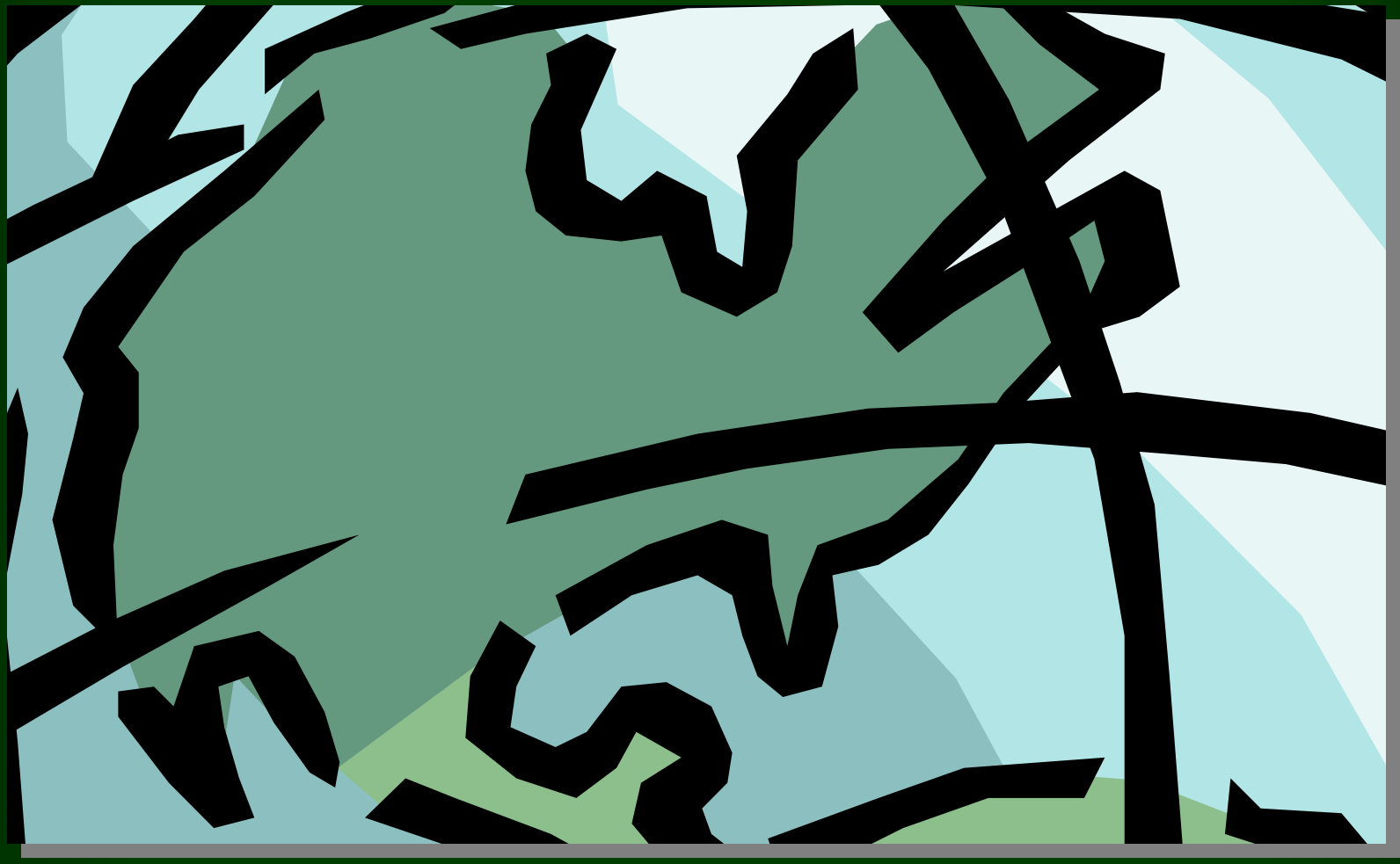
Getting to know GIS



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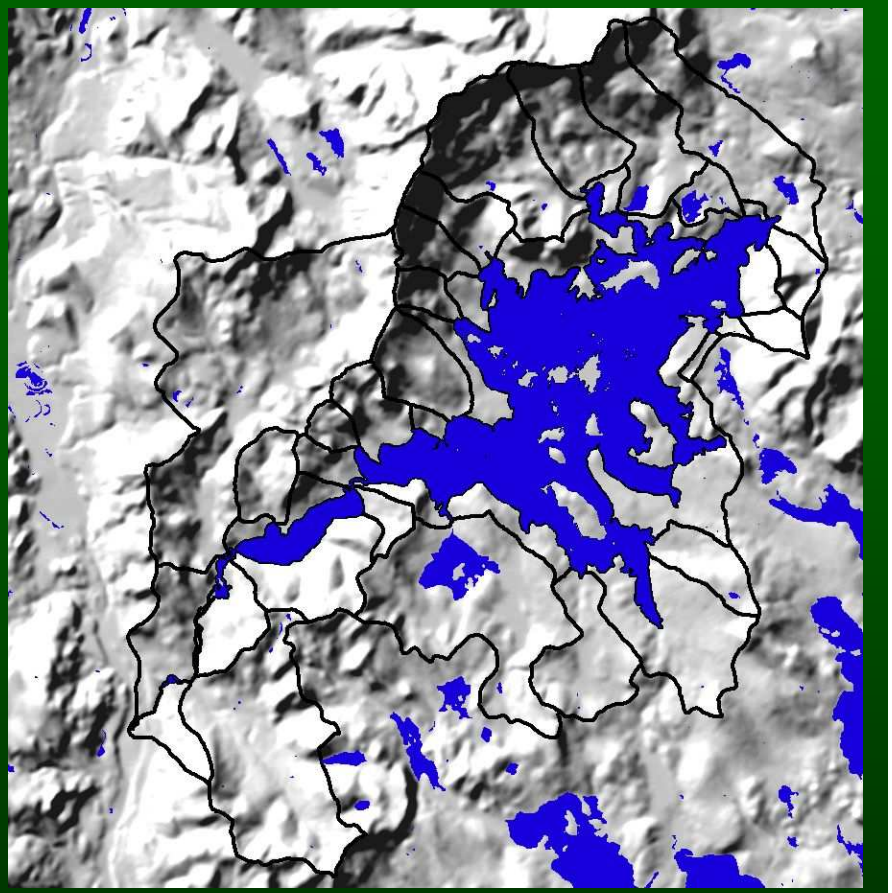
GIS: GEOGRAPHIC INFORMATION SYSTEM

- Geographic information made digital and aligned to a common reference system (*georeferenced*)
- GIS layers are by national, state and local sources
- Can provide information on a many types of features, both natural resource and societal
- Combines geographic layers with descriptive data about those layers

