Centers for Urban and Interface Forestry
USDA Forest Service
320 Green Street
Athens, GA 30602-2044

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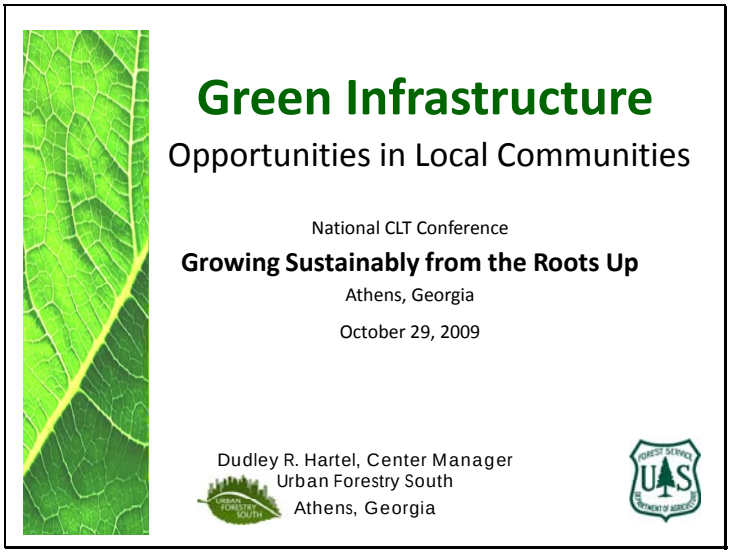

An introduction to implementing green infrastructure projects in your community.

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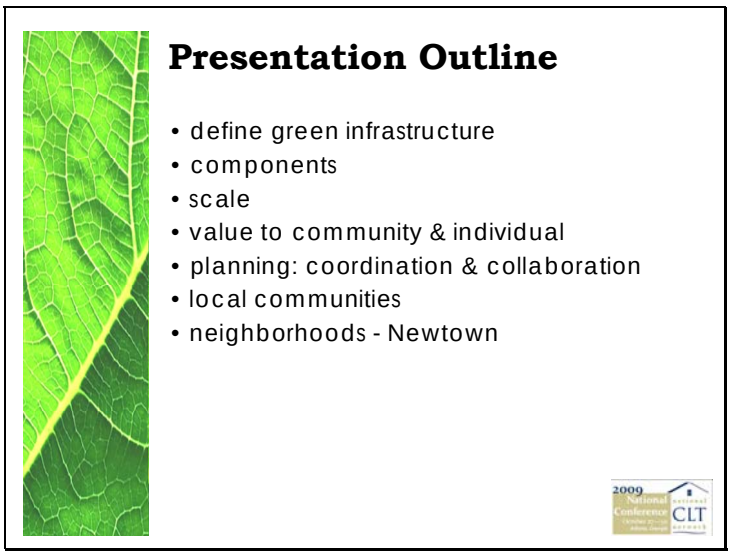

In this presentation I will cover:

- the definition of green infrastructure (GI) and describe examples;
- talk about green infrastructure in terms of scale (region to site);
- discuss the value of GI to communities, neighborhoods, and individuals;
- discuss how planning is a key element of successful GI projects;
- and then discuss in general terms how individuals, neighborhoods, and communities can interact to create GI

