

Water, People and Prosperity In the Kinnickinnic River Watershed: Results of a watershed-wide conversation using the Green Infrastructure Scenarios Tool • August, 2015

Background

In July 2013 Climate Interactive began working with the Milwaukee Metropolitan Sewerage District (MMSD) to create a computer simulation tool for testing potential investment scenarios in green infrastructure in the Kinnickinnic River Watershed. The tool, the Green Infrastructure Scenarios Tool (GIST), was designed to help community leaders in Milwaukee explore three questions:

- (1) What are the benefits that might arise from a scale up of green infrastructure in the watershed?
- (2) Which infrastructure choices produce the benefits that residents of the watershed would most like to see?
- (3) What will it take to scale up green infrastructure in a way that would capture those benefits?

Climate Interactive formed a partnership with two organizations well known in the watershed for their work on health, environment and equity, The Sixteenth Street Community Health Centers and 1000 Friends of Wisconsin. Together, with the support of the Fund for Lake Michigan and the Surdna Foundation, we invited dozens of citizens and leaders from across the watershed to join in a series of workshops focused on the above questions.

Building a Broader, Stronger Voice for Green Infrastructure

Conversations with key stakeholders indicated that, despite many good efforts, green infrastructure didn't appear to be on the verge of "growing to scale" in the watershed.

The output of GIST suggested a reason: no subset of groups in the watershed could take green infrastructure to scale on their own. The MMSD could offer a vision and financing and environmental groups

could provide education and support, but residents, business owners, municipalities, and the County would need to be open to the idea of constructing green infrastructure on their properties in order for green infrastructure to reach significant scale. While many ongoing projects could provide opportunities for the installation of green infrastructure, we learned that the goal of scaling up investment in green infrastructure wasn't widely shared.

These observations led us to focus the workshops on the objective of **building a broader, stronger, better-informed voice to help bring green infrastructure in the watershed to its full potential.**

Key Workshop Elements

Four elements were key to the overall success of the workshops:

Element One: Diversity of participants

The participants were from the three largest municipalities in the watershed. Amongst the approximately 60 people who attended the workshops were:

- Health professionals
- Advocates for water quality, jobs, social justice, urban resilience and sustainability
- Planners, storm water engineers, public works staff and redevelopment experts
- Landscape architects and consultants
- Educators from the Milwaukee Public Schools and local universities
- Local business owners

Feedback from participants frequently cited this diverse mix of participants as one of the strengths of



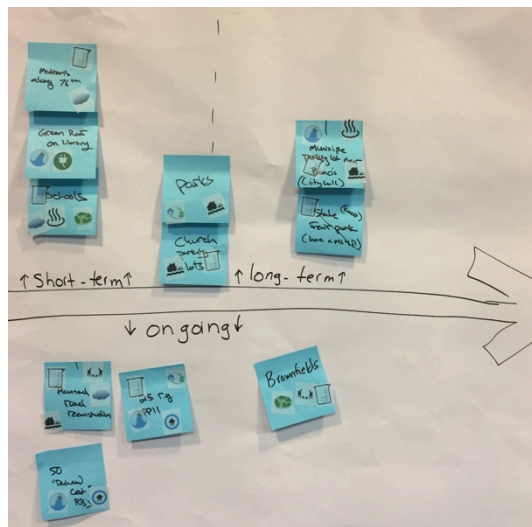
the process, which built new relationships and made the common ground between issues more visible.

Element Two: Scenario Testing

The workshops were designed around groups of participants testing different scenarios to answer the questions: Where should available dollars be invested? What mix of green infrastructure is most desirable? Who needs to be involved? These exercises encouraged people to learn from each other, question assumptions, and discuss their desired future for the watershed.

Element Three: Looking For Opportunity

Groups of participants also worked to identify opportunities for green infrastructure in each community. Participants pooled their knowledge and created opportunity maps for everything from private development projects to county parks planning to road construction projects. Consistent feedback from participants was that their understanding of potential opportunities increased as a result.



Element Four: Local Expertise

Each workshop included speakers with practical knowledge of green infrastructure. From a business owner who had installed a green roof to a college about to embark on a major storm water management project, these green infrastructure ‘veterans’ were honest in their assessment of what was working well, and what they would do differently the next time. Participants were hungry for their information.

Insights From the Workshops

Doing nothing is not an attractive option

Maintaining current infrastructure would set the people of the watershed up for more flooding,

basement backups and combined sewer overflows. In addition, water quality requirements are soon to come into force, so investments to improve water quality will be required across the watershed.