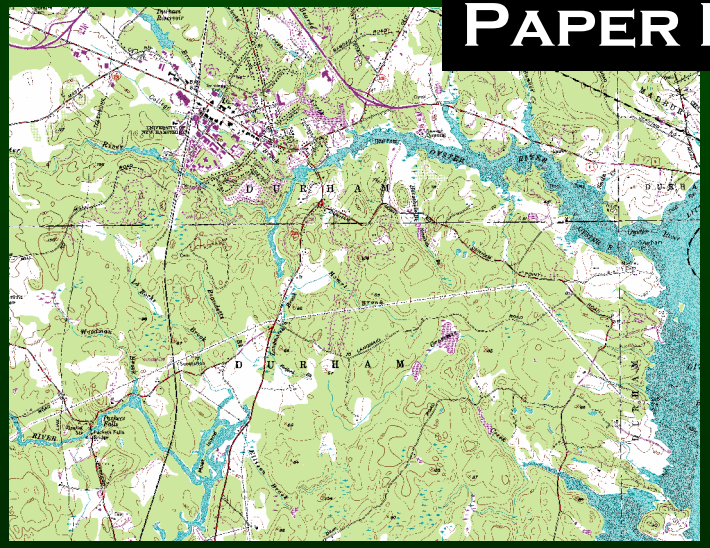


GIS Data Sources

GPS

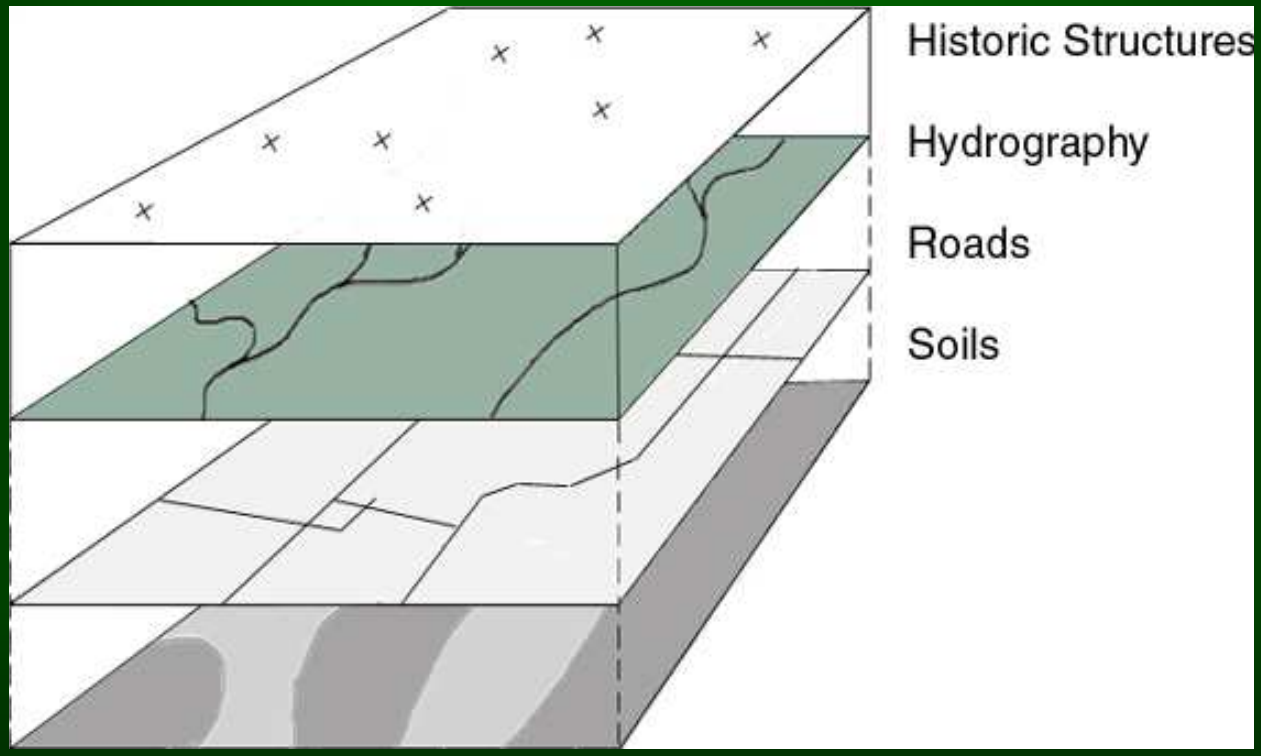
Remote Sensing

Paper Maps



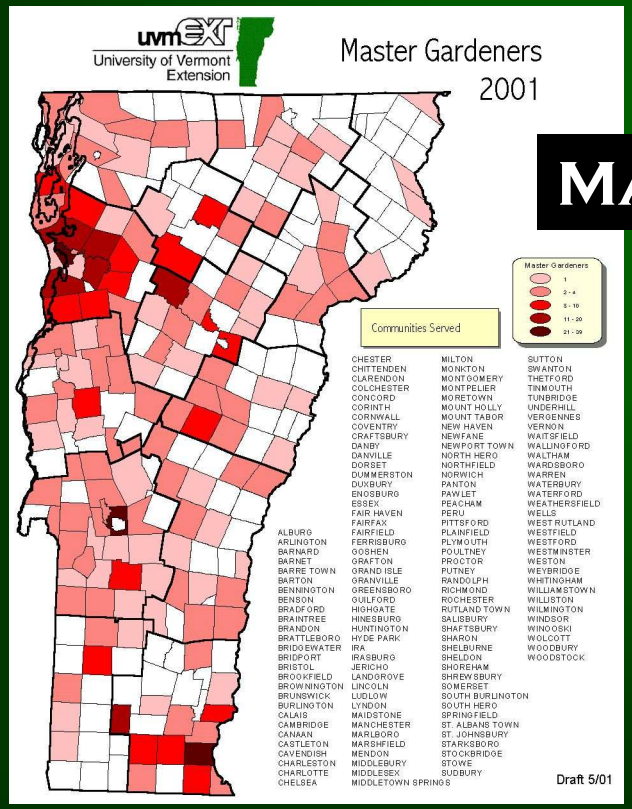
What makes GIS work?

- GIS SOFTWARE - Stack different data layers
- GIS SOFTWARE - Knows how features are related to each other spatially



What can you do with GIS?

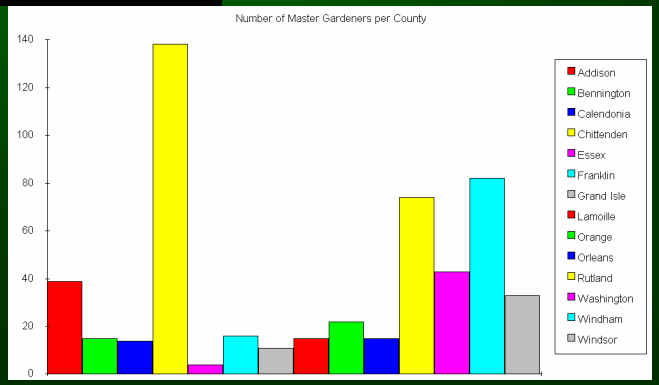
Present information as...



Maps

Tables

Graphs

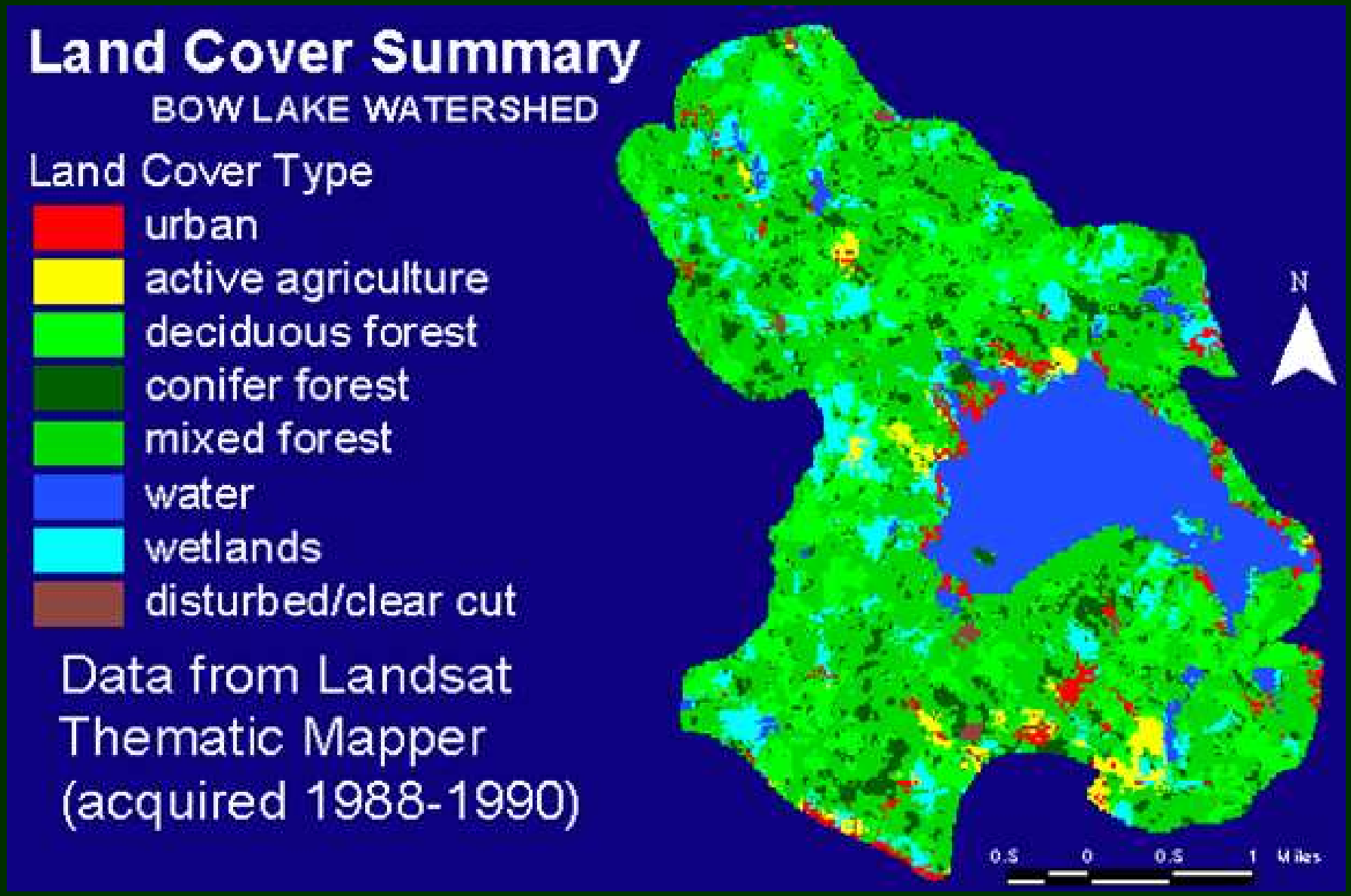


Common types of GIS data

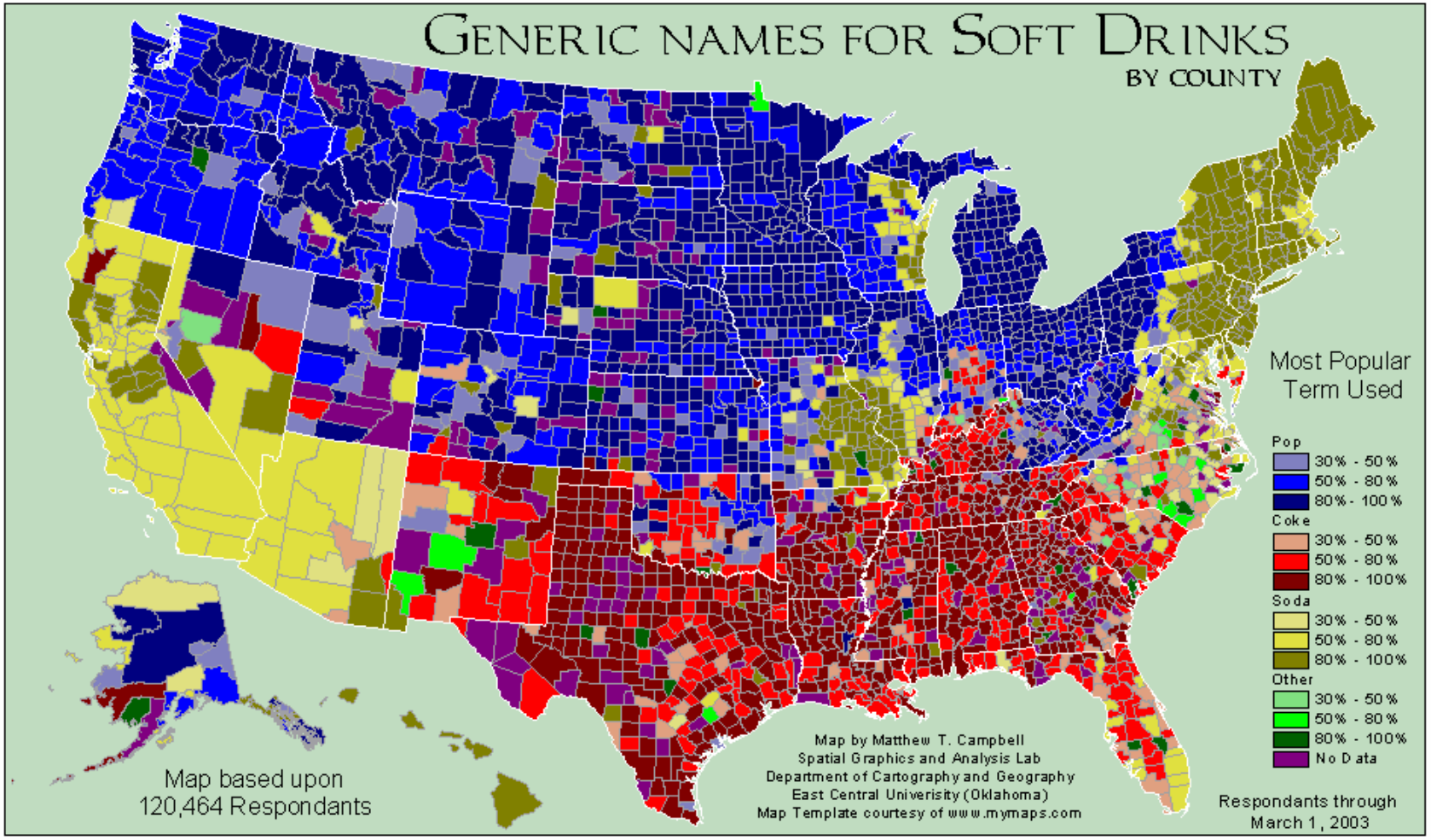
- Topographic maps
- Infrastructure
  - Roads, Rail, Trails, Water, Sewer, Phone lines
- Geology
- Hydrography
  - Lakes, Ponds, Rivers, Streams
- Demographic (Census)
- Wetlands
  - NWI, USGS, Remote Sensing
- Soils
- Groundwater resources
- Landcover/Landuse
- Watershed delineations
- Wildlife Action Plan

