An Introduction to Green Infrastructure, CNT, and Tools for Valuation

Kalle Butler Waterhouse
Natural Resources Division
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Center for Neighborhood Technology (CNT)

- 32 year old Chicago-based non-profit
- Creative “think-and-do-tank”
- Sustainable urban development strategies
  - research
  - advocacy
  - demonstration projects
  - scaling up; replication
- CNT works across disciplines & issues:
  - transportation & community development
  - sustainable energy
  - climate change
  - natural resources

What Is Green Infrastructure?

The interconnected network of open space, natural areas and landscape features that naturally manage stormwater, recharge aquifers, preserve water quality, and provide recreational opportunities and wildlife habitat.

Site-specific methods of restoring the natural hydrologic functions of infiltration, storage, and evapotranspiration of stormwater.

- Environmental protection
- Benefits to human health and well-being
- Monetary benefits

What Is Green Infrastructure?

Rain gardens

Vegetated swales

Permeable pavements

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What Is Green Infrastructure?

Disconnecting downspouts

Urban tree canopy

Green roofs

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Why Does Green Infrastructure Matter?

Autumn Trails, Moline, IL
Image: Stormwater magazine

Portland, OR

CNT Super Barrel

- Reduces Stormwater Runoff & Flooding
- Reduces Potable Water Use

Why Does Green Infrastructure Matter?

Image: www.cnr.vt.edu/urbanforestry/biblio/

Image: www.cnt.org

Los Angeles – Urban Heat Island Effect

- Improves community health
- Fosters community cohesion & environmental stewardship
- Saves money & increases property values

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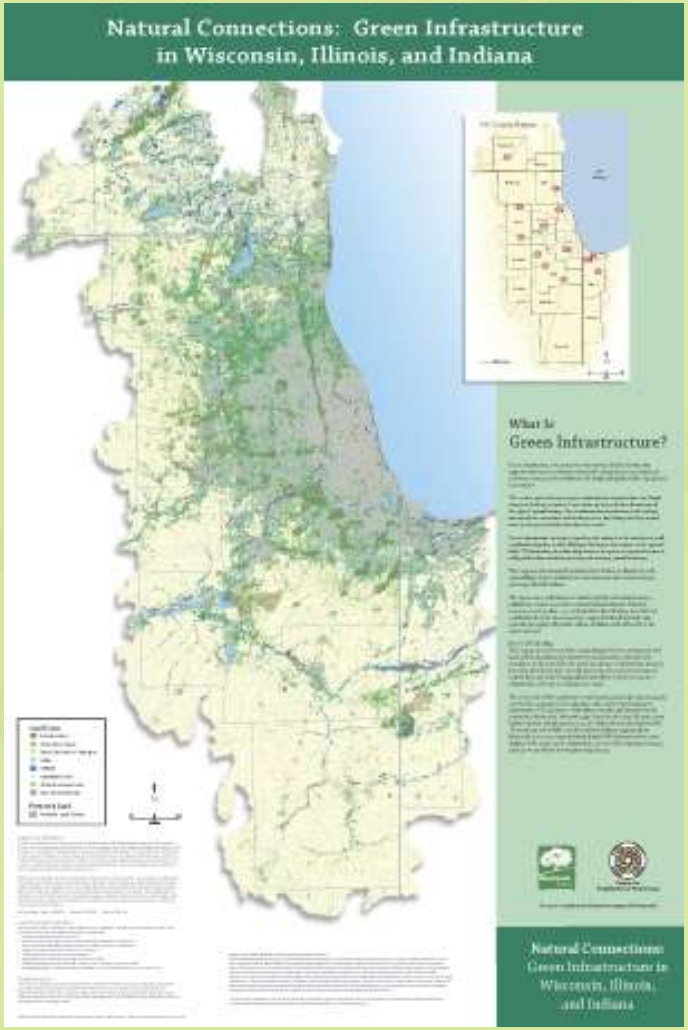
CNT Natural Resources Group

