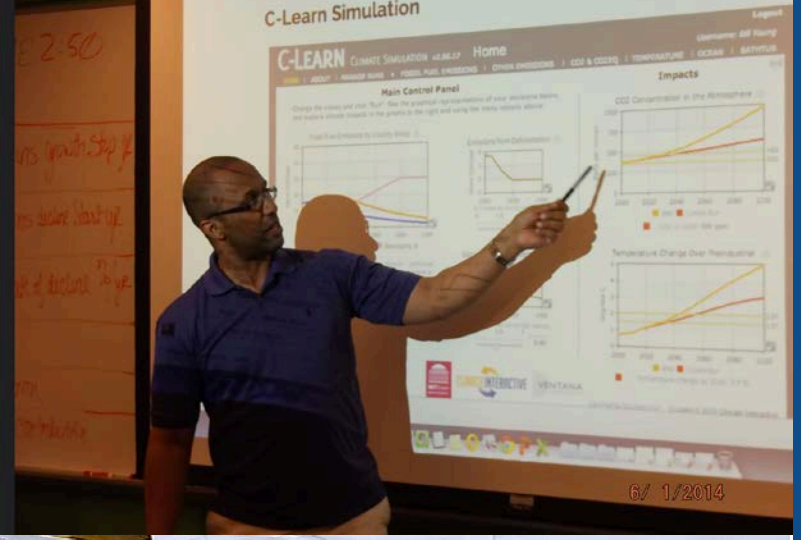
CLIMATE INTERACTIVE
Tools for a thriving future

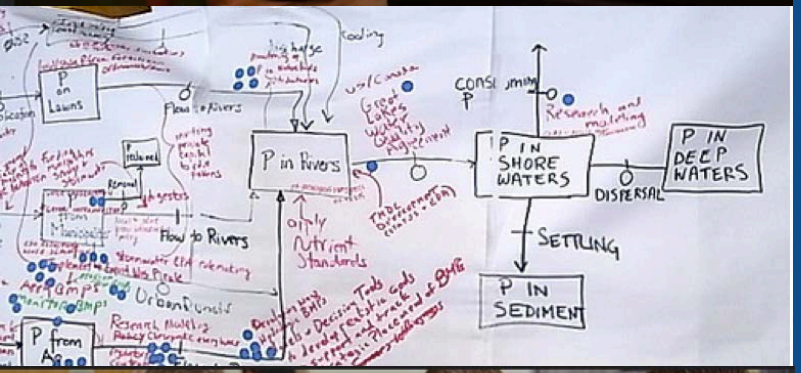
The Green Infrastructure Decision Support Tool

22 July 2014

Dr. Elizabeth Sawin

EPA Green Infrastructure Webcast Series





CLIMATE INTERACTIVE

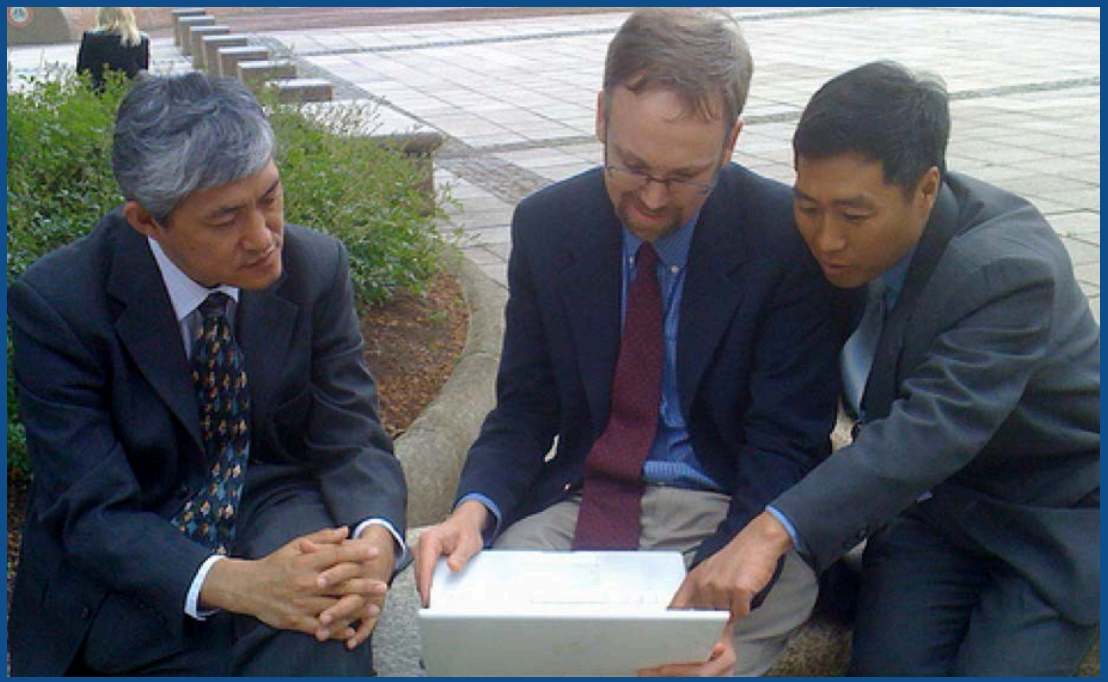
Helping people see what works to address our biggest climate challenges:

- clean energy
- food and water
- resilience

www.ClimateInteractive.org

Seeing what works --

Fast, interactive computer simulation to support learning and cooperation.



Why a Green Infrastructure simulation?

People need ways to see what they might accomplish together.

Why a Green Infrastructure simulation?

People need ways to ask ‘what if’ questions about the future before they invest time and money.

Why a Green Infrastructure simulation?

All impacted groups need to have a voice in infrastructure decisions

Why a Green Infrastructure simulation?

People need ways to prioritize which approaches will deliver the most benefit for investment of time and money.

Pilot project in Milwaukee, Wisconsin

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Pontifex CONSULTING

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

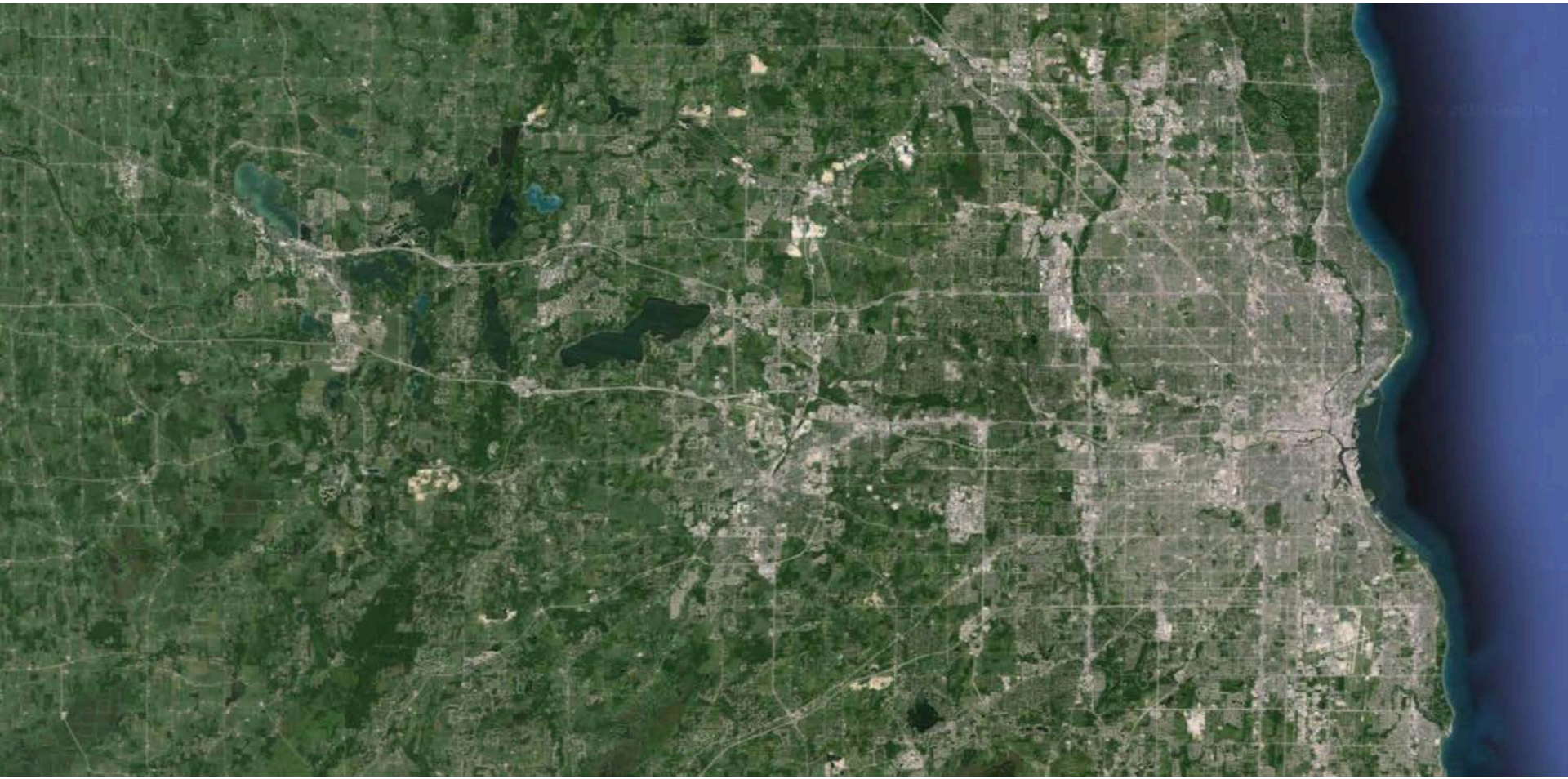
Sixteenth Street
COMMUNITY HEALTH CENTERS

