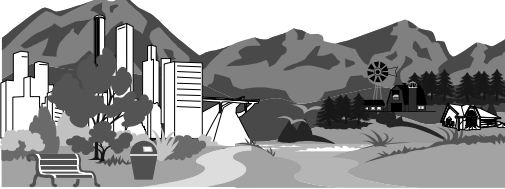


Strategic Conservation and Development Using a Green Infrastructure Approach

Dr. Mark A. Benedict, The Conservation Fund
Senior Associate, Strategic Conservation & Training



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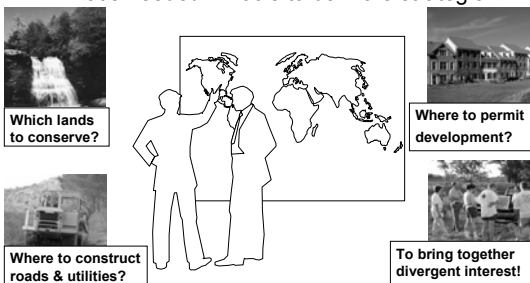
The Challenges of Growing Communities



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The Challenges of Growing Communities

What's needed? Tools to be more strategic!



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Green Infrastructure – What Is It?

A strategically planned and managed network of:

- ✓ Conserved Natural Areas & Features
- ✓ Working Lands with Conservation Value
- ✓ Greenways and Trails
- ✓ Other Protected Open Spaces



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Green Infrastructure – What Is It?

A process and framework that helps:

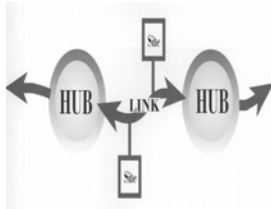
- ✓ Preserve essential resources
- ✓ Protect community assets
- ✓ Accommodate population growth



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Green Infrastructure – What Does It Look Like?

- ✓ Hubs – anchor the system
- ✓ Links – tie the system together
- ✓ Sites – smaller areas, may not be attached



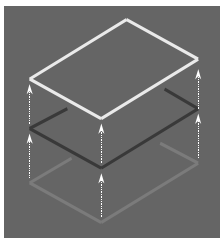
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Green Infrastructure – What Does It Look Like?

Green Infrastructure Network

Lands with Associated Benefits for Human Populations

Lands that Protect Natural Ecosystem Values and Functions



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Why Green Infrastructure?



Protect Resource Values

- ✓ Sustain native plants, animals & their habitats
- ✓ Maintain ecological processes & functions
- ✓ Provide clean water and air
- ✓ Reduce built infrastructure costs
- ✓ Contribute to rural economies
- ✓ Provide a land base for tourism

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Why Green Infrastructure?



Enhance Community Livability & Quality of Life

- ✓ Improve physical and mental health
- ✓ Maintain a connection to nature
- ✓ Provide sites for outdoor education
- ✓ Engage people in land stewardship
- ✓ Enhance property values
- ✓ Attract new residents and businesses



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What Green Infrastructure is Not!

- ✓ A program
- ✓ A short-term solution
- ✓ An isolated effort
- ✓ No growth or anti-development
- ✓ A panacea
- ✓ "Green" engineered structures



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Relating Green to Gray



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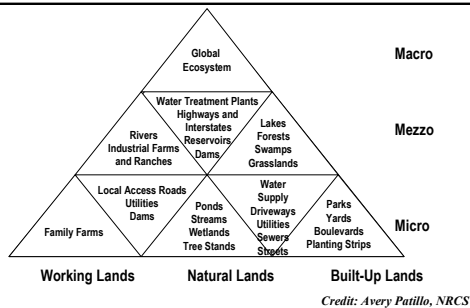
Relating Green to Gray

Infrastructure – “the substructure or underlying foundation on which the continuance and growth of a community depends” Webster’s New World Dictionary



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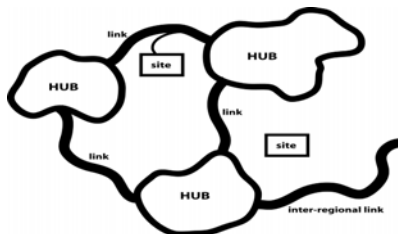
Relating Green to Gray



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Infrastructure Principles

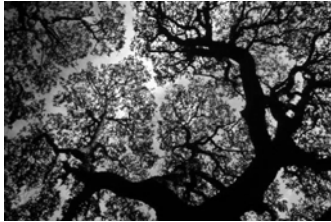
Design networks that will function across geographic scales & political boundaries!



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Infrastructure Principles

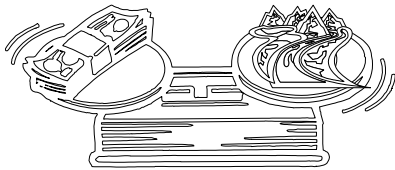
Manage / maintain network features & processes to provide essential services!