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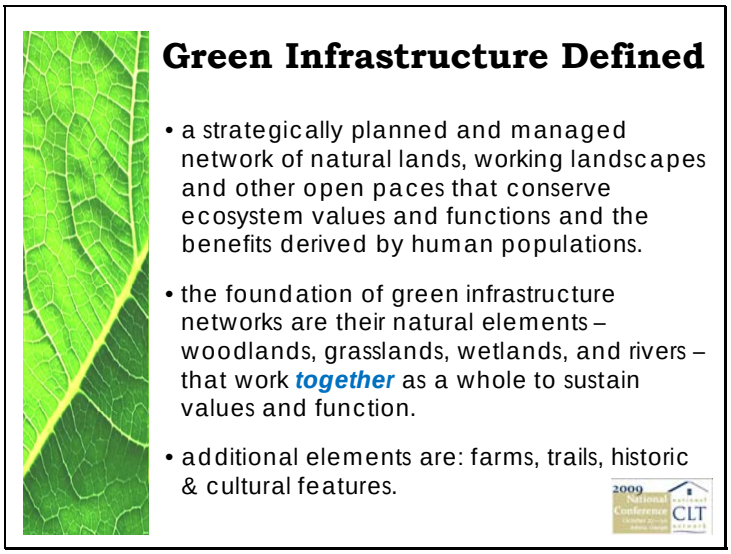

The key words in this definition include: planned, managed, and network.

In addition, the concept of ecosystem services ties the "green" to people for a desired benefit.

GI is based on "natural" systems (or elements) as opposed to built structures (houses, roads, water treatment plants).

The "elements" can vary: rivers, wetlands, farms, trails, and historic or cultural resources.

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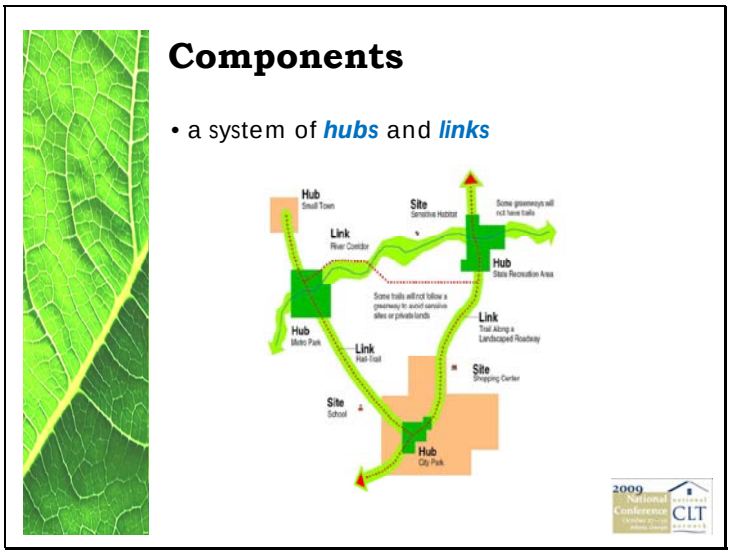

A simple graphic illustrates GI with a "network" of hubs (focal points) and links (routes).

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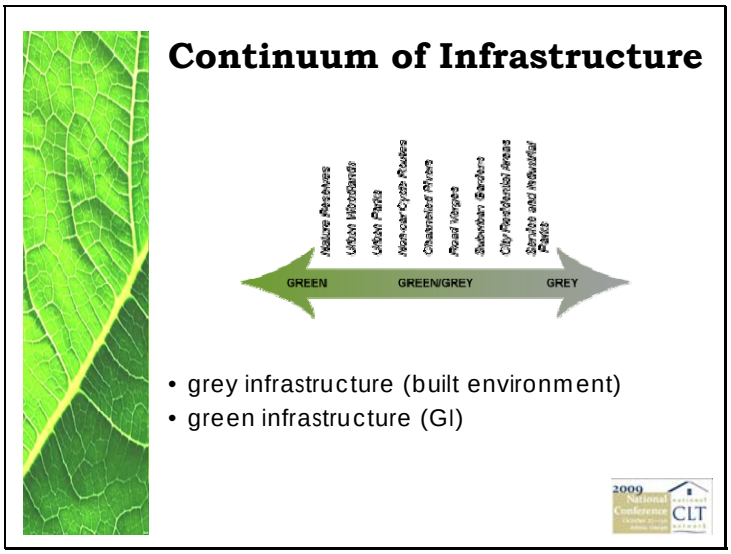

The “line” between green and grey infrastructure (our built environment, or hardscape) is not necessarily well defined.