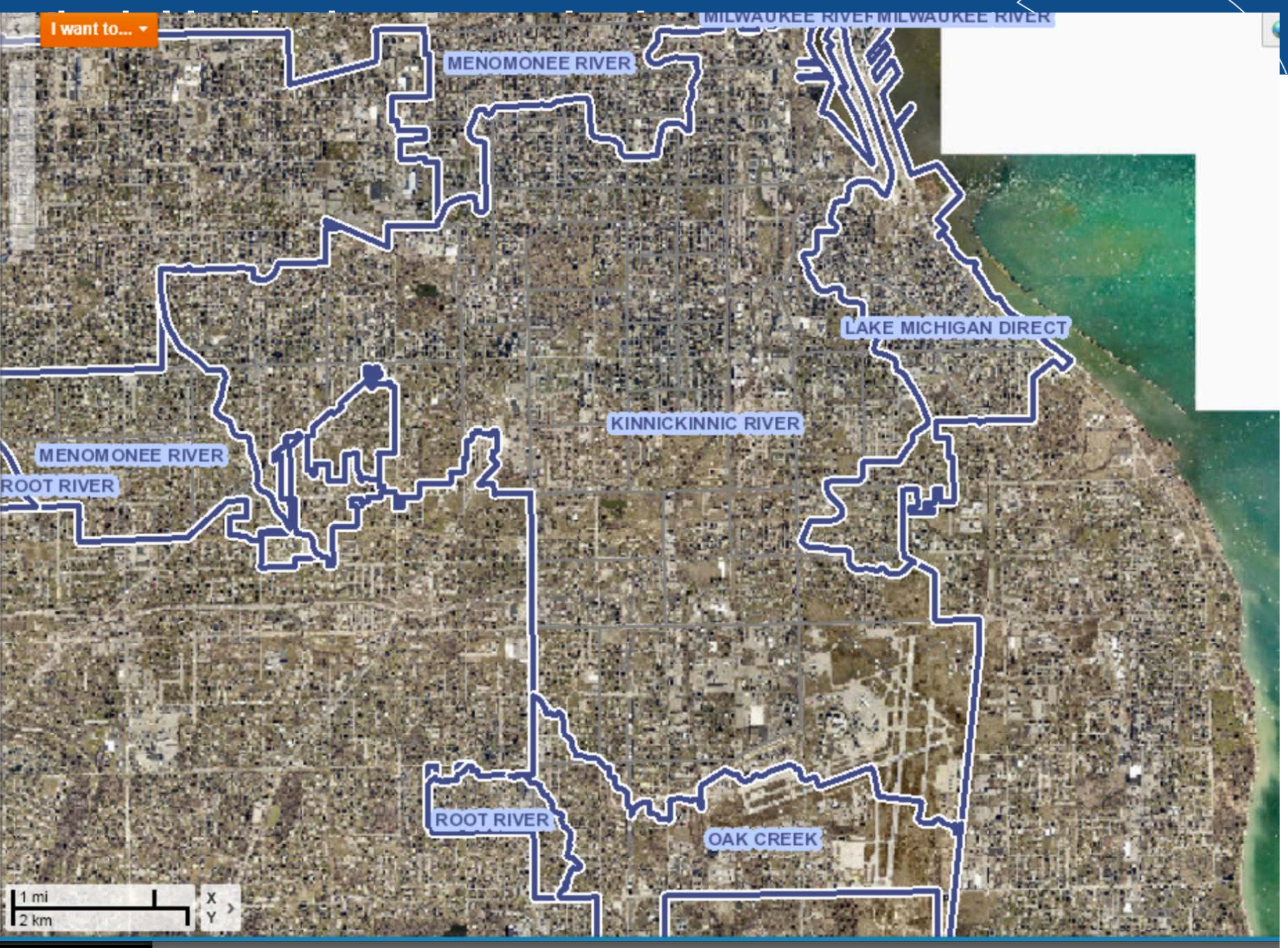
SURDNA ANDRUS

Fund for Lake Michigan

Roy A Hunt Foundation

Kinnickinnic River Watershed





Source: Map Milwaukee Portal

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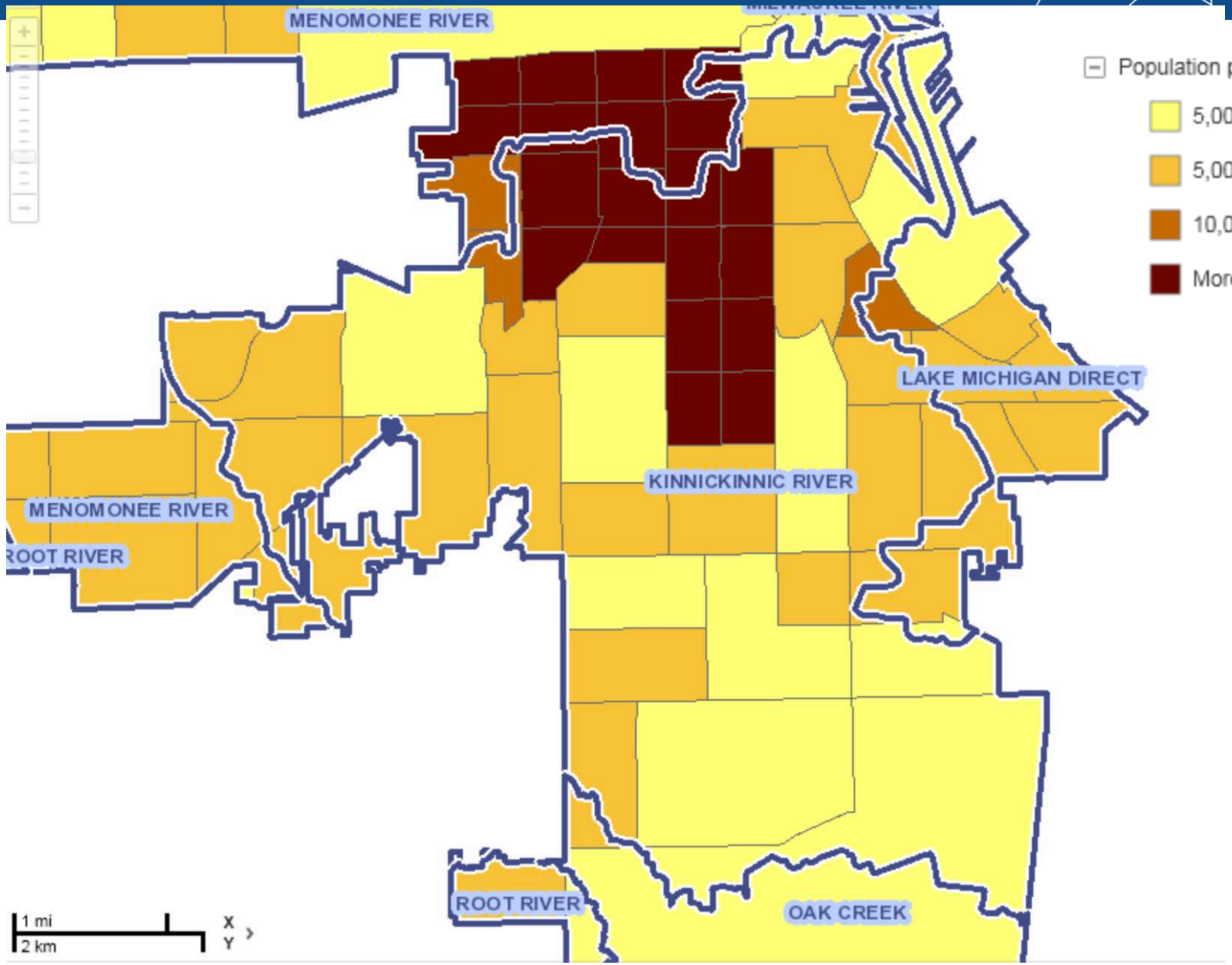

