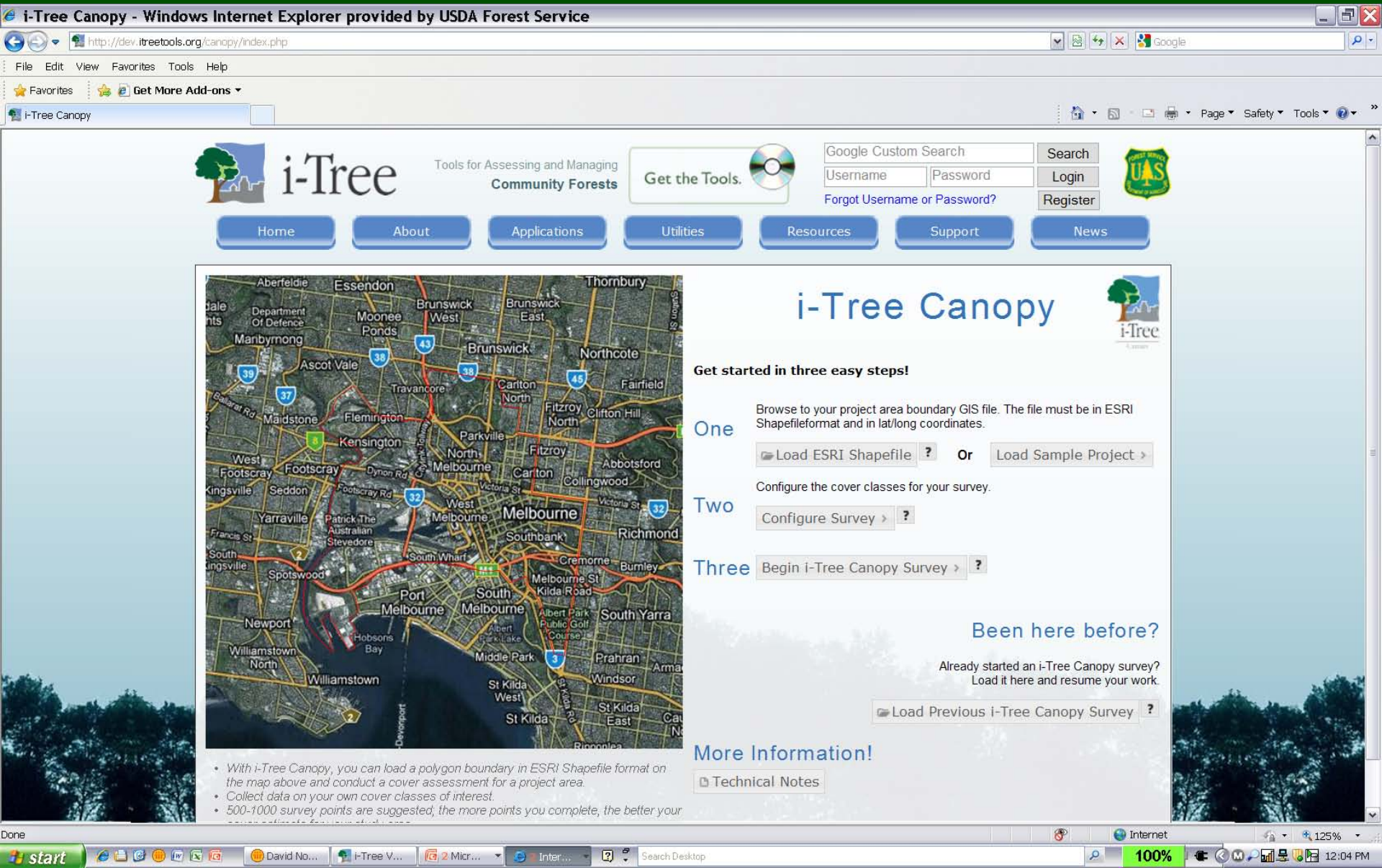
www.itreetools.org

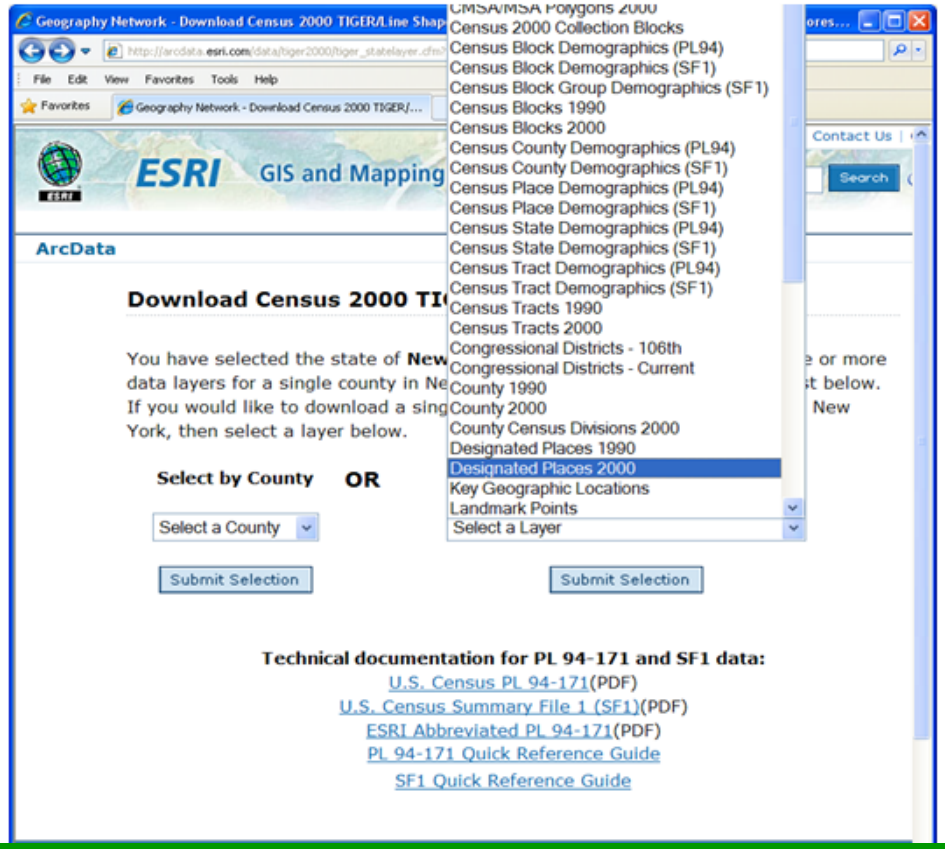
i-Tree Canopy



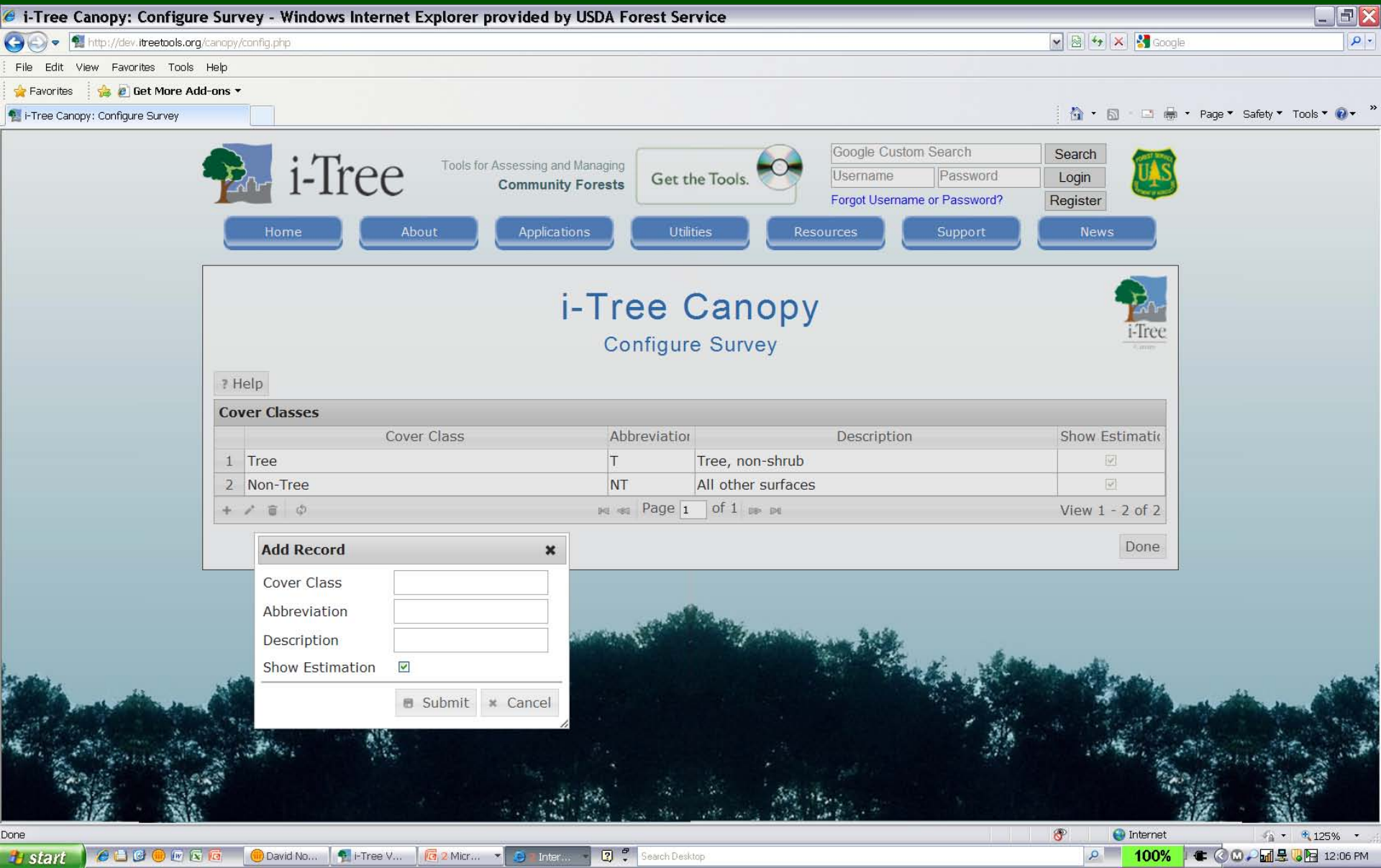
Processing a boundary file for use in i-Tree Canopy

Download a boundary file from the ESRI website >