Most people favored the benefits of investing in green infrastructure

While investment in grey infrastructure might produce slightly more reduction in combined sewer overflows compared to green infrastructure, grey infrastructure investments didn’t deliver as many of the other co-benefits participants cared about, including improved air quality, energy savings, additional green space and urban heat island reduction.

Most people didn’t think that these benefits would be the outcome of ‘business as usual’

Most people felt that without increasing advocacy on behalf of green infrastructure, it was unlikely that its benefits would be realized. Participants recognized that creating their desired future for the watershed would require more collaboration, organization, and a sense of shared purpose.

No one group can do it alone

Scenario testing with GIST showed participants that the scale up of green infrastructure requires contributions from all sectors: local businesses, residents, government, and non-profits. Participants agreed that continued education and outreach would be required to ensure the active participation of each slice of the community.

Not all green infrastructure is created equal when it comes to benefits

Vegetation-rich types of green infrastructure, such as rain gardens, bioretention and green roofs produced more helpful benefits than scenarios dominated by permeable pavement. Participants came to understand that it is the living, transpiring surface of plants that reduces the urban heat island effect and improves air quality. The ongoing advocacy of those who champion green infrastructure will be needed to make sure that green infrastructure isn’t viewed as ‘one size fits all’.

There is a need for ways to connect efforts and share learning

The appetite for stories ‘from the field’ seemed to indicate that there is a need for more learning about green infrastructure and for forums where people can ask for and offer support and resources, and where leaders in fields as diverse as health, jobs, and environment can support and learn from one another.

The idea of “co-benefits” provides a powerful framing for decision making

Interviews with participants after the workshops demonstrated that many people have adopted the framing of co-benefits in thinking about the question of “green vs. grey” and many were even applying that framing to other issues in the community. In this way, the idea of co-benefits has provided a common language and reference point for thinking about investments, policy and priorities.

Forward Momentum

In the final workshop participants strategized about how the insights from the workshops could influence planning and decision making about green infrastructure in the watershed. The strategy elements that were identified included:

Participants are carrying the multiple benefits of green infrastructure forward in their roles

- Several participants are members of the Green Infrastructure subcommittee of the Watershed Advisory Committee (WAC), a group that advises the MMSD on projects aimed at flood mitigation. The WAC’s organizers invited any interested GIST alumni to join the committee, further increasing the voices in support of green infrastructure in that influential body.
- As municipalities prepare for the new TMDL requirements, there is interest in using GIST a planning tool for strategies to improve water quality.
- The MMSD is initiating a community advisory board, which workshop participants can join, to provide further guidance on its Kinnickinnic River Watershed Green Infrastructure Plan.
- Several members of the City of Milwaukee Office of Sustainability participated in the GIST workshops and are now working on a green infrastructure plan which will be informed by the experiences with GIST.

Via this cross-fertilization of on-going efforts, the whole system perspective inspired by GIST will inform ongoing decision-making.

Leaders in Green Infrastructure education and outreach are now equipped to use GIST

As a result of these workshops, Sixteenth Street Community Health Centers and 1000 Friends of Wisconsin staff are now experts in using GIST and can offer the same experience to other groups of

stakeholders. Possibilities include 1000 Friends expanding their work on green infrastructure codes and ordinances, and Sixteenth Street increasing green infrastructure education and outreach efforts, perhaps related to the Pulaski Park green infrastructure effort.

Workshop participants hope to come together in high leverage collaborative projects.

The workshops led us to realize (1) the value of sharing lessons and best practices across communities and sectors and (2) the potential for successful projects to bring support to green infrastructure. Some of the potential sites for green infrastructure projects identified in the workshops rose to the top for their potential to share lessons learned and serve as successful examples. One of these projects is the work that is already underway in the Pulaski Park neighborhood, which could be shared with workshop participants and their colleagues as it progresses. Even participants that are not directly involved could help give the project support and visibility, and draw upon its impacts to build support for additional work. Another opportunity is the possibility of leveraging the work planned at Alverno College, to complement it with projects in the surrounding neighborhoods. This idea is especially promising because Greenfield abuts Alverno’s location in Milwaukee. Projects there present opportunities for learning between cities. Finally some workshop participants have begun to discuss the potential for periodic meeting of a “Co-Benefits Network” that could continue to develop the co-benefits framework in the watershed and provide opportunities for collaboration and mutual support.

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Thanks to our supporters:

