

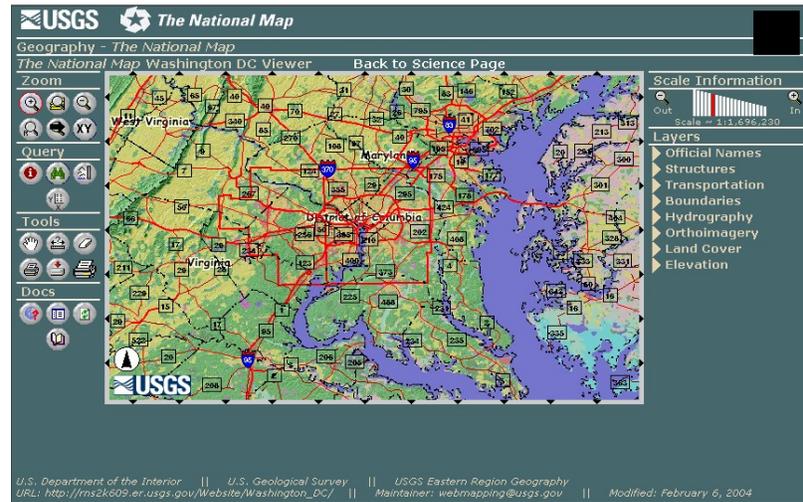
The National Map In Action: Comprehensive Urban Ecosystems Studies

Draft 2/24/2004

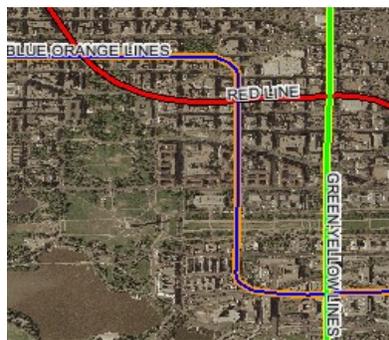
Introduction: *The National Map* enhances the Nation's ability to access, integrate, and apply geospatial data for the public good and provides the spatial framework for national, regional, state and local mapping and geographic information networks. It is a baseline investment in the Nation's geospatial and analytical infrastructure from which government, industry, academia and the public can build upon. Basically, having a robust National Map democratizes the citizenship's ability to understand the environmental and geopolitical issues facing them. The Comprehensive Urban Ecosystems Studies provide a means to demonstrate *The National Map* integrated with scientific national data and local data for specific study areas. The base layers of *The National Map* include: Transportation, Boundaries, Hydrography, Orthoimagery, Land Cover, Elevation

Washington D.C. and Charlotte, NC Comprehensive Urban Ecosystems Studies.

http://ergwms.er.usgs.gov/website/washington_DC/erg/
The USGS supports U.S. cities' needs by providing geographic base information, assessments of natural hazards, and information on water and biological resources, among other things. USGS data and information around urban centers also serve Federal emergency management and defense functions, as well as the needs of private industry, nongovernmental organizations, and individual citizens.



Washington D.C. and Charlotte, NC Comprehensive Urban Ecosystem Study: The project addresses science applications critical to Washington D.C. and Charlotte, NC. Utilizing *The National Map* with local and regional scientific data brings critical issues facing urban areas together. USGS Eastern Region urban area issues, include security, vulnerability of water resources, natural hazards, urban sprawl, and the conservation and protection of National parklands and other natural resources. The site offers download capabilities for *The National Map* base layers and future downloads for local layers.



Washington D.C. Metro Transit draped High Resolution Orthoimagery

Both are accessed using a map service call to USGS Eastern Region.

Washington D.C. area National Elevation Dataset (NED), USGS NHD Water Bodies, Airports, and Heliports

Illustration of requesting map services from different sources. The NED and USGS NHD Water Bodies are map services from USGS/EROS Data Center. The Airports and Heliports is a map service request from USGS Eastern Region.

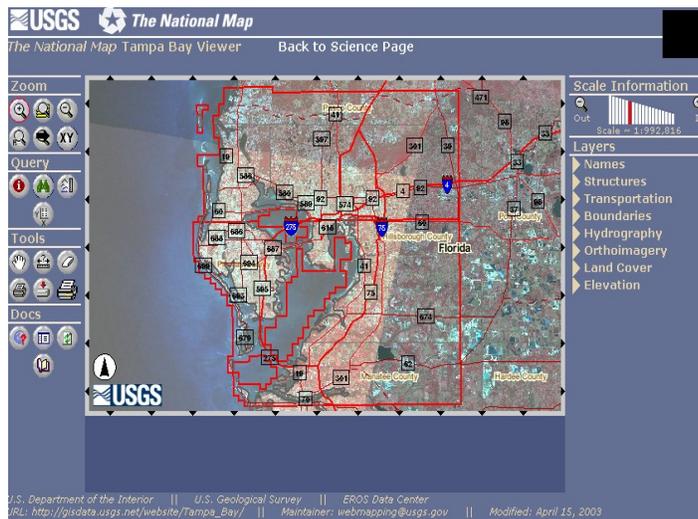


The National Map In Action: Comprehensive Urban Ecosystems Studies

Tampa Bay Case Study:

http://gisdata.usgs.net/website/Tampa_Bay/cues/

Tampa Bay, one of the Gulf of Mexico's largest estuaries, exemplifies the environmental stresses that our nation's estuaries face as increased rates of urbanization and significant land-use changes alter the ecosystem. Tampa Bay and its environs have experienced phenomenal urban growth over the past 50 years, which is in turn reflected in the water quality and health of its estuaries.



Tampa area
GNIS Parks
draped over
High Resolution
Orthoimagery
(Passage Key
National
Wildlife
Refuge)
Illustration of
accessing
**The National
Map** layers



Tampa area EPA Water
Bodies and EPA Streams
draped over National
Elevation Dataset

Illustrates the use of data
from different government
agencies.

Tampa Bay Case Study: The role of geographic information and analysis in emergency response, land management, policy development, and decision making at the local, regional, and national levels has never been more urgent. The objective of the prototype implementation of *The National Map* for the Tampa Bay watershed is to demonstrate the depth of scientific analysis and discovery that is possible when a fully-populated, multi-scale geographic database is available for researchers. It provides public access to high quality, geospatial data and information from multiple partners to create a consistent seamless, continually maintained, vertically and horizontally integrated map for the Tampa Bay watershed via the Internet. The site offers download capabilities for *The National Map* base layers and orthoimagery.

Future Plans: Distributed Download capability for local layers is a plan in the near future. The goal is to continually maintain and improve on these projects, as well as create new partnerships for more projects.

Other Informative URL's:

<http://gisdata.usgs.net/>
<http://edc.usgs.gov>
<http://nationalmap.usgs.gov>

Contact Information:

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