

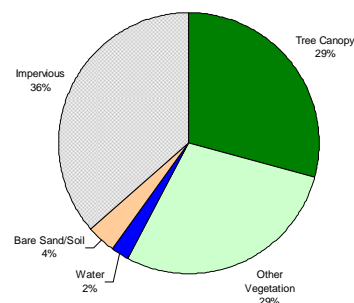
# City of Tampa Urban Ecological Analysis 2006-2007

## Executive Summary

In October 2006 the City of Tampa's City Council directed the Parks and Recreation Department to oversee an ecological analysis of the city's urban forest resources. This report describes the methodology used to conduct the inventory and assessment; quantifies the change in overall canopy coverage 1996 to 2006; provides a three-dimensional description of the forest structure and composition; and provides a detailed look into some of the economic and ecological values of the City of Tampa's urban forest. The outcomes from this study can serve as the basis for: enhancing the understanding of the urban forest's values, improving urban forest policies, planning and management, and providing empirical data for the inclusion of trees within environmental regulations.

The University of South Florida combined the use of high resolution imagery (1 meter) and a more robust approach to spatial analysis than used in the 1996 study as part of its investigation into urban forest cover and distribution.

- Overall citywide tree cover increased between 1996 and 2006.
- Tree cover in 2006 appears to have returned to 1970's levels.
- High-resolution 2006 land cover classification indicated the City of Tampa was comprised of 29% tree canopy, 29% other vegetation, 2% water, 4% bare sand/soil and 36% impervious surface.
- Residential, public/quasi-public institutional and right-of-way were the top three land use categories in terms of tree canopy, representing over 78% of the 21,716 acres of tree canopy within the City of Tampa.



During spring – early fall of 2007 the University of Florida School of Forest Resources and Conservation and Hillsborough County Extension established two hundred and one plots which were sampled and analyzed to determine the vegetative structure, functions, and values of the urban forest in Tampa.

Definitions of terms used in this report:

1. **Urban Forest:** Urban forests encompass the trees, shrubs, plants, and wild/domesticated animals that live in the area regardless of origin (native/non-native, naturally regenerated, or planted/introduced).
2. **Forest Structure:** a description of the distribution of vegetation both horizontally and vertically. Forest structure attributes are a function of the community of species.
3. **Forest Function:** determined by forest structure and includes a wide range of environmental and ecosystem services.
4. **Forest Value:** an estimate of the ecological and economic worth of the various forest functions.

Summary of Tampa's Urban Forest and associated functional values

Feature	Measure
Number of Trees	7,817,408
Tree Cover	28.1%
Top 3 Species	red mangrove, Brazilian pepper, black mangrove
Proportion of Trees < 6-inches DBH	84%
Pollution Removal	1,360 tons/year (\$6.3 million/year)
Carbon Storage	511,141 tons (\$10,386,389)
Gross Carbon Sequestration	46,525 tons/year (\$945,396/year)
Value of Energy Conservation	\$4,205,623
Compensatory Value	\$1,465,600,097

City of Tampa Urban Ecological Analysis 2006-2007 full report available at [http://www.tampagov.net/dept\\_parks\\_and\\_recreation](http://www.tampagov.net/dept_parks_and_recreation)