Particularly in urban settings, there can be a continuum of combinations of green and grey.

From industrial parks to natural areas.

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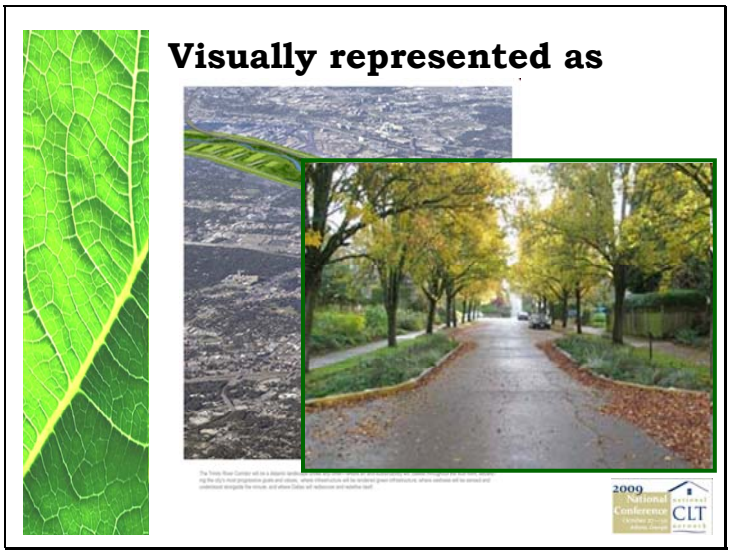

When we think about green infrastructure we might visually "see" a regional greenway in a metropolitan area…

But, a residential street can be created and maintained as a link or portion of a link in a neighborhood or community GI.

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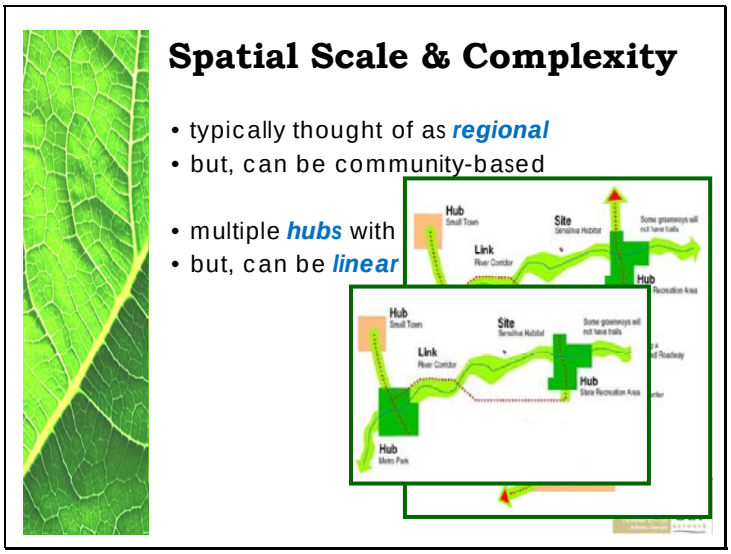

Green Infrastructure is further defined by:

- scale
- complexity

Usually, we think of GI from a regional (i.e. multi-county) perspective; but GI can be community scaled as well.

Multiple hubs and multiple links provide users with many options for use; but, GI can also be simpler linear systems (e.g. greenways) with limited hubs.

