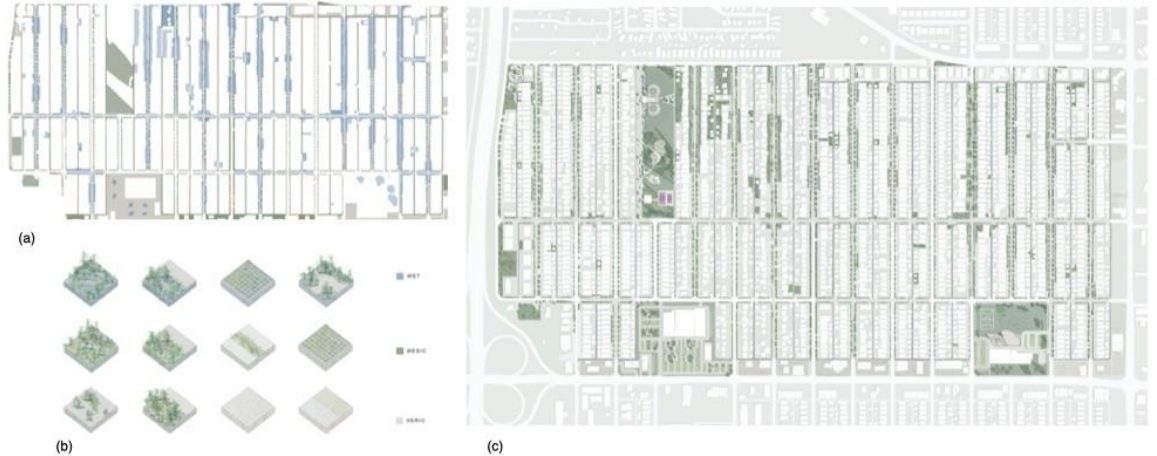


Figure 9: Calumet City, IL, (a) studies of wetness and flooding variations throughout neighborhood; (b) variety of GSI strategies corresponding to alternative pavement needs and planting opportunities; and (c) network of GSI interventions in rights-of-way, streets, and school grounds, playgrounds, and shopping area.



Next Steps

- Continuously incorporating feedback
- Adding sections (e.g., Maintenance)
- Promotion
- Program and projects



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