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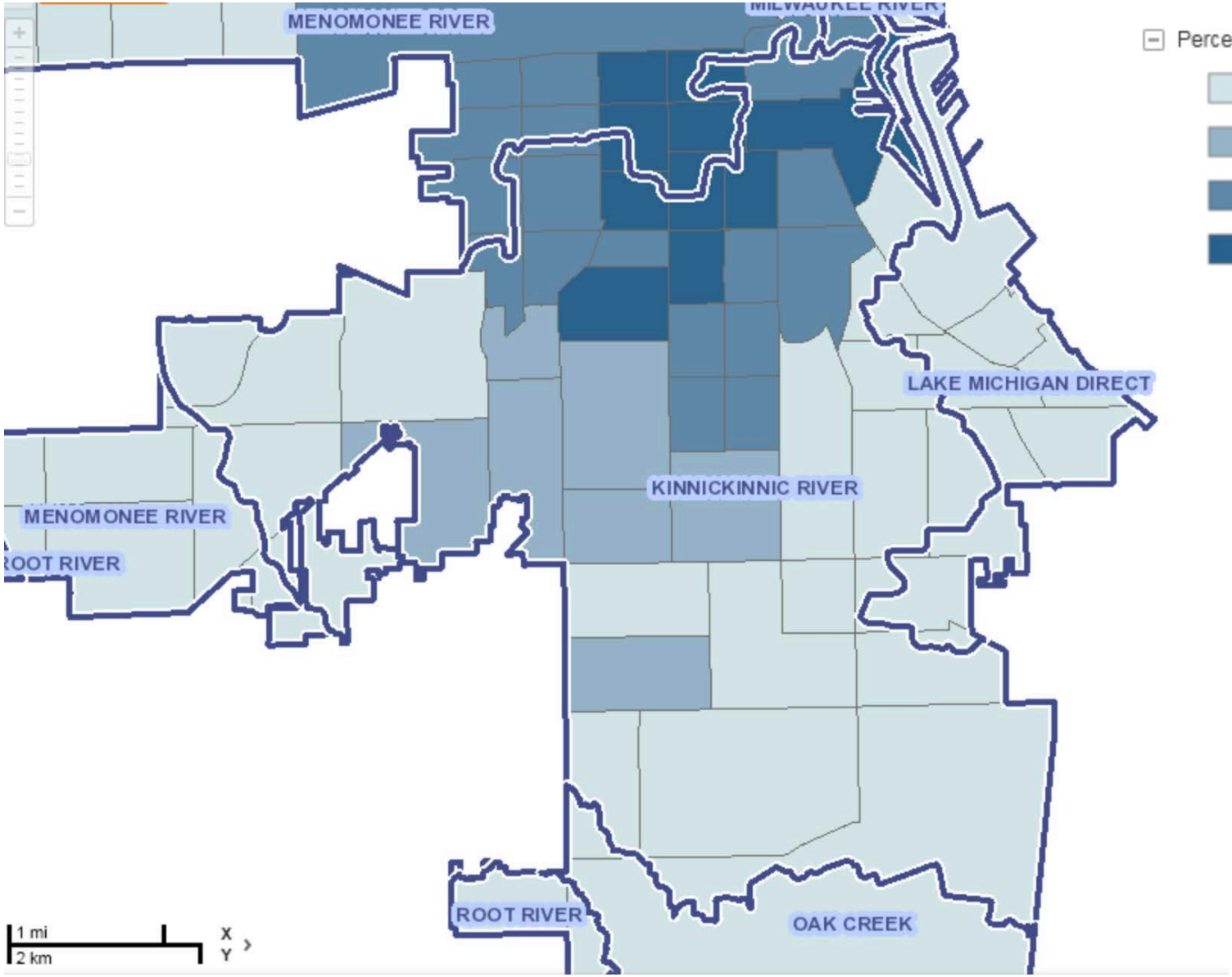
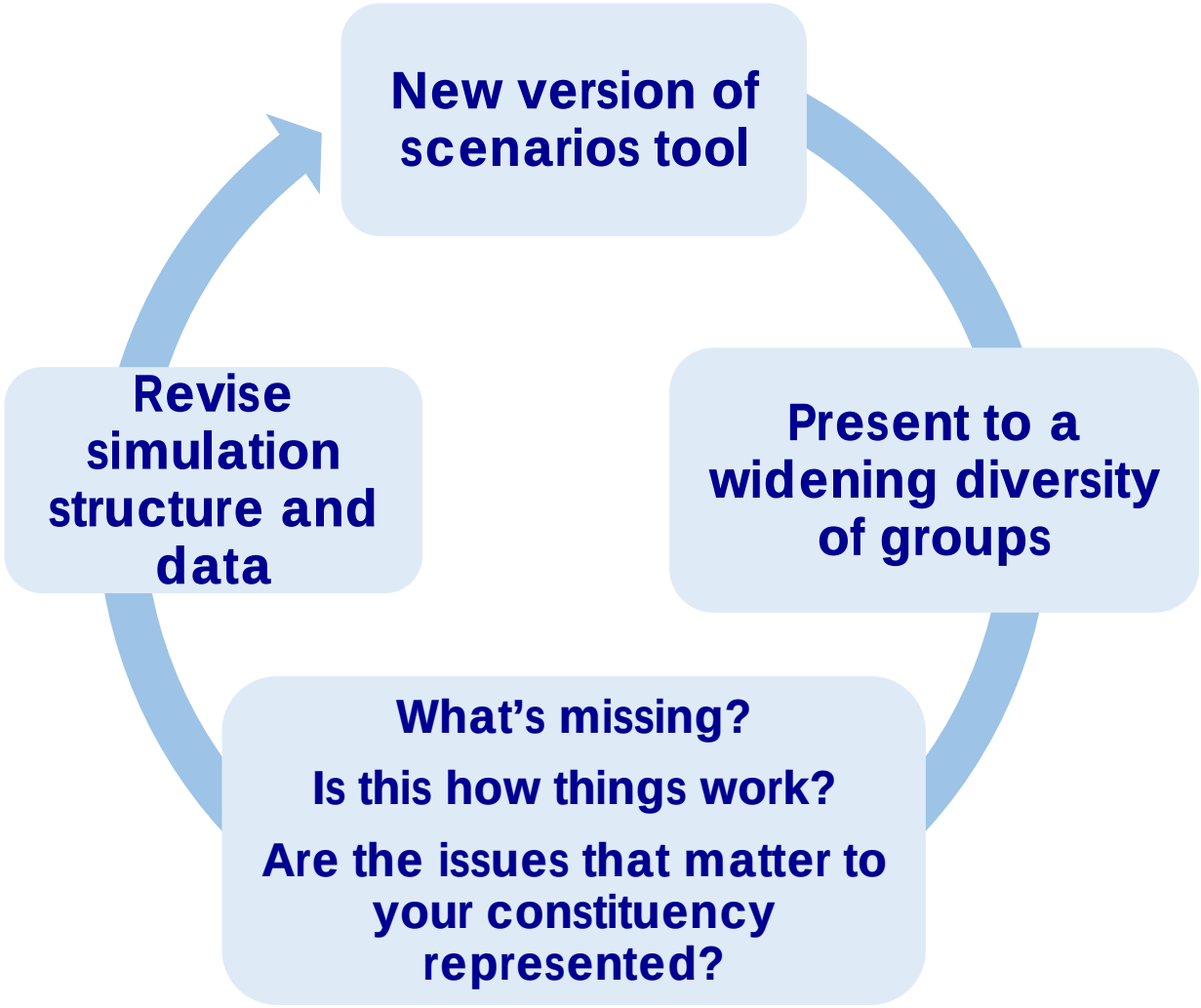


