Executive Director's Spring 2019 Report

We begin 2019 with GIC entering its **second decade** of helping communities map, assess, conserve and restore their natural landscapes from wildlands to urban centers. GIC is being recognized for its work in many ways, several of which are noted below! And GIC has grown! GIC now has a staff of three full time and 3 part time staff working out of the Charlottesville VA Office. Learn more about us at http://www.gicinc.org/staff.htm
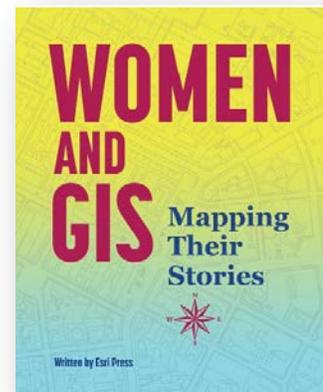
In 2018 GIC's Director was given the *urbanator award* from the National Association of State Foresters, Urban and Community Forestry Committee. This award recognizes GIC's leadership in conserving urban forests across the U.S. It is a high praise coming from those who manage state urban forestry programs!

In Spring 2019 Esri Press accepted GIC's book *Map and Plan the Natural World with GIS* which is now typeset and ready for publication soon! It describes how to use the national habitat model that GIC helped Esri build using GIC's computer script to identify and rank natural habitats nationwide. Anyone in the U.S. can use the site to map their natural habitats and download the data for their state! The book describes the science behind habitat mapping and how to use the data to plan for conservation and restoration!

https://green-infrastructure.esri.com/AssetFinder/index.html

Also in Spring 2019, GIC's Director Karen Firehock was featured in **Women and GIS: Mapping Their Stories** which tells the tales of how 23 women applied themselves and overcame obstacles, using maps, analysis, and geographic information systems (GIS) to contribute to their professions and the world. Buy the book at: https://www.amazon.com/Women-GIS-Mapping-Their-Stories/dp/1589485289

The **Phyllis E. Galanti Arboretum** GIC built at McGuire Veterans Hospital will be featured in the spring edition of *Virginia Forests Magazine*. Hospital staff, visitors and patients are benefitting from the healing landscape GIC built which will continue to help our veterans heal – up to 30 percent faster – by adding green spaces to their therapy and in-patient experiences. In May, GIC led a field trip to the arboretum to show urban foresters from across the south how to create healing landscapes in their communities.

Trees to Offset Stormwater: A 12 City Study

In May 2019, GIC completed a study of the role of trees in mitigating stormwater runoff for 12 cities in the states of VA, NC, SC, GA, FL, and AL. The GIC and the states obtained funding from the USFS Southern Region to provide cities with technical assistance to map their land cover, determine plantable areas and model the current and potential stormwater uptake of the urban forest. Each city has a case study of their results and a summary report is underway!

GIC's new trees and stormwater modeling tool helps cities account for current stormwater uptake and run 'what if' scenarios to see how much water could be intercepted by tree planting or lost by tree removal. Maps show where to plant or retain trees to maximize stormwater uptake!
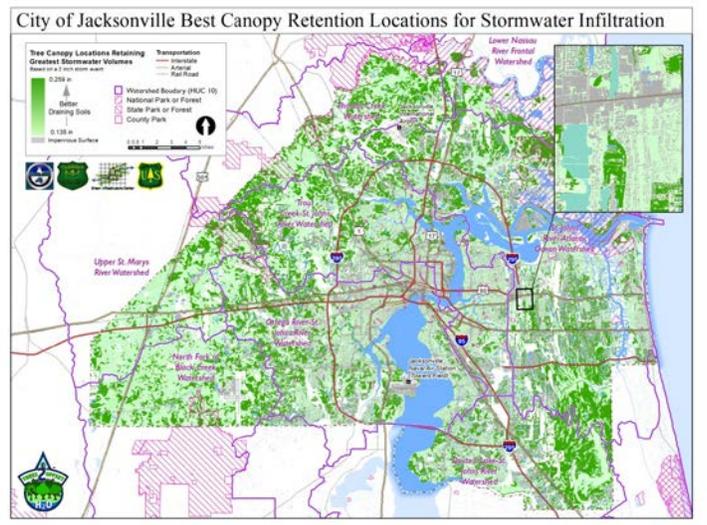
The GIC also developed a codes and policies audit tool for each city which allows any city to grade themselves and see how their codes make them more pervious or impervious as well as how to better manage and grow their urban forests. To learn more and read the city studies visit http://www.gicinc.org/trees_stormwater.htm

Conservation Development Guide: The GIC, the North Carolina Forest Service and South Carolina Forestry Commission partnered to develop a guide for conservation-based development and landscape connectivity. The project is funded by the US Forest Service. Two pilot development project designs are underway. The developer will receive renderings depicting development patterns, roads and areas for conservation, recreation, and restoration. Benefits of conservation design layouts will be described and will address investment return. Both sites will have 50 percent of conserved open space and meet multiple conservation principles and green development practices. The GIC's guide will show the step-by-step analysis and design considerations to reduce development impacts.

The 30-acre site in Polk County, NC is surrounded by 430 acres of open space that are protected under easement/parkland. GIC is working with a land trust Conserving Carolina and the Housing Assistance Corporation which will build affordable housing. The 850-acre site in Greenville County SC includes a 50 acre lake. Both sites will have at least 50 percent of conserved open space and meet multiple conservation principles and green development practices. The design book will be published in fall 2019!

Project architect Muhelman (left) and GIS Analyst Sheppard determine open space areas.

New! Resilient Coastal Forests

Coastal communities are increasingly impacted by storm surges, temperature extremes, and development pressure, resulting in damage to critical coastal ecosystems. Coastal development typically results in forest loss, exposing shore lines, decreasing critical habitat, and increasing stress on remaining forested areas. This project will map the extent and intactness of forest cover for several coastal communities in VA, NC and GA, develop risk assessments and future forest cover projections, and create coastal forest resiliency plans for each pilot community. Stakeholders and elected officials decision makers will be educated and decision support tools will be developed.

Want to learn more and support our work? Learn about our completed projects at http://www.gicinc.org/projects.htm, Support our work -- all donations are 100% tax deductible and help communities. Donate at http://www.gicinc.org/donate.htm Contact: GIC, 440 Premier Circle, Suite 220, Charlottesville VA 22901 (434)244-0322