GREAT LAKES STORMWATER COLLABORATIVE
Closing The Gap In Technology Transfer
DECEMBER, 4, 2018
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GREAT LAKES REGION
BACKGROUND

• Current infrastructure
• Additional stressors
  • Rising populations
  • Increases in impervious surfaces from urban development
  • Human-caused changes to river systems
  • More frequent severe storm events
PROJECTED PRECIPITATION CHANGES IN GREAT LAKES REGION

Frequency of Heavy Precipitation Events in the Great Lakes Region

(a) 24-Hour Events

(b) 7-Day Events
IMPACTS OF INCREASED RUNOFF IN THE GREAT LAKES REGION

- Increased flooding
- Sewer overflows
- Nutrient runoff → harmful algae blooms
- Managing SW more challenging
- $5 billion investment needed in SW infrastructure
- Avg. annual damages from flooding risk in the midwest: >$500 million by 2050.
INNOVATIONS IN STORMWATER MANAGEMENT

• There is more evidence that they are needed and effective

• However, they are:
  • Slow to proliferate
  • Historically limited to pilot projects
  • Limited by gap in technology transfer
Great Lakes Stormwater Collaborative: History

- Great lakes stormwater technology transfer project
  - 2-year effort between 2016 and 2018
  - Partnership between the great lakes commission and Lawrence technological university
  - Funded by the Erb family foundation
  - Started in June 2016
GREAT LAKES STORMWATER COLLABORATIVE: HISTORY

- Project goal: understand the barriers of the adoption of innovative SW management technologies and designs
- Completed a needs assessment (Oct. ‘16 – May ’17)
GREAT LAKES STORMWATER COLLABORATIVE: HISTORY

1. Interviews
   • > 40 interview with a wide range of SW professionals:
     • Supply (9), demand (23), consultants (11)

2. Focus groups
   • Mississauga, ON
   • Cleveland, OH
   • Appleton, WI
GREAT LAKES STORMWATER COLLABORATIVE: HISTORY

• Major barriers preventing better SW management:
  • Difficulty matching technology to needs
  • Confidence in performance of new technologies
  • Uncertainty over cost and cost/benefit ratio
  • General risk aversion
  • Missing drivers: regulations, leadership, and coordination
GREAT LAKES STORMWATER COLLABORATIVE: HISTORY

• Collaborative kickoff workshop – Nov. 2017
  • Leadership team was formed
  • GLSC charter was developed
GLSC CHARTER

• VISION, MISSION, OBJECTIVES

• STRUCTURE
  • Co-chairs: representative of both sides of the industry - supply and demand
  • Leadership team: 5-9 members, supports the co-chairs
  • General membership: broad industry support, wide range of stormwater professionals
COLLABORATIVE VISION

To protect the great lakes and its watershed by advancing SW technology & practices and addressing barriers between supply & demand
GLSC MISSION

• GLSC is a multi-sector binational coalition of SW management stakeholders that works to regionally address the impacts of the quantity and quality of SW, enhance ecosystem services, reduce non-point source pollution, and promote social and economic benefits of SW technology and practices. It provides a forum for networking, partnership building, and the exchange of information to advance the development, transfer, and deployment of innovative SW management technology and practices in the binational great lakes-st. Lawrence river region.
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GLSC OBJECTIVES

A. Help match available verified innovative SW technologies & practices to the needs

B. Build confidence in the performance of innovative SW technology & practices through education, advocacy, robust metrics, & performance standards

C. Evaluate & promote the life-cycle costs & associated benefits (TBL & co-benefits) of innovative SW technology & practices

D. Advance & promote post development/installed ownership, inspection, maintenance, & performance assessment of innovative SW technology & practices
GLSC OPERATING PRINCIPLES

- Broad, balanced membership across multiple sectors of SW management
- Wide range of perspectives is enabled through a collaborative process
- Decisions are made by consensus
- GLSC decisions, products or services do not necessarily reflect the opinions or positions of the agencies, organizations, or companies employing participants
- Actions of the GLSC shall not prevent or preclude a GLSC member from taking differing positions
BRIDGING THE GAP

• Providing fact-bound, easy to understand information about SW management
• Helping build the economic, environmental and innovation case for positive development effects of SW management
• Offering technical guidance, actual track record and data you can tailor to your local conditions
BRIDGING THE GAP

• Connecting with communities with the most similar conditions to give you the best illustrations, guidance and data on techniques, costs and benefits of alternative approaches

• Making informed, reliable decisions and navigate potential risks before they become a challenge to your goals

• Collecting, sharing and using cold weather data

• Get help addressing long term planning and life cycle costs
GLSC WORK IN PROGRESS

• MEMBERSHIP

• COMMUNICATION & WEBSITE: WWW.GL.C.ORG/WORK/GLSC

• PARTNERSHIPS: WEF, STEPP

• FUNDING

• COMMITTEES
COMMITTEES

• Executive Committee
• Communications Committee
• Funding Committee
• Spotlight Project Committee
GETTING INVOLVED

• GENERAL MEMBERSHIP
  • Open to groups & individuals that agree to fulfil GLSC mission & operating principles
  • Participate in periodic GLSC events
  • Contribute to executing the annual workplan

• COMMITTEE MEMBERSHIP

• EXCHANGE IDEAS
Thank You