Source: Map Milwaukee Portal

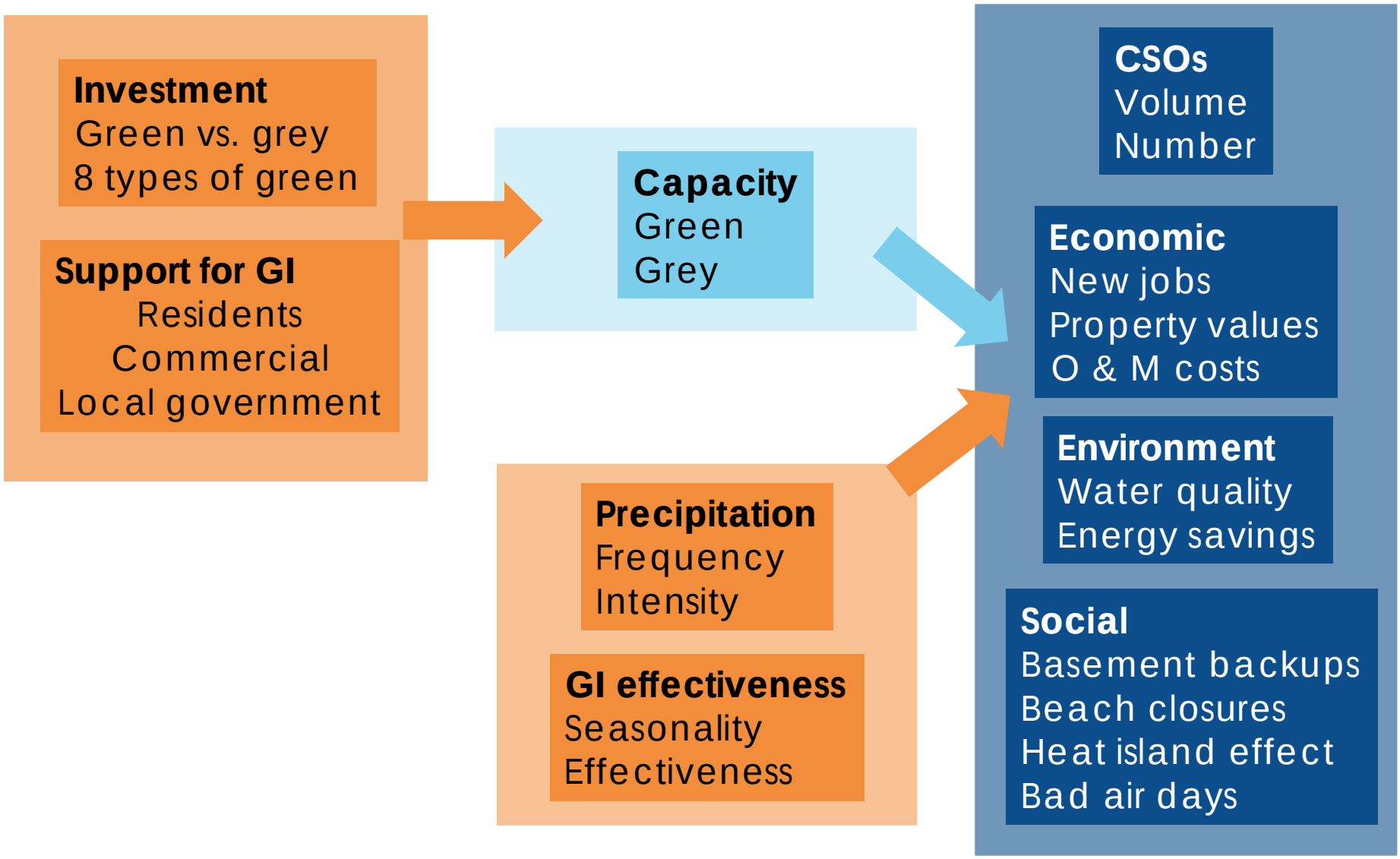
Iterative Approach



Input so far from

- Milwaukee Metropolitan Sewerage District
- City of Milwaukee Dept. of Public Works
- City of Milwaukee Office of Environmental Sustainability
- Milwaukee Riverkeeper
- Wisconsin Voices
- 16th Street Community Health Center
- Gateway Milwaukee
- Citizen Action
- Brico Foundation
- Fund for Lake Michigan
- Joyce Foundation
- University of Wisconsin Madison
- Sweetwater
- University of Wisconsin Milwaukee
- American Rivers

Simulation structure



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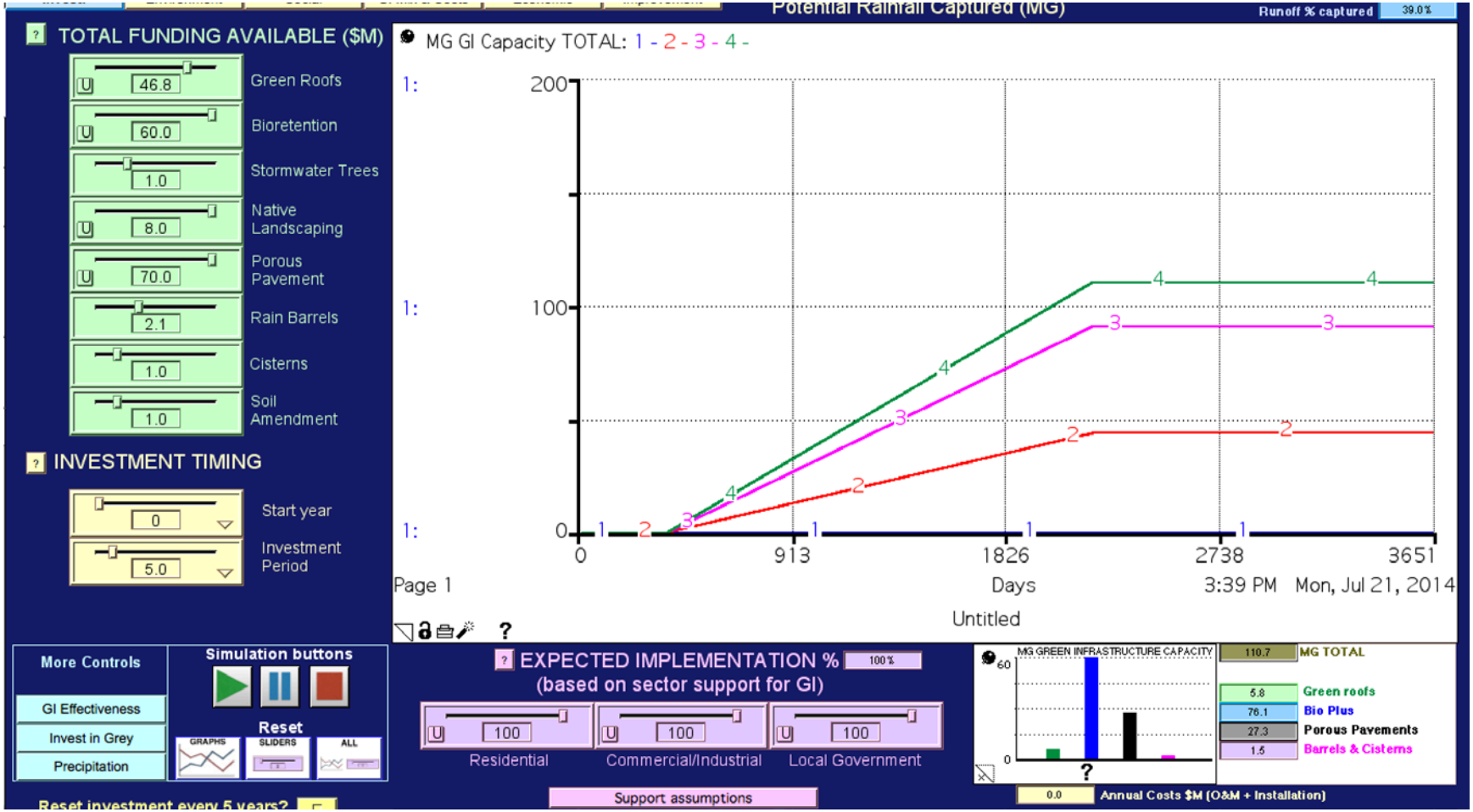
Demo