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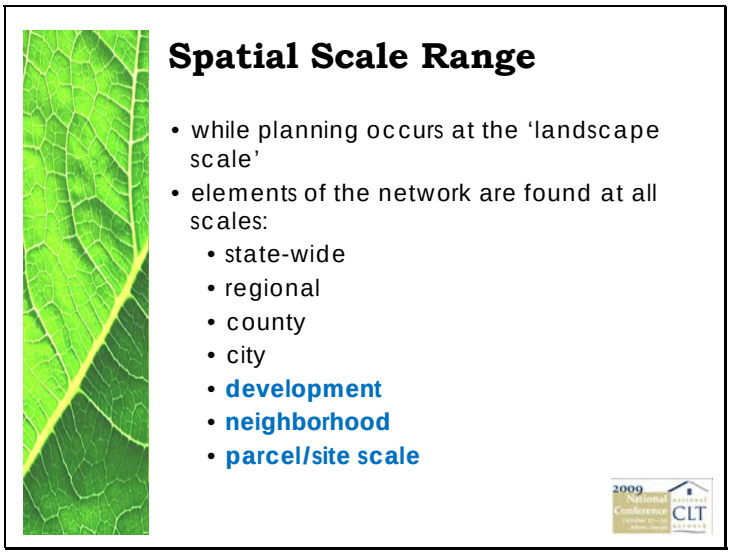

While planning should occur at the highest scale possible which is dependent on interest and vision at various levels, elements of the GI network are found at all scales.

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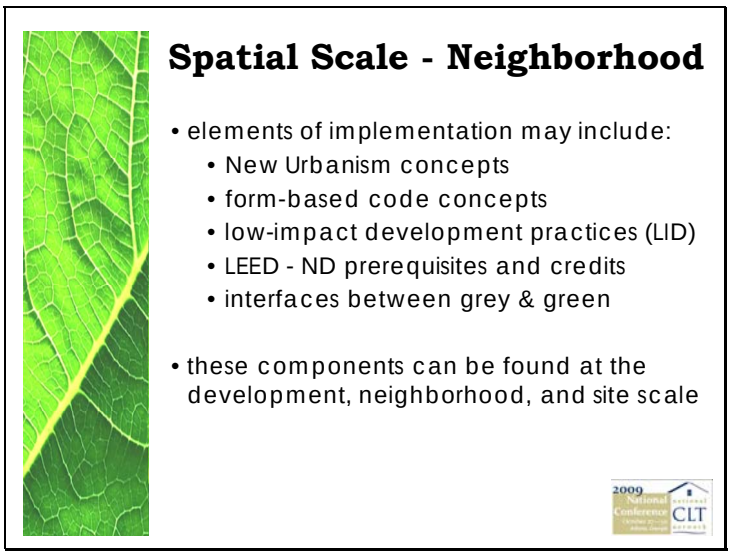

At the development or neighborhood scale there are a variety of implementation protocols or guides.

- New Urbanism that relies on walkable communities practically "demands" some form of green infrastructure for those links.
- Form-based code, like Smartcode, uses a transect model to control development, and emphasizes regional, neighborhood, and site scale elements.
- One emphasis of low impact development is the identification, preservation, and use of natural site elements for stormwater control. Many of these elements could also function as hubs and links in GI.
- The newest LEED standard for neighborhood developments includes many prerequisites and criteria that would also support a GI network.
- Within the urban continuum of grey to green infrastructure there many opportunities for unique and subtle interfaces.

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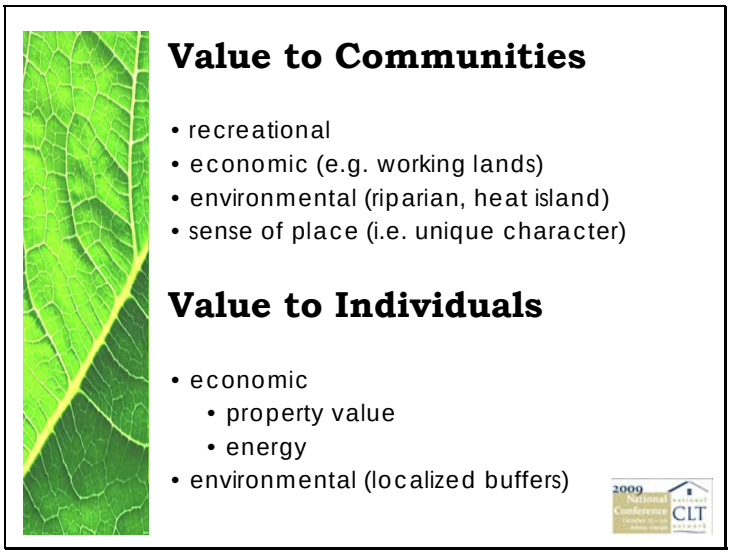