Land Cover Summary

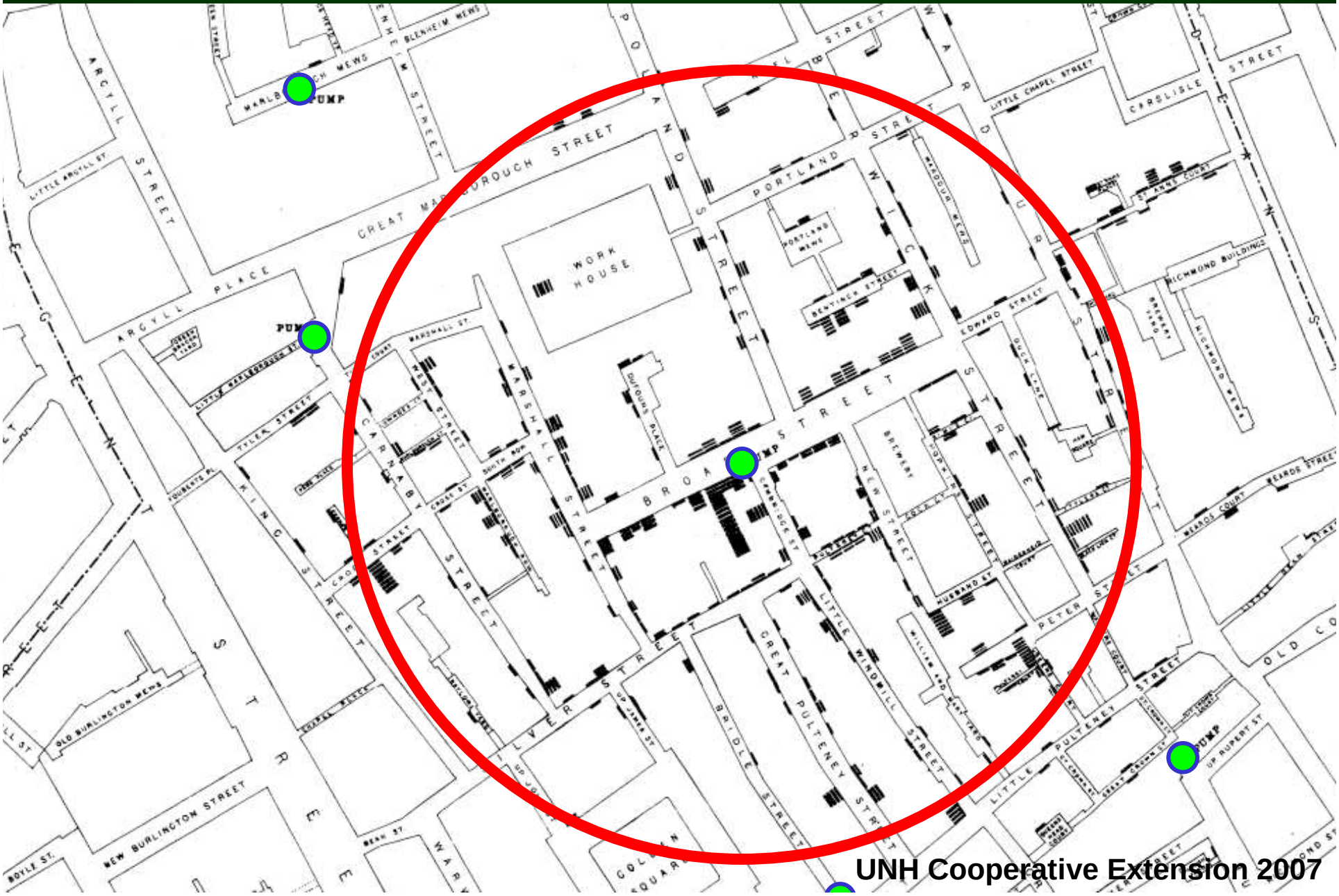
BOW LAKE WATERSHED



Not all GIS uses are related to “bugs and bunnies”



THE GHOST MAP...