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Infrastructure Principles

Fund networks “up-front” using the full range of available financing options!



Credit: Avery Patillo, NRCS

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Infrastructure Principles

Plan networks with the input of diverse people, programs and organizations!



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Relating Green to Gray

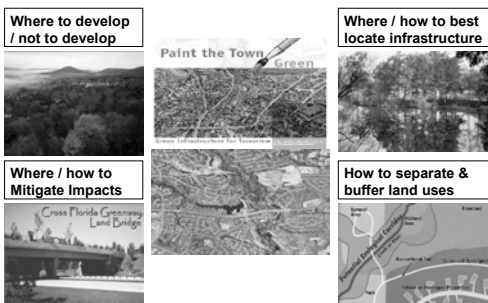
Emphasizes that green infrastructure, just as gray infrastructure, is a necessity not an amenity!



(Source: USDA National Agroforestry Center)

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Informing Growth and Development



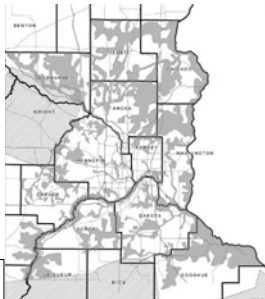
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Providing Predictability and Certainty

➤ For Conservationists

➤ For Landowners and Developers

Metro Greenways,
Minneapolis / St. Paul



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Relating Green to Gray

Green Infrastructure and Gray Infrastructure

Both Require:

- **Strategic planning** to ensure optimal / functional systems
- **Financing** for design and maintenance
- **Management** to maximize long-term benefits



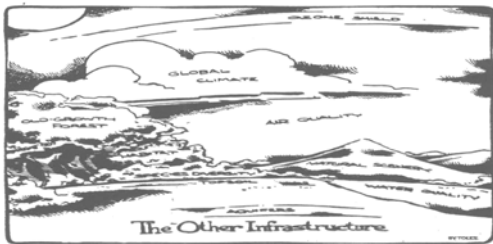
Ideally Are:

- **Planned simultaneously** before development
- **Given equal priority** in the planning process
- **Planned as complimentary** systems
- **Given equal attention** in the funding process

Credit: Avery Patillo, NRCS

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Green Infrastructure – Why Now?



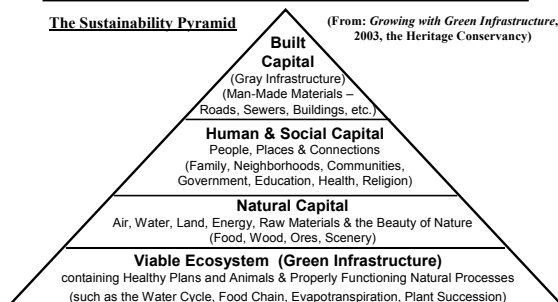
Our Natural Life Support System!

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Providing a Foundation for Sustainable Communities

The Sustainability Pyramid

(From: *Growing with Green Infrastructure*, 2003, the Heritage Conservancy)



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Green Infrastructure – Why Now?



Accelerated fragmentation & consumption of open land ..

- ☐ 1992-1997 = 2.2 million acres/year
 - ☐ 1.5 X rate 1982-92 (1.4 mil. ac./year)
- (Source: NRCS National Resources Inventory, 2000)

.. with rates exceeding population growth!

- ☐ 47.14% change in urbanized area
 - ☐ 17.02% change in population
- (Source: Brookings Institution, 2001)

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Green Infrastructure – Why Now?

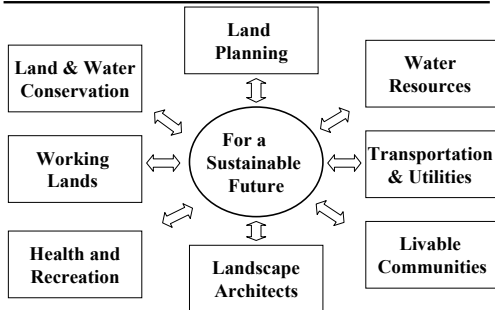
Today's choices are ...



... our legacy for tomorrow!

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Green Infrastructure – Why now?



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Green Infrastructure – Why now?



Linking Landscapes & Communities for People & Nature!

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Green Infrastructure – Why now?



"Each of us is an artist whose task it is to shape life into some semblance of the pattern he dreams about. The molding is not of the self alone but of shared tomorrows and times we shall never see. So let us be about our task. The materials are very precious and perishable."

Arthur Graham

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To Learn More



←
Read the New Book -
Island Press, Spring 2006!

→
Take the Next Course -
NCTC, June 12-16, 2006!



Visit the Website - www.greeninfrastructure.net



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