Organization and Support of Long-Term Collaborative Relationships Between Private Citizens, Government Institutions and Universities to Conduct Inventories and Ecological Analyses across the Tampa Bay Watershed; Development of Strategic Plans for Forest Conservation; and Ongoing Support for Ecologically Based Management

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Keywords

INTRODUCTION

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CONTEXT

Hillsborough County and the City of Tampa comprise the majority of the land area within the Tampa Bay watershed. Prior to settlement by European immigrants in the mid-19th century, the Tampa Bay watershed was primarily forest, containing patches of interior shrub/scrub habitats and sinewy estuary communities of submerged grasses and mangrove. As the dominant land uses changed from forest to agriculture to urban, the highly productive and economically important estuary declined in productivity. The need to control non-point sources of pollution to restore the bay led to intergovernmental cooperation. The pace of urbanization rapidly increased in the late 20th and early 21st centuries leading to a recognized loss of viable coastal and upland habitat, and threatening the hard-fought gains to protect the bay. Recognizing, in part, the positive outcomes of collaboration on restoring the bay, citizens voted to support the purchase and management of natural areas across the county/city boundary for watershed protection and habitat.

GOAL

Create a scientific framework for the ecological assessment and sustainable management of the Tampa Bay watershed's trees and forested ecosystems.

1. Understand the Tampa Bay watershed trees and forest as an ecological system.
2. Understand how the Tampa Bay watershed trees and forest ecosystems change over long time periods.
3. Use the ecological knowledge created to help support educational activities and development of strategic plans for urban forest conservation.

APPROACH USED

In 2005, the University of Florida organized and facilitated 9 meetings of private citizens, non-profit conservation groups and government natural resource agencies. The meetings led to development of a mission and goals that today serve as a framework of collaboration. A core group of collaborators remains, including non-profits organizations; local, state and federal agencies; and universities. Today, they provide the technical backbone for 13 years of ongoing monitoring of forest resources; development of science-based plans for the conservation of Tampa's urban forest; strategic planning for the management of nearly 70,000 acres of forest natural areas; and ongoing analysis of bio-physical and social inventories. At the core of the

work is an endeavor to develop a sustainable urban forest management system. Unlike older and continuously funded management systems developed for national forests, state forests, and private land holdings (CFM), urban forestry lacks the organizational infrastructure to support sustainable management and attainment of long-term environmental and social goals.

RESOURCES

This is not a short-term project but an ongoing collaboration, addressing open-ended questions concerning urban forest science, technology, and management. Since its inception the collaborative has generated over $1 million in grants from federal, state, and private sources. This does not include in-kind work or services provided by collaborators. The development of an extensive data set and ongoing inventory and analysis is attracting researchers and government agencies to the Tampa Bay watershed.

KEY RESULTS

- Ongoing inventory and analysis of the watershed's forest at various scales of management.
- Strategic plan for the management of Hillsborough County's 70,000 acres of natural areas.
- Strategic plan for the management of the City of Tampa's urban forest.
- Ongoing technical support for implementation of inventories, analyses, and strategic plans.
- Teaching critical thinking, the design of learning organizations, and ecosystem science and management.