Mapping Green Infrastructure

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What is HeartLands Conservancy?

**Mission**
Provide leadership and solutions to sustain and enrich the diverse environmental resources of Southwestern Illinois

**Vision**
Communities with healthy and sustainable air, land, and water resources for current and future generations.

- Founded in 1989
- 501(c)(3) nonprofit charitable organization
- Independent corporation
Investing In The Nature Of Southwestern Illinois

- 7 County Primary Service Area
- 2.5 million acres
- 670,000 residents
- 7,000 acres protected
- $30 Million+ invested
- 9 Employees
- 28 years in operation
How are we funded?

Variety of Sources:

- Service Contracts with Local Government & Agencies
- Foundation, State, and Federal Grants
- Donations
- Corporate Sponsors
- Judgments/Settlements
How do we accomplish our mission?

Three Priorities

- Land Conservation
- Building Greener Communities
- Engaging People with Nature
‘An interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife. In short—Our Natural life-support system.’

(Benedict and McMahon, 2006)
Why is Green Infrastructure Important?
Why is Green Infrastructure Important?

**Fragmentation**

- Decreased Habitat
- Less diversity-rich and rare habitats
- Loss of corridors for large species travel
- Increased ‘Edge Habitat’
  - Exotic/Invasive Species
  - Increased human interaction, vehicle crashes
  - Increased Spread of Pathogens
Why is Green Infrastructure Important?
Public Health Risks

- Degraded Air Quality
- Higher Humidity and Increase in Heat Wave Intensity/Frequency
- Degraded Water Quality
Why is Green Infrastructure Important?
Loss of Well Being

- Nature Deprivation
- Increase in obesity, cardiovascular disease, asthma, stress, depression
- Increase in pathogens, less resistance to pathogens
Green Infrastructure Framework for Southwestern Illinois

- Use GIS to analyze Land Use & Land Cover data in order to identify prime places for Hub and Corridor Connections for a Regional Green Infrastructure Plan.
What’s Next

• Use new refined urban land use to establish identify connections through cities.
  ○ Urban Forestry Program

• Work with local governments to move toward regional goals

• Engage with landowners using various tools for land conservation.
TOOLS

- PURCHASE or DONATION (Fee-Simple Ownership)
  - High Quality Natural Areas
  - Park & Recreation
  - Stormwater
  - Donated lands that don’t meet criteria above can be sold and funds received can be then be invested in conservation
TOOLS

- EASEMENTS

- Donated vs. Purchased

- 2 Types
  - Conservation Easement
  - Agricultural Easement
ADDITIONAL TOOLS

- STATE – IL Nature Preserves Commission
  - Nature Preserve
  - Land & Water Reserve
  - Natural Heritage Landmark

- FARM BILL PROGRAMS
  - Conservation Reserve Program
  - Wetland Reserve Program
  - Wildlife Habitat Incentives Program
ADDITIONAL TOOLS

- POLICY
  - Conservation Overlay Districts / Conservation Subdivision
  - Protection of riparian corridors, stormwater management, urban forests, etc.
  - Environmental Mitigation
ADDITIONAL TOOLS

- PROGRAMS
  - HeartLands’ Lots of Love – converting vacant lots into habitats that will increase biodiversity and improve water quality for the community.
Implementing this Plan in 2 counties would:

- Protect & buffer 88,000 acres of core forest.
- Create 3,200 acres of riparian corridor
- 84,000 acres of wetland buffer