Differing Green Investment



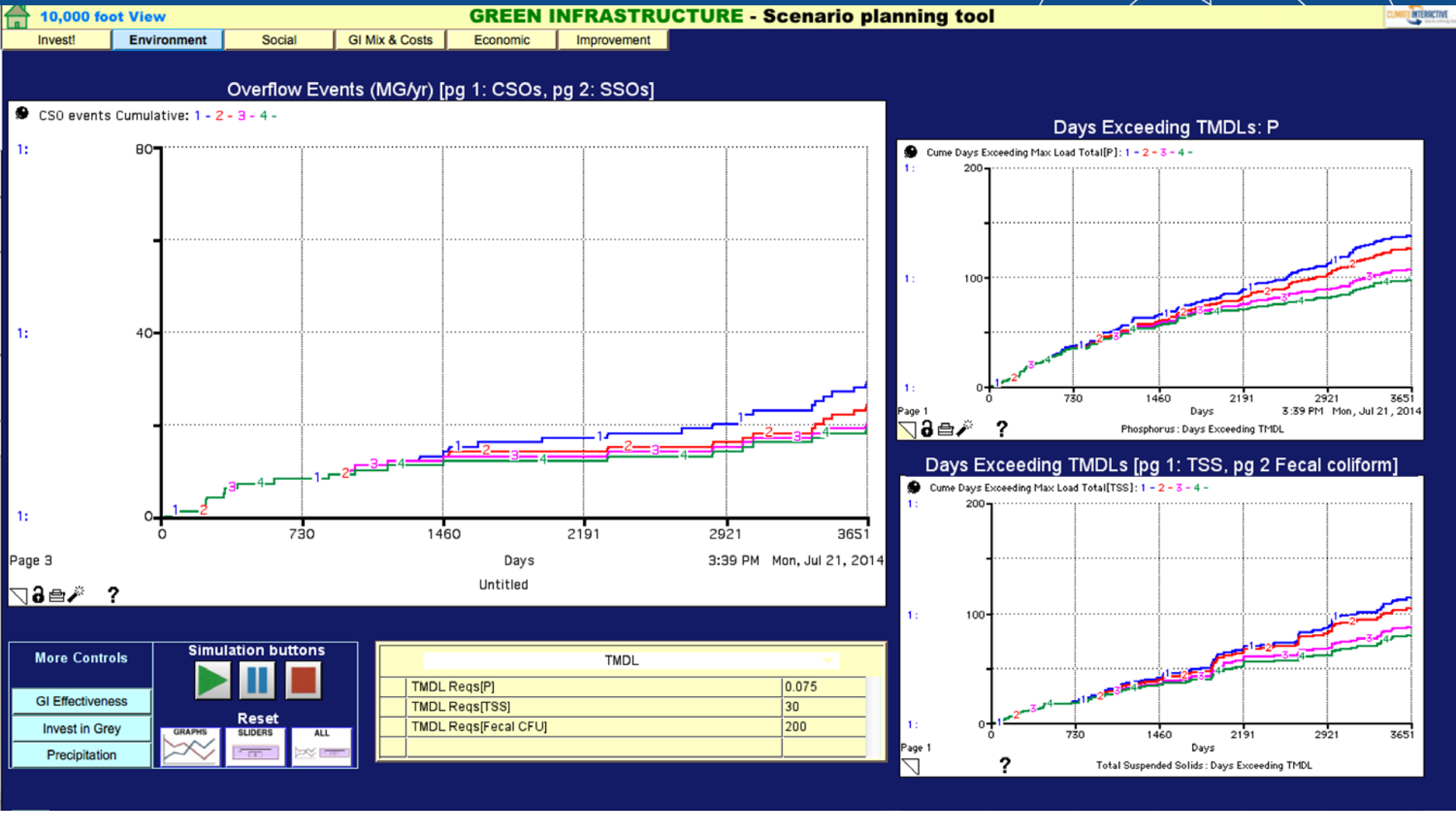
1 – no investment

2- Partial Green

3 – Full Green

4- Full Green – with more bioretention and porous pavement

Environment Outputs



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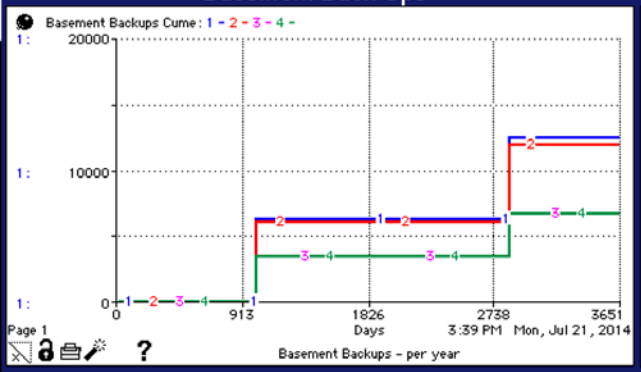
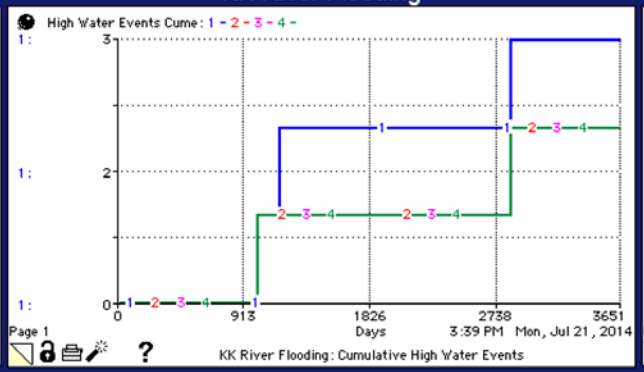
Social Outputs