The ecosystem values provided by the GI decrease as we go down the scale, and the recipients of those benefits move from the community at-large to small groups to individuals.

At large scales the values are less quantifiable; as the scale moves to your neighborhood and individual homes the benefits are more tangible.

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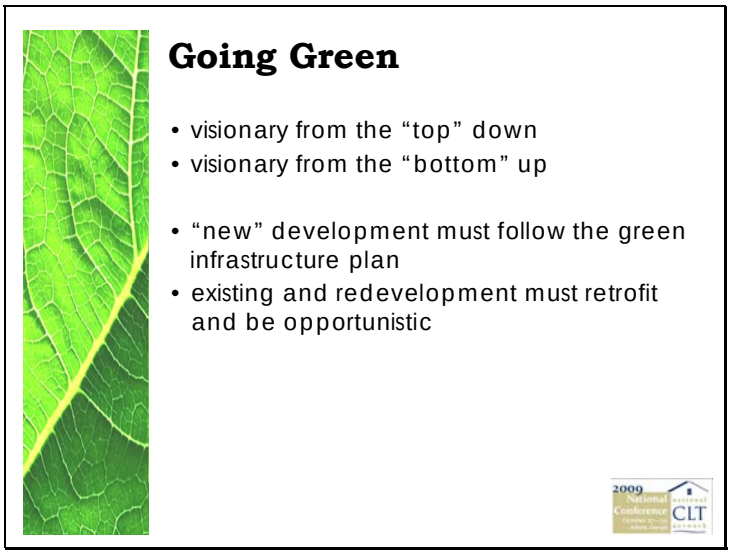

Two concepts to consider.

Starting the process can be "large scale" and be proposed by visionary community leaders (i.e.. elected officials, staff, regional planners).

Or, in the absence of vision at the "top", local neighborhoods can start at a smaller scale and implement GI to lead the leaders.

As "new" development occurs the emphasis is on local ordinances that "follow" the GI plan

For existing development the primary task is one of retrofit as opportunities arise.

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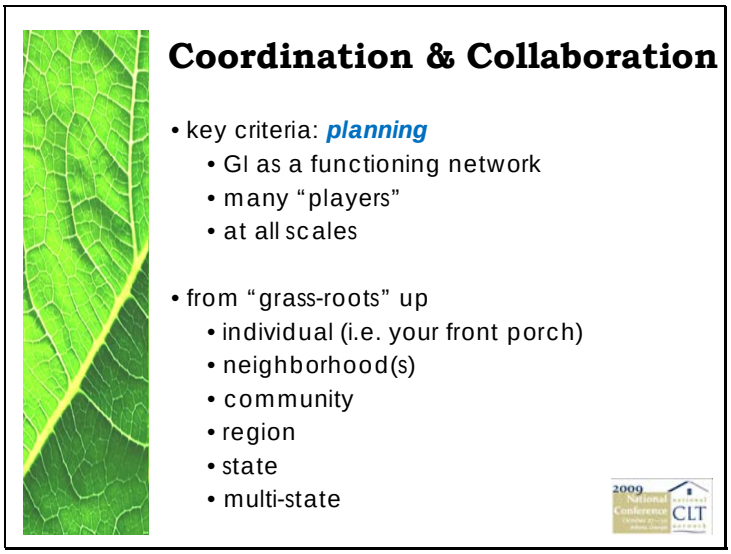

Regardless of how or where it started, successful GI is dependent or planning.

