



MEMORANDUM

To: CMAP Environment and Natural Resources Committee

From: CMAP Staff

Date: December 31, 2016

Re: Next plan: green infrastructure co-benefits policy refinement framework

Green infrastructure provides many critical functions that maintain the health and vitality of communities. Green infrastructure is often defined according to scale. At the regional scale, interconnected natural areas make up the region's green infrastructure network. At the community level, smaller parks and open spaces are provided by municipalities and park districts primarily for recreation and aesthetic benefits. At a site scale, green infrastructure best management practices (BMPs) use vegetation, soils, and natural processes to mimic natural hydrological functions. Together, regional, community, and site scale green infrastructure can provide places for recreation, habitats for native flora and fauna, air pollutant filtration, flood reduction, and groundwater recharge—just to name a few functions.

Green infrastructure in GO TO 2040

GO TO 2040 addresses the various scales of green infrastructure in different ways. At the regional level, the plan calls for preserving the most important natural resources in the region and increasing acres of conservation open space. At the community level, the plan recommends improving access to park space for all residents. GO TO 2040 also recommends linking regional open space areas and local parks via functional connections, using the Green Infrastructure Vision (GIV) and Greenways and Trails Plan as guides. Lastly, at the site scale, GO TO 2040 emphasizes the importance of green infrastructure BMPs as part of stormwater management and integrated land use and site planning.

While these policies broadly cover the application of green infrastructure at different scales, there is room to further explore the intersections between these intertwined policies, as well as the potential co-benefits of various green infrastructure strategies. For example, the plan's conservation recommendations have been helpful for framing large-scale conservation efforts in the region, but the GIV, which identifies the core lands and corridors that form the basis of our regional green infrastructure network, includes very little land within urbanized areas, leaving these communities without clear guidance for managing their green spaces and locally adapting

green infrastructure practices. The recommendation to increase access to parks could increase the overall amount of land conserved, but the plan focuses primarily on the recreational benefits of these areas, rather than the broader ecological and stormwater management functions that they could provide.

A logical expansion for the next plan is to better connect recommendations for our region-wide green infrastructure network with site-scale green infrastructure practices that can better apply to all community contexts. A refined approach to green infrastructure recommendations can provide an approach for the spectrum of contexts—from rural to urban—found throughout northeastern Illinois.

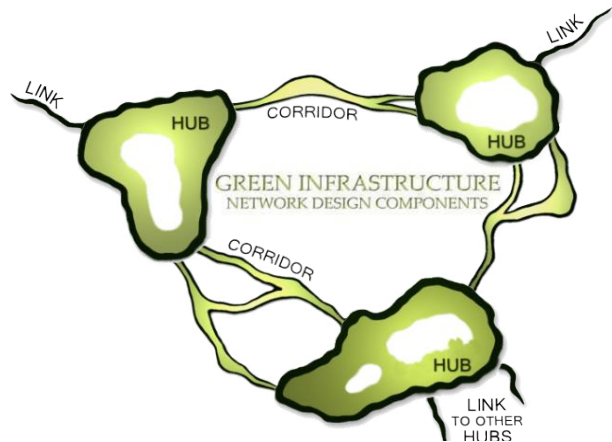


Figure 1: Green Infrastructure Network Design Components

Proposed policy refinement framework

A proposed framework to refine green infrastructure policy in the next plan can be organized in the following manner to provide more comprehensive guidance for various contexts. Across these policy refinements, new emphasis will be given to the multiple potential benefits of green infrastructure, from public health to climate resilience to placemaking. This framework is also a refinement of the core-hub-corridor model used in GO TO 2040 (illustrated in Figure 1 above).

- 1. Protect ecological cores.** Large, high-quality landscapes serve as the building blocks of the region's ecological network. Building off of the strong conservation targets from GO TO 2040, the next plan can develop a systematic approach for identifying priority areas for conservation that are geographically distributed across the region. Furthermore, green infrastructure BMPs can support conservation goals by providing distributed buffers around priority conservation areas and provide important ecological functions in built-out areas with limited opportunities for new parks.
- 2. Encourage green infrastructure in parks.** At the community scale, GO TO 2040 calls for increased park access for all residents in the region. Whether managed by municipal governments or park districts, parks provide important community assets. The implementation of this recommendation thus far has primarily considered access to parks for recreational purposes. The next plan presents an opportunity to use formal park lands to support a wider range of ecosystem functions such as stormwater management, climate resilience, and air quality. These benefits, which can be integrated in the development of new parks or as part of existing park retrofits, can ensure that increased park access also includes provision of multiple community benefits.

3. **Green hardscapes.** Urban, suburban, and rural communities can all strive to incorporate green infrastructure BMPs on traditional hardscapes, such as parking lots and transportation rights of way. In more urban areas, green infrastructure BMPs can be used to mitigate urban flooding and improve public health outcomes in lieu of large park spaces. On developed lands adjacent to large, high-quality landscapes, green infrastructure BMPs can also be integrated into site developments to help protect and connect ecological cores.
4. **Account for co-benefits.** The refined policy can also take into account new research on the multiple benefits of green infrastructure at all scales. Since GO TO 2040, new national and local studies demonstrate the range of benefits, from public health to placemaking. These data can more concretely show the multi-faceted ways that green infrastructure improve quality of life. While this aspect does not itself make up a new policy direction, it offers a new approach to understanding the value of green infrastructure that can cut across the refined green infrastructure framework in the next plan.

ACTION REQUESTED: Discussion