Invest! | Environment | **Social** | GI Mix & Costs | Economic | Improvement

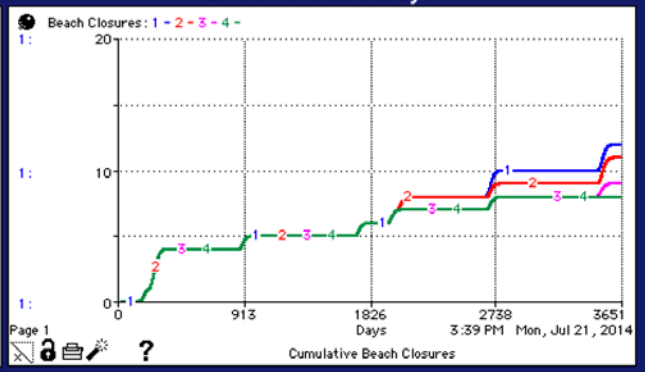
Basement Back Ups



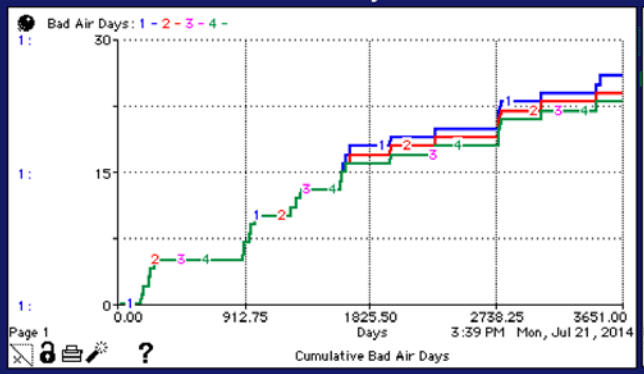
KK River Flooding



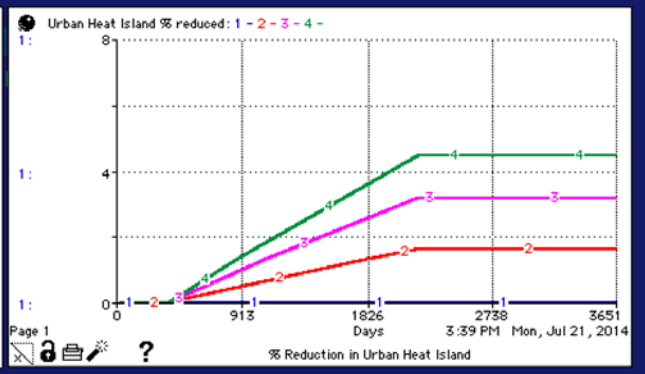
Beach Closure Days

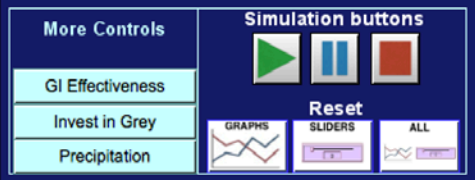


Bad Air Days



Heat Island Effect





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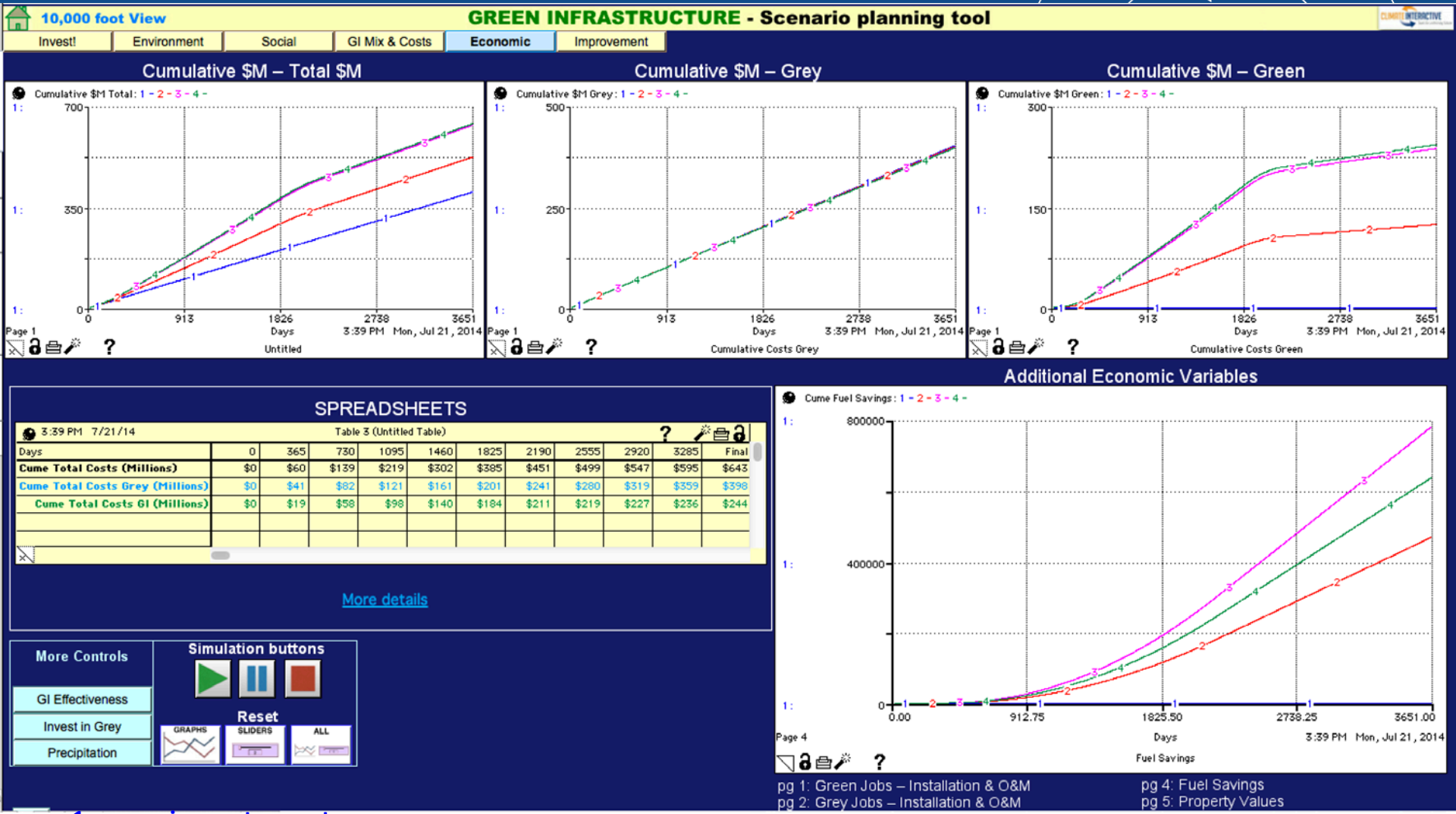
Economic Outputs



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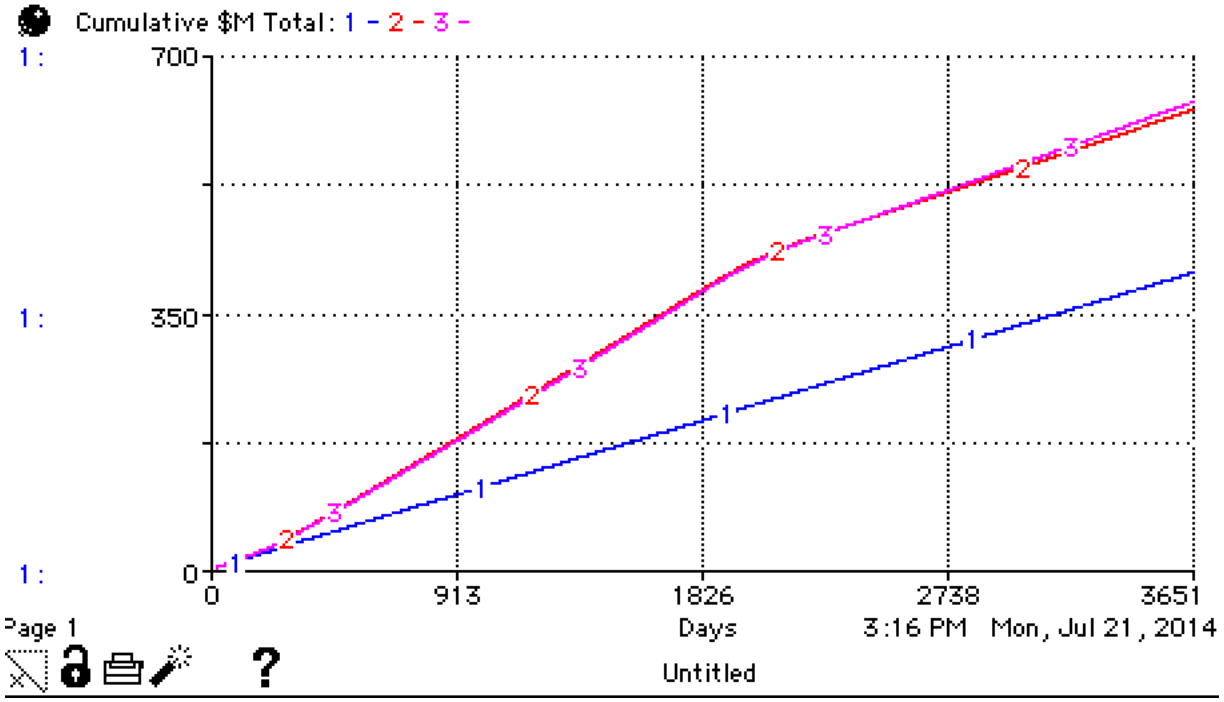
Grey, Green or No Investment