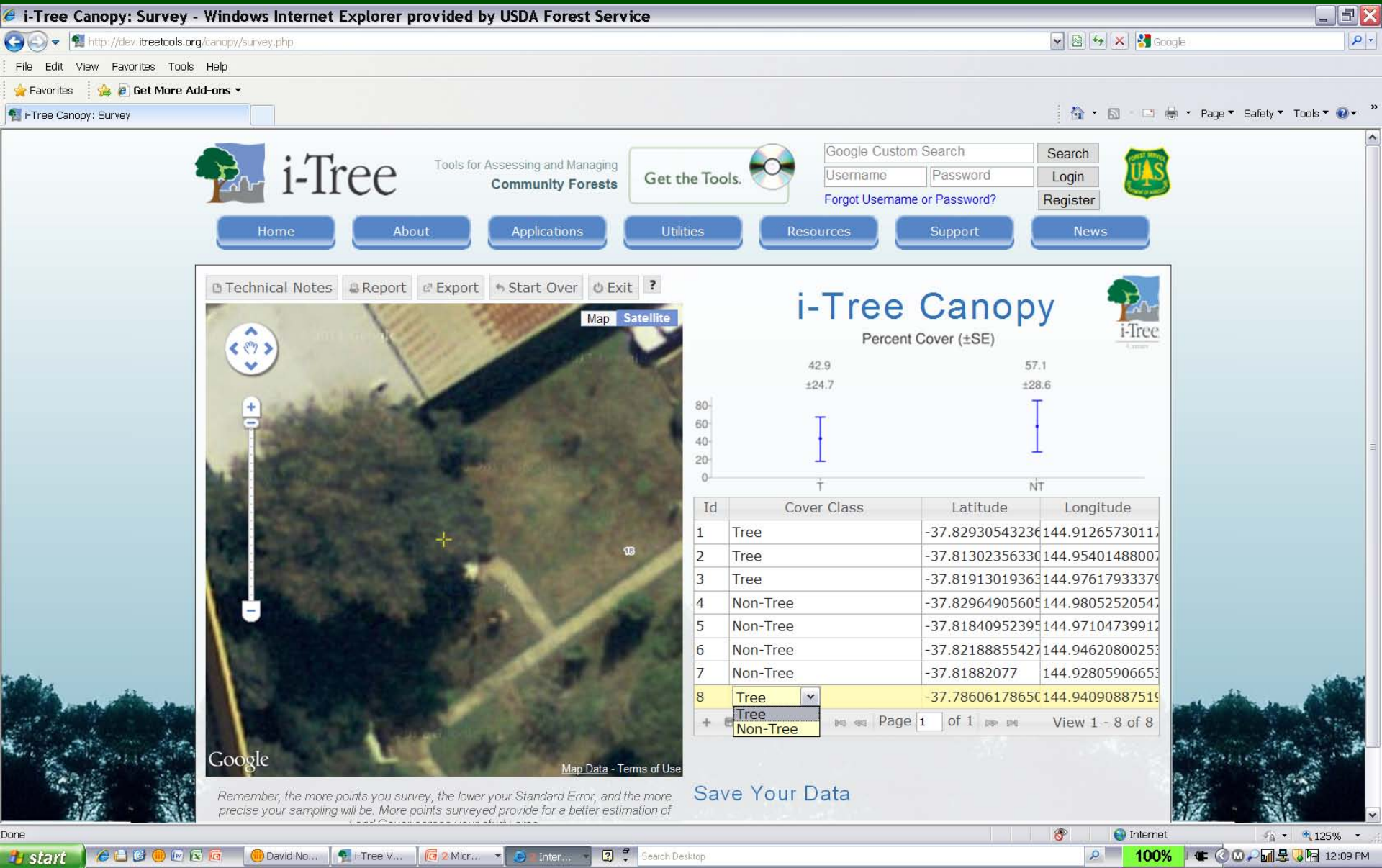
- Go to the ESRI Census 2000 TIGER Data website.
- Select the State of interest.
- In the **Select By Layer** pull-down menu select the boundary file you are interested in analyzing (Figure 1).
    - The **Designated Places 2000** selection will provide boundaries for cities, towns etc.
- Select **Submit Selection**
- Check the county of interest and select **Proceed to Download.**
- Select **Download File** and unzip the file to extract the all the files within it; .dbf, .shp and .shx.