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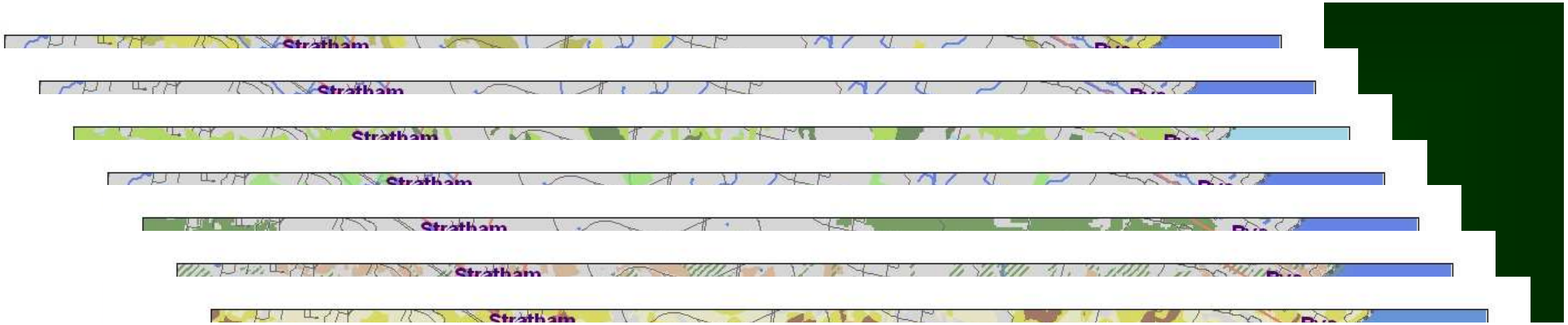
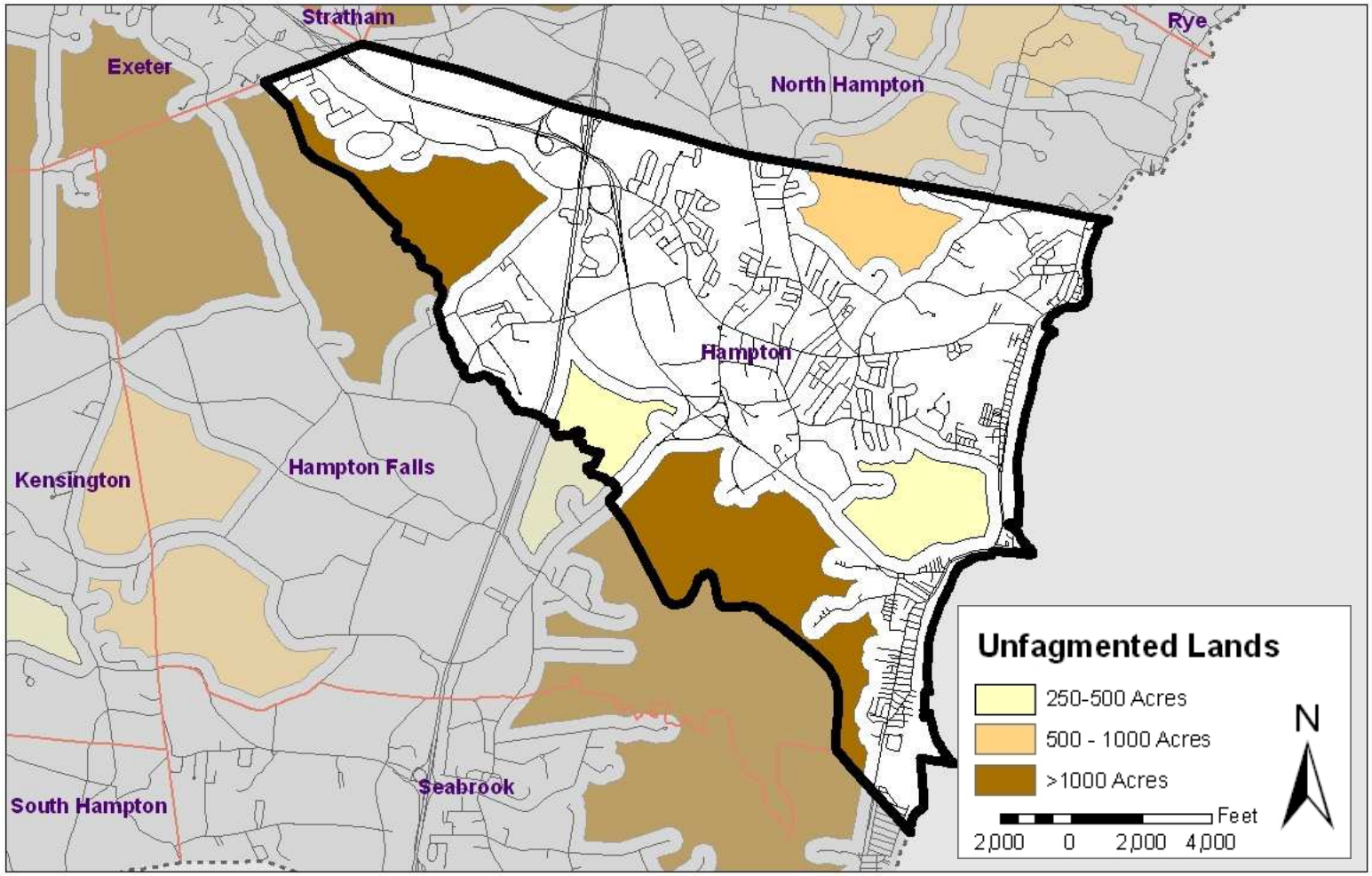
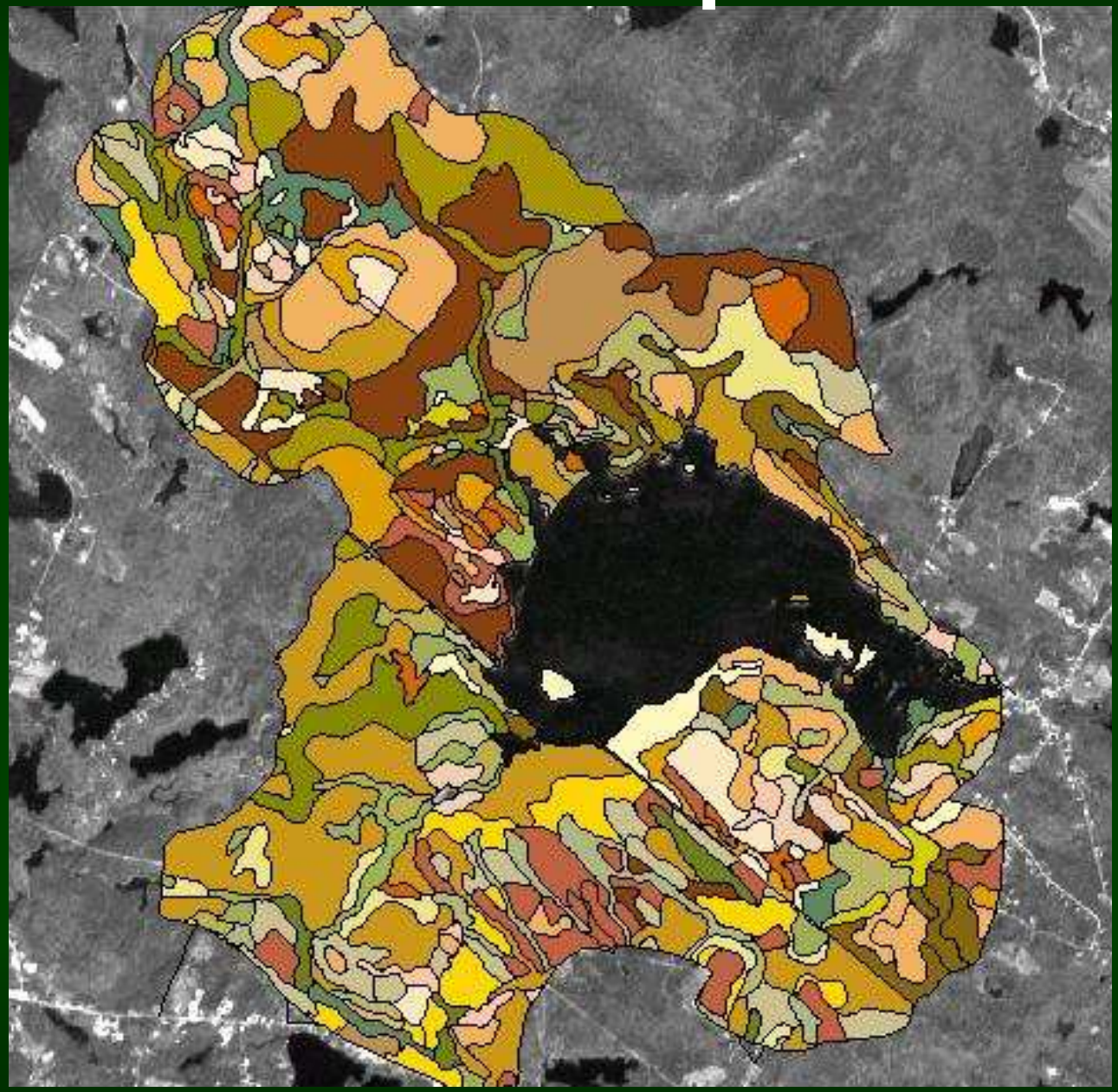
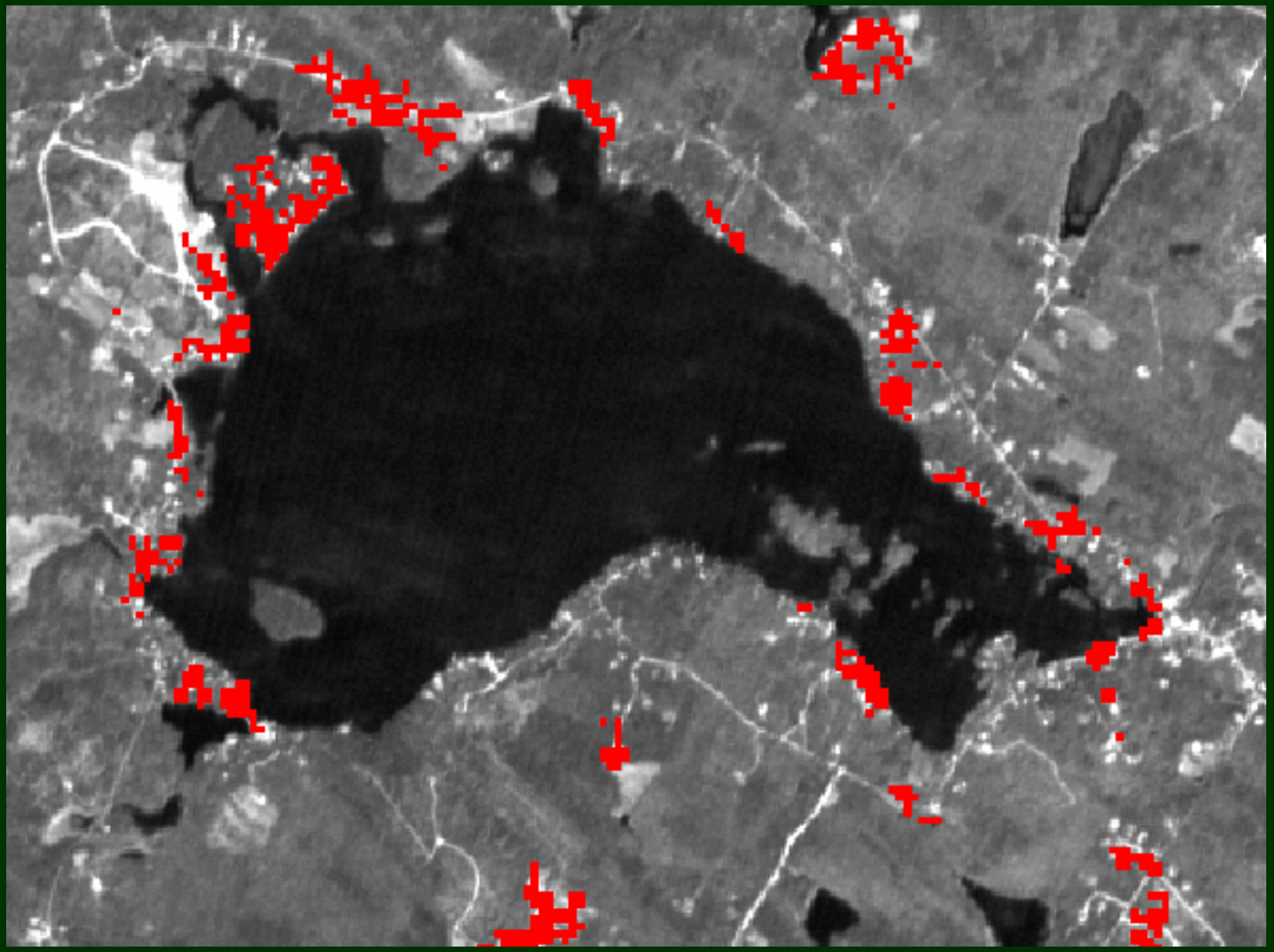



Stratham
Exeter
North Hampton
Rye
Hampton
Kensington
Hampton Falls
Seabrook
South Hampton
Unfagmented Lands
250-500 Acres
500 - 1000 Acres
>1000 Acres
N
Feet
2,000 0 2,000 4,000

Bad Map



Interesting Map



METADATA…

…helps keep track of GIS data for you and others

Who developed the data?

What was the original source data?

When was the data developed?

When was the last update?

What is the scale of the data?

What are the attributes of the data?

Who to contact to find out more?

GIS Options

In your web browser

Google Maps

USGS science for a changing world
seamless data server

NH GRANIT DATA MAPPER

TerraServer USA

topozone

With streamed data

NASA World Wind 1.3
worldwind.arc.nasa.gov

Google Earth

Using downloaded data

ArcGIS 9.2

TERRAIN NAVIGATOR

ArcView GIS 3.3

TatukGIS

ACCUGLOBE DESKTOP 2007

fGIS

Questions?