Inherent in planning are:

- collaboration with many "players"
- coordination of effort among and across those "players"

When the "vision" or "need" is from local (i.e. neighborhood) leaders, collaboration and the embracing of new "players" is what can move the "vision" to the "top".

There are many obstacles when working from the bottom up:

- legal
- political
- economic
- organizational capacity
- cultural

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So, local communities can implement their portion of a larger, future, community-wide green infrastructure by identifying those things locally of importance.

When they then combine their neighborhood with adjoining neighborhoods, then the "value" of the GI increases and the visibility of the "vision" within the community rises.

Properly planned and implemented GI at smaller scales can become important and/or useful within a community GI plan. Your pocket park "hub" for your neighborhood may not become an important community hub, but can help increase the complexity of the community-wide GI system.

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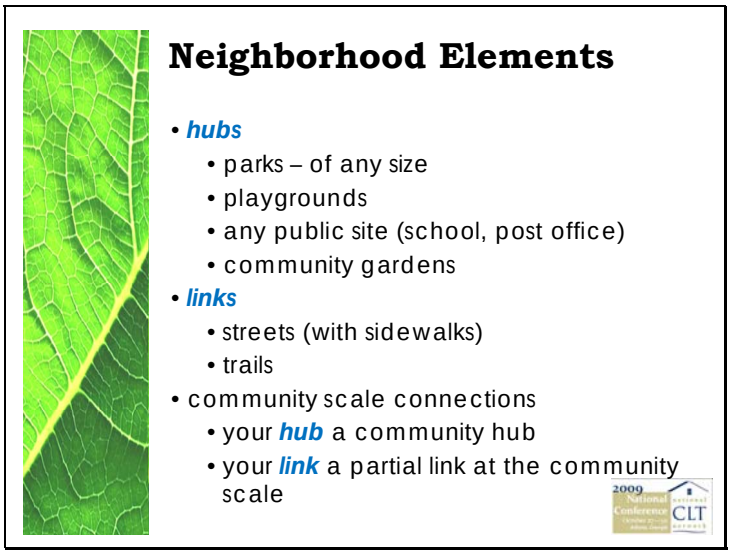

What do we look for in our neighborhood to build and benefit from a system:

hubs

- public areas (parks, buildings)
- historic sites
- "donated" land with long-term access

links

- streets
- trails (e.g. rail corridors)
- public lands

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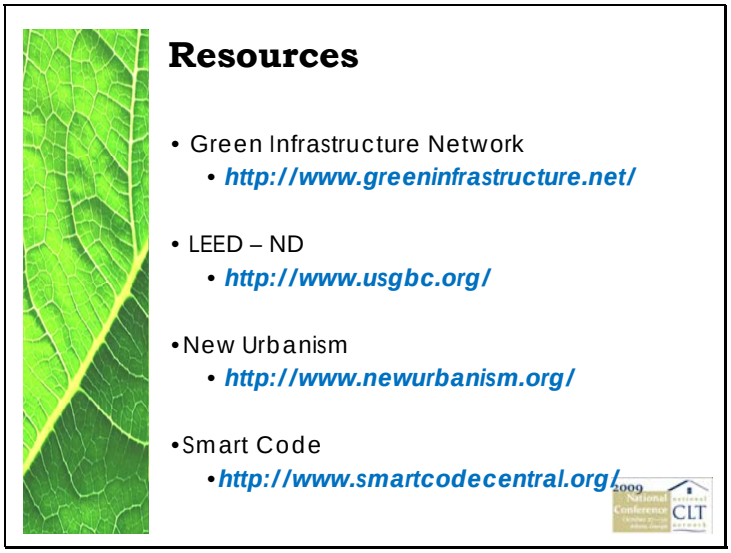

Some Internet resources.

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"Quick Search" with 'NCLT green' (no quotes).