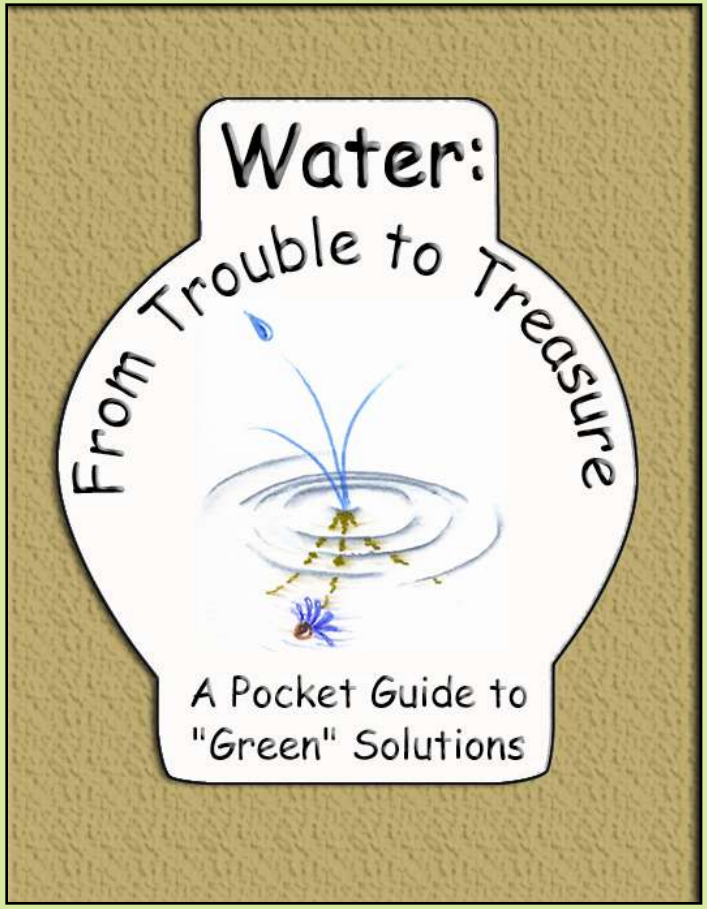
Focus on improving the urban relationship with water by

- Developing tools to map and analyze the values of green infrastructure
- Researching and demonstrating stormwater BMPs, water resource management efficiency & conservation
- Promoting changes in local, regional and national policy

CNT Green Infrastructure Tools



greenmapping.org



Outreach

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CNT Green Infrastructure Tools

- Overall statement of runoff reduction and a cost/benefit analysis
- Detailed analysis of hydraulic results
- Financial breakout of the costs & benefits of BMP implementation relevant to each stakeholder

greenvalues.cnt.org

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CNT Green Infrastructure Tools

Green Infrastructure Benefit / Practice Matrix

Benefit	Reduces Stormwater Runoff				Increases Available Water Supply	Increases Groundwater Recharge	Reduced Salt Use	Reduces Building Energy Use	Improves Air Quality	Reduces Atmospheric CO_2	Reduces Urban Heat Island	Improves Community Livability				Improves Habitat	Valuable Public Education Opportunity
	Reduces Water Treatment Needs	Improves Water Quality	Reduces Grey Infrastructure Needs	Reduces Flooding								Improves Aesthetics	Increases Recreational Opportunity	Reduces Noise Pollution	Improves Community Cohesion		
Practice																	
Green Roofs	●	●	●	●	◒	○	○	●	●	●	●	●	◒	●	◒	●	●
Trees	●	●	●	●	◒	●	○	●	●	●	●	●	●	●	●	●	●
Bioretention & Infiltration	●	●	●	●	○	●	○	○	●	●	●	●	●	◒	◒	●	●
Permeable Pavement	●	●	●	●	○	●	●	○	●	◒	●	○	○	●	○	○	●
Water Harvesting	●	●	●	●	●	●	○	○	○	◒	◒	◒	○	○	○	○	●

○ No
◒ Maybe
● Yes

The Benefits of Green Infrastructure:
A Guide to Valuing the Economic, Ecologic, & Social Benefits of Green Infrastructure