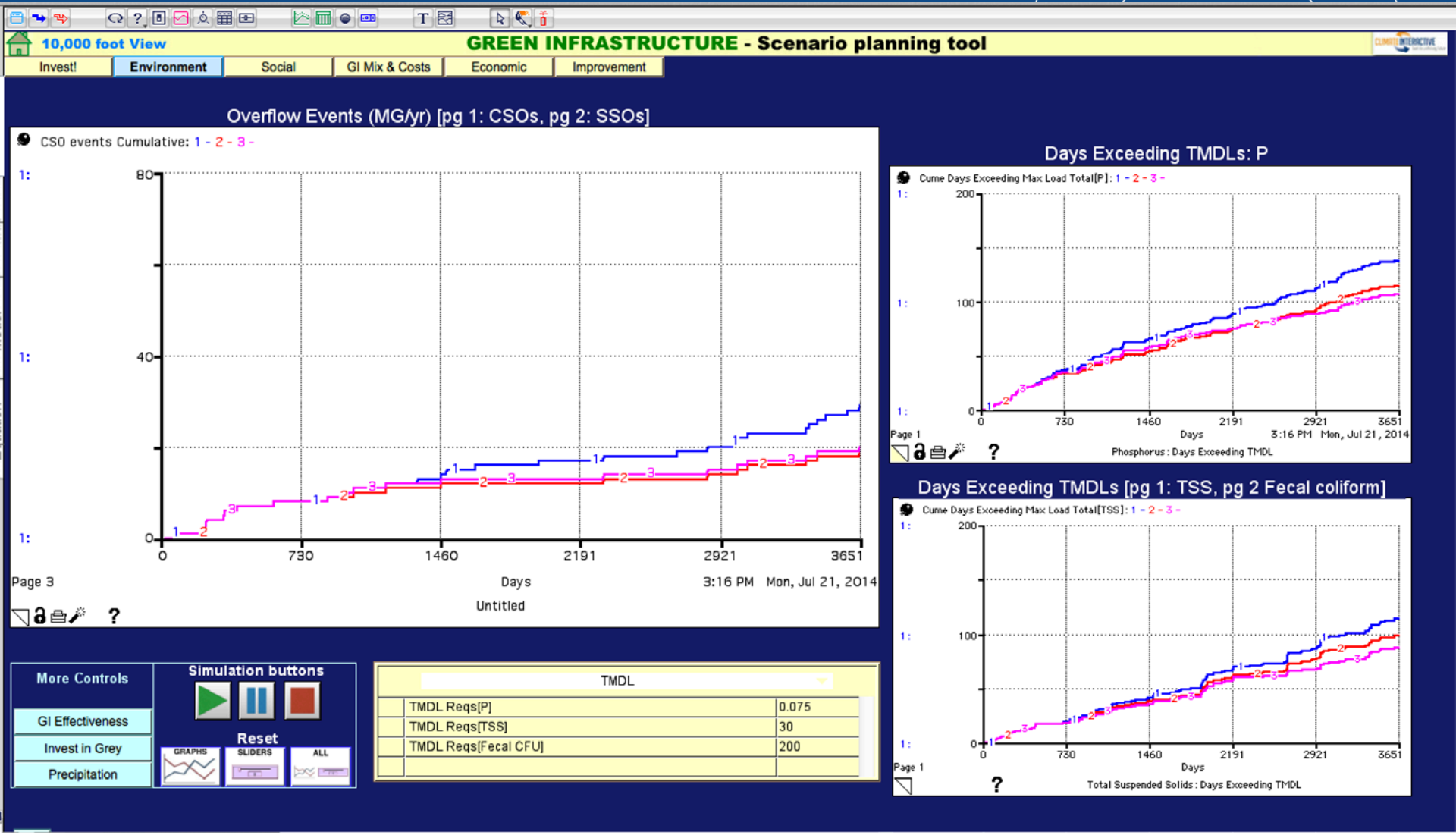
1 – no investment

2- Grey

3 - Green



Environment Outputs



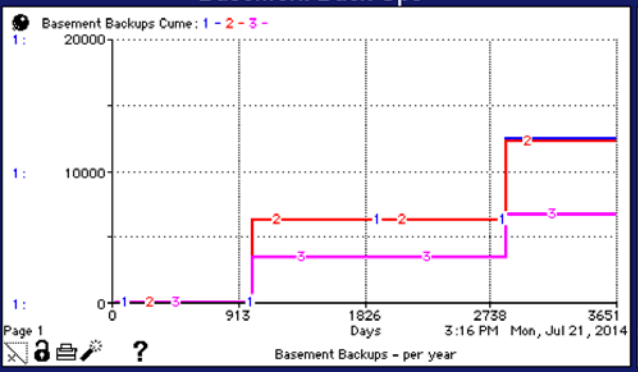
1 – no investment

2- Grey

3 - Green

Social Outputs

Basement Back Ups



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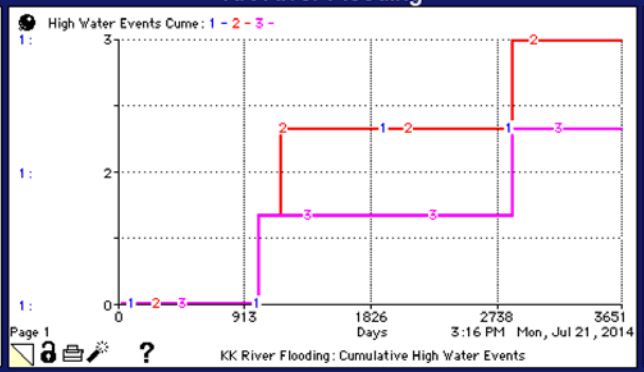
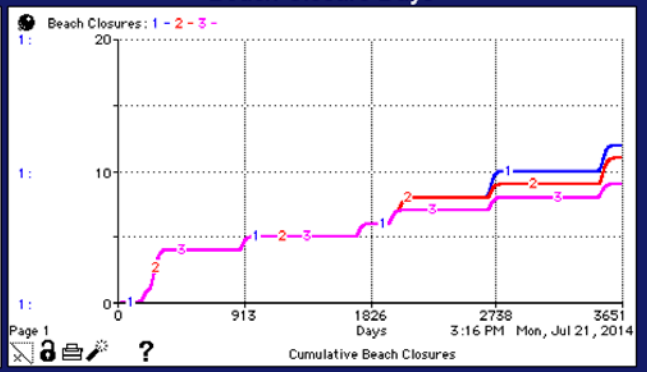


Beach Closure Days



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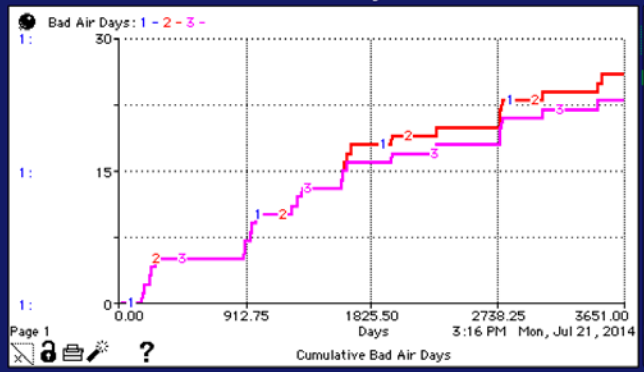
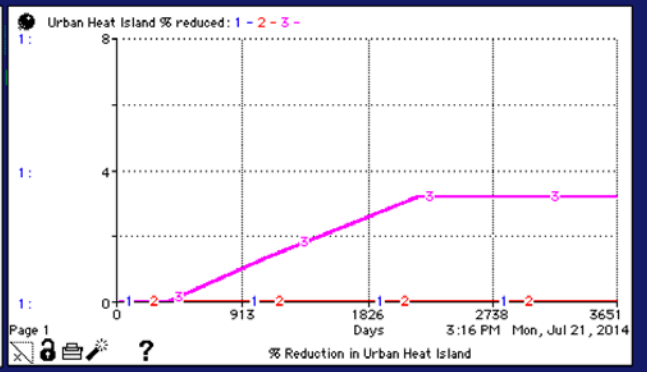
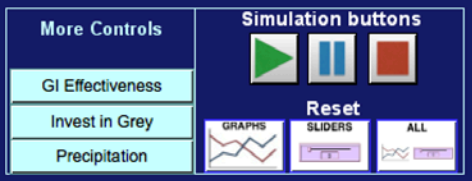


Heat Island Effect





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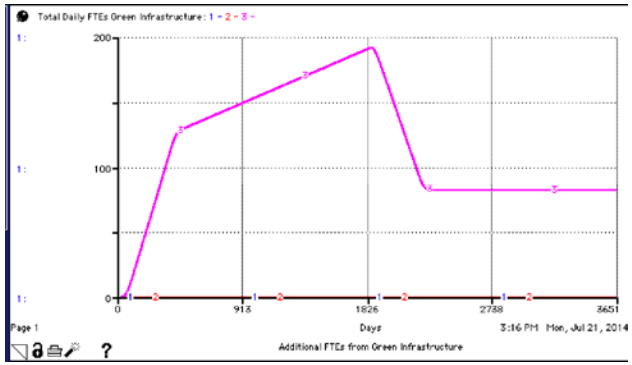
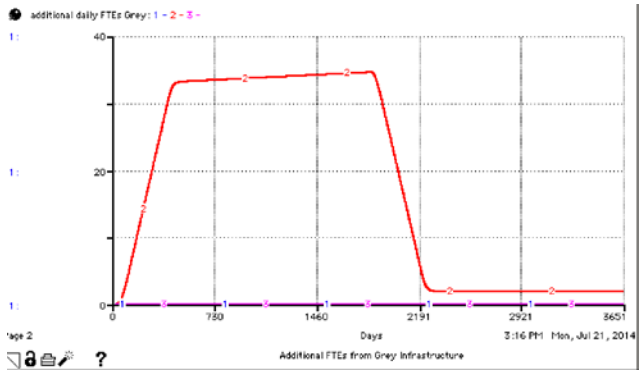
2- Grey

3 - Green

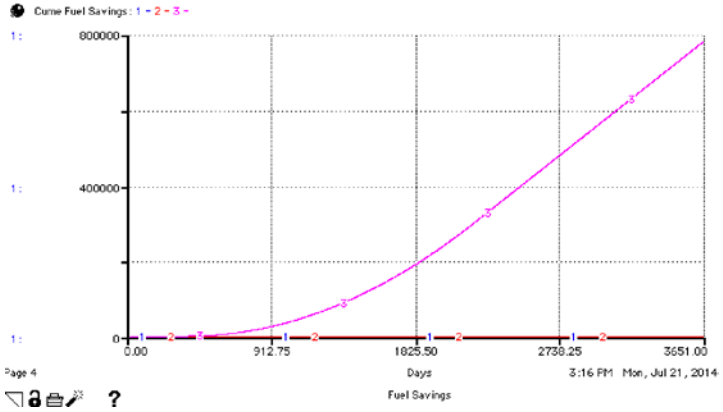
Jobs Green



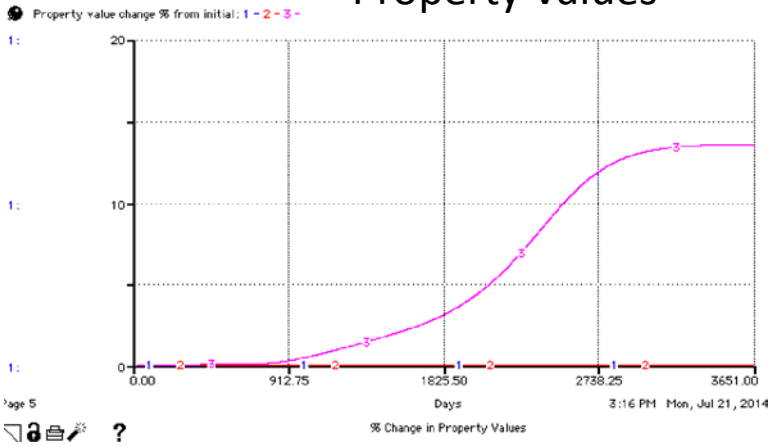
Jobs Grey



Cumulative Energy Savings



Property Values



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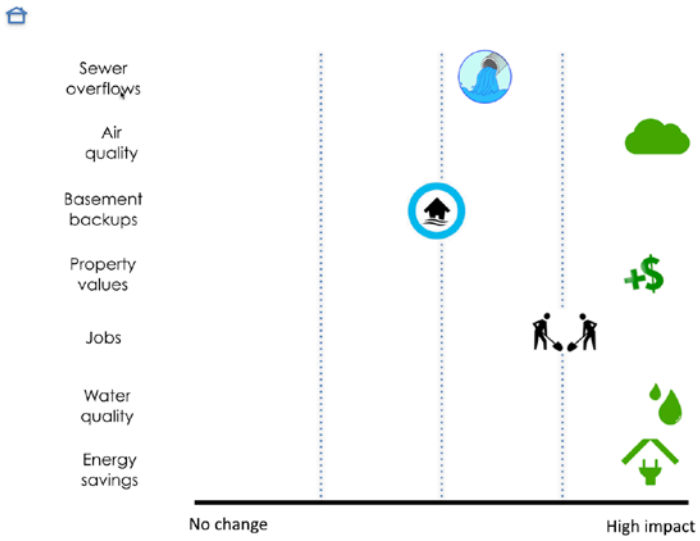
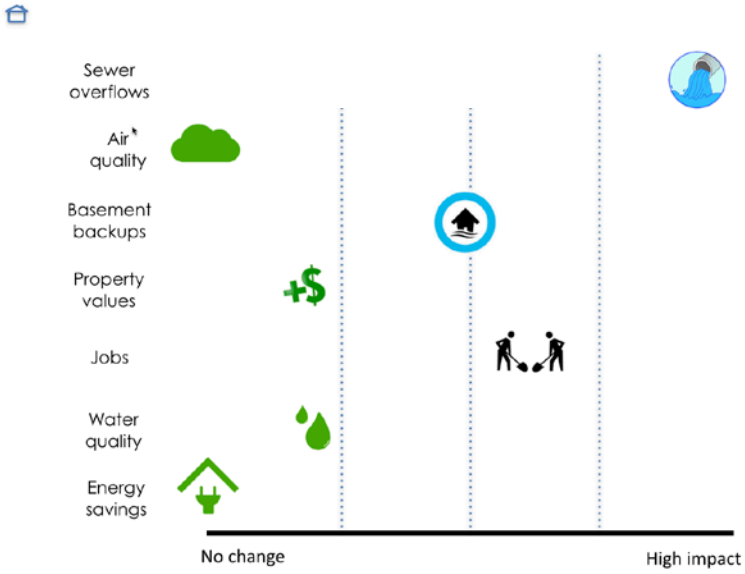
2- Grey

3 - Green

1. Develop a simple, less graph-intensive interface

In development – ‘at a glance’ output





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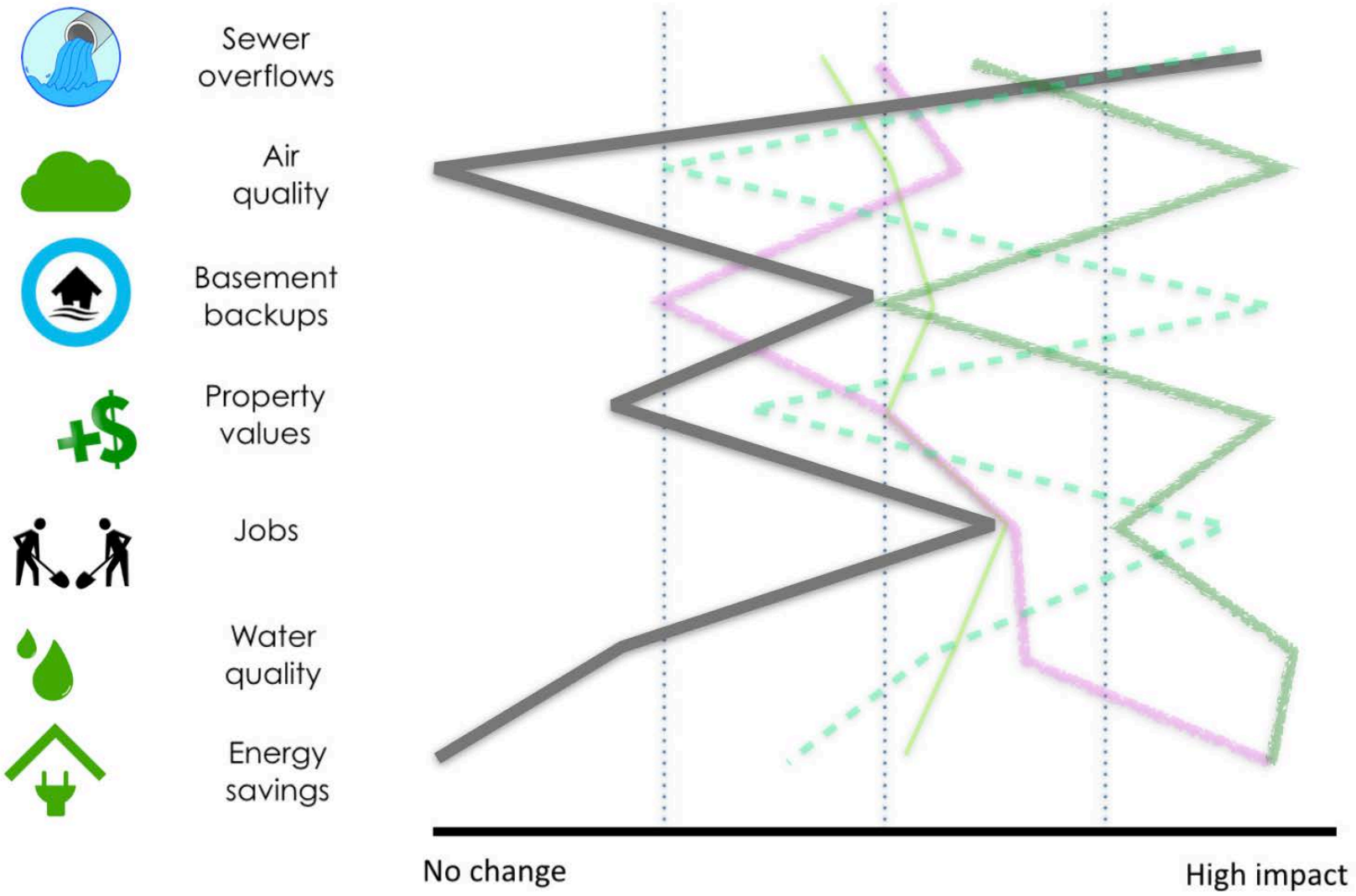

1. Develop a simple, less graph-intensive interface
2. **Support local organizations in catalyzing a wave of GI investment in Milwaukee**

Catalyzing GI investment in Milwaukee

- Local partners – 16th Street Community Health Centers and Milwaukee Metropolitan Sewerage District
  - 6 municipalities, county, business groups, neighborhood associations, non-profits
  - Simulation will help citizens and leaders see what is possible and build a shared vision for their communities
  - Complemented with technical and planning expertise, site visits, information sharing
  - Vision of an implementation fund at the end of the project

2014-2015: 3rd goal

1. Develop a simple, less graph-intensive interface
2. Support local organizations in catalyzing a wave of GI investment in Milwaukee
3. **Making insights from the simulation useful around the country, and making customized versions for other cities**

Sharing insights and customized tools around the US

- Late fall/early winter – an online learning community of GI advocates from municipalities, regional agencies, and community groups
- Meeting via webinar, a few hours per month
- Our offers
  - More time with the Milwaukee tool, understanding the generalizable insights
  - Access to the Milwaukee tool and support in using it
  - For 2-4 cities willing to invest more time, the offer of more detailed consultation to customize the Milwaukee tool for other regions.

- How you can help
  - Sign up if you'd like to be informed of call for applications to the learning network
    - http://www.climateinteractive.org/infrastructure-community/
- Let us know if your network or professional associations might like to partner with us or co-host these learning sessions.

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Thank You!

esawin@climateinteractive.org

www.ClimateInteractive.org

To receive notification about our online learning community:

http://www.climateinteractive.org/infrastructure-community/