

St. Lawrence County Biomass Inventory

A presentation to the St.
Lawrence County Planning Board

July, 2009



The St. Lawrence County Biomass Inventory

In 2008 a collaborative effort between St. Lawrence University and the St. Lawrence County Planning Office was undertaken to determine location and quantity of Biomass in the county.

The goal of the biomass inventory project was to identify the location and quantity of land areas within St. Lawrence County suitable for sustainable grass and woody biomass resource production.



The St. Lawrence County Biomass Inventory

We found this information by looking at land characteristics such as:

- Land Use/Land Cover (LULC)
- Soil type
- Wetlands
- Hydrography
- Topography
- Adirondack Park Land Classification
- Real Property (Tax) Information

We wanted to find out more than just where the biomass is, rather, where it is completely unrestricted by environmental constraints or existing production agriculture practices.

The St. Lawrence County Biomass Inventory

We attached a number of restrictive parameters to ensure that the land identified is truly surplus land.

Some parameters that were attached include:

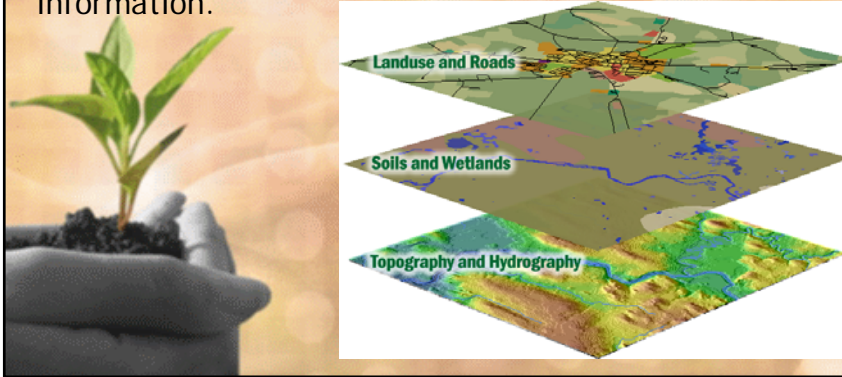
- Restricting identified areas to those at least 100 feet away from bodies of water and wetlands
- Land with the best soils (Class 1-3) was excluded
 - Areas with shallow and steep slopes (1-3% and 15% and above) were excluded
 - Land currently assessed for agriculture or commercial uses was excluded
 - Primitive and Wilderness classified lands in the Adirondack Park were excluded

The St. Lawrence County Biomass Inventory

We did this analysis using Geographic Information Systems (GIS) Software.

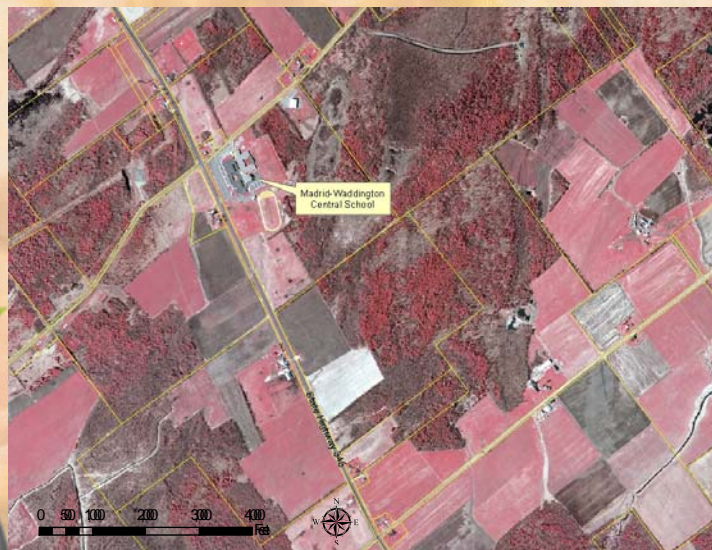
What is GIS?

GIS is a method of using computer systems to collect, organize, manipulate and display all forms of geographically referenced information.



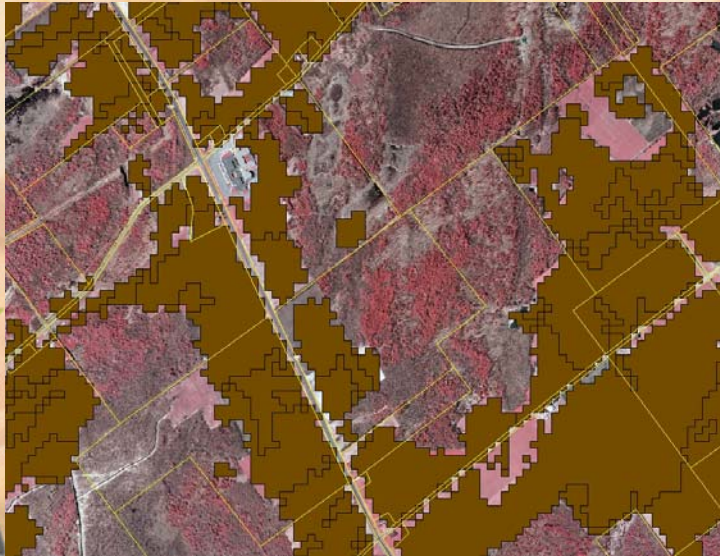
Town of Madrid
SH 345 Corridor
Locator Map

Aerial Photo
With Parcel
Boundaries



Town of Madrid
SH 345 Corridor
Land Use/Land
Cover Map

Showing
Grassland
Areas



Town of Madrid
SH 345 Corridor
Wetlands Map

Land Constrained
By Wetlands
(with 100 foot buffer)



Town of Madrid
SH 345 Corridor
Soil Map

Showing Soil
Type Classified as
4 or Higher



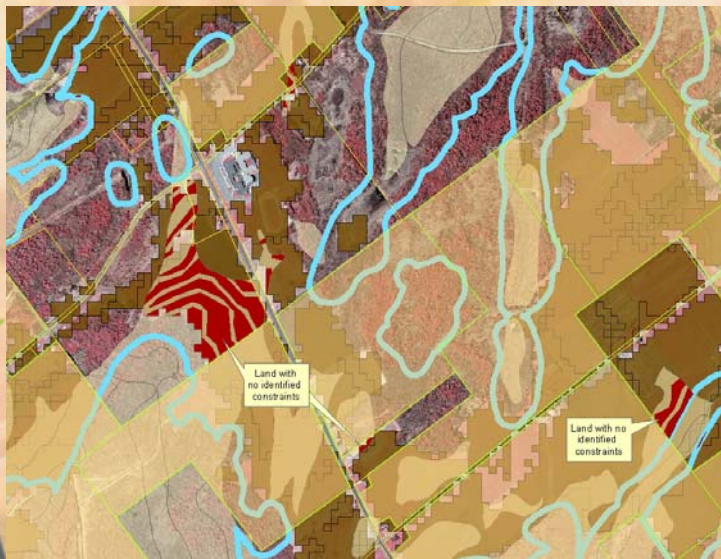
Town of Madrid
SH 345 Corridor
Assessed Agricultural
Land Map

Shaded parcels have
an agricultural
assessment



Town of Madrid
SH 345 Corridor
Inventory Map

Consolidated land
characteristics
showing land with
no identified
constraints



In summary:

The value of the biomass inventory project is not necessarily in the outcome, but in the data generated and the process.

Knowing what we know, we can better plan for the sustainable harvest of biomass as an agricultural and energy resource.

Thank you for your attention.

Questions?