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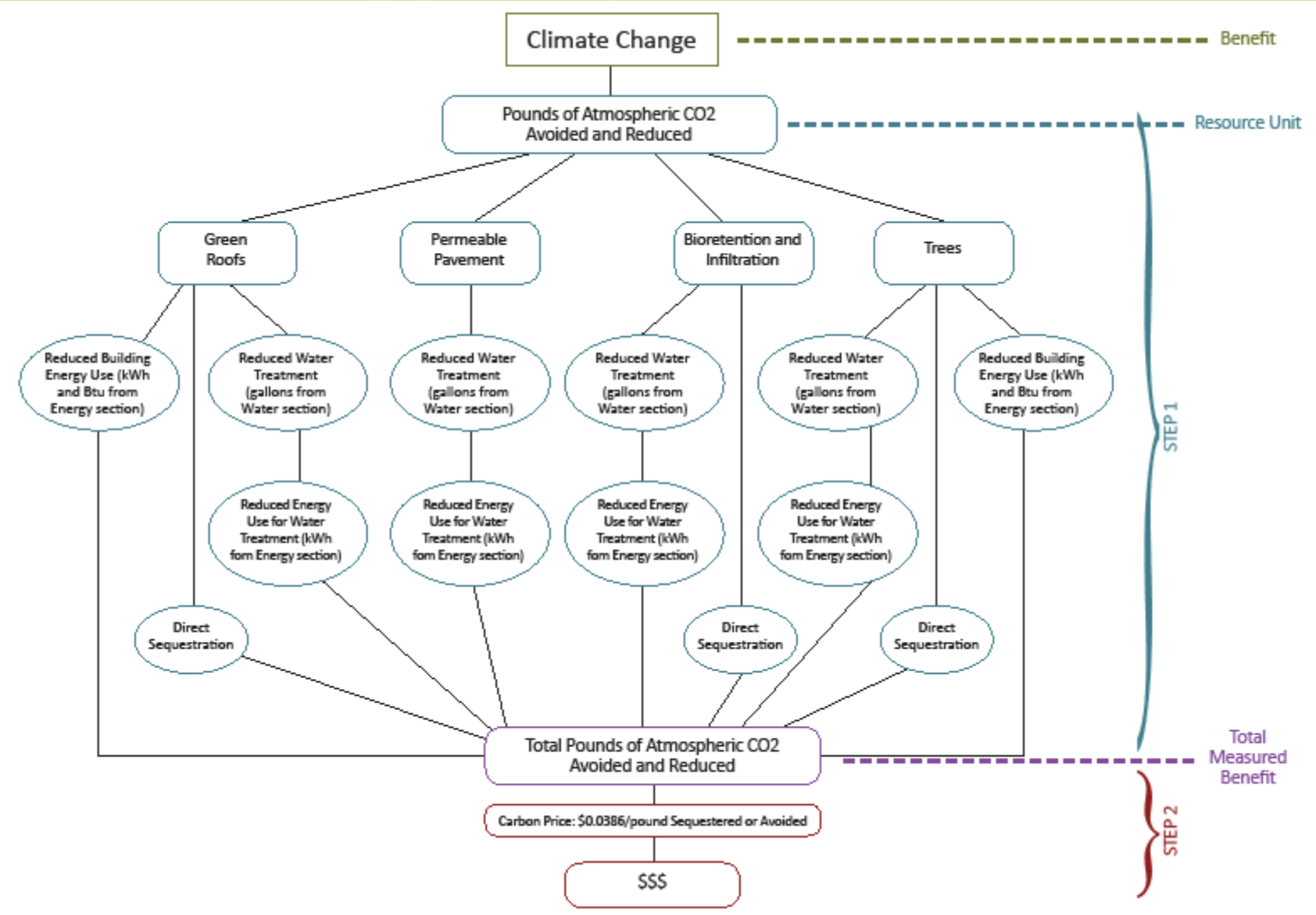
CNT Green Infrastructure Tools



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Thank you !

For more information, please visit our website at

www.cnt.org

or

Contact me at

kbutler@cnt.org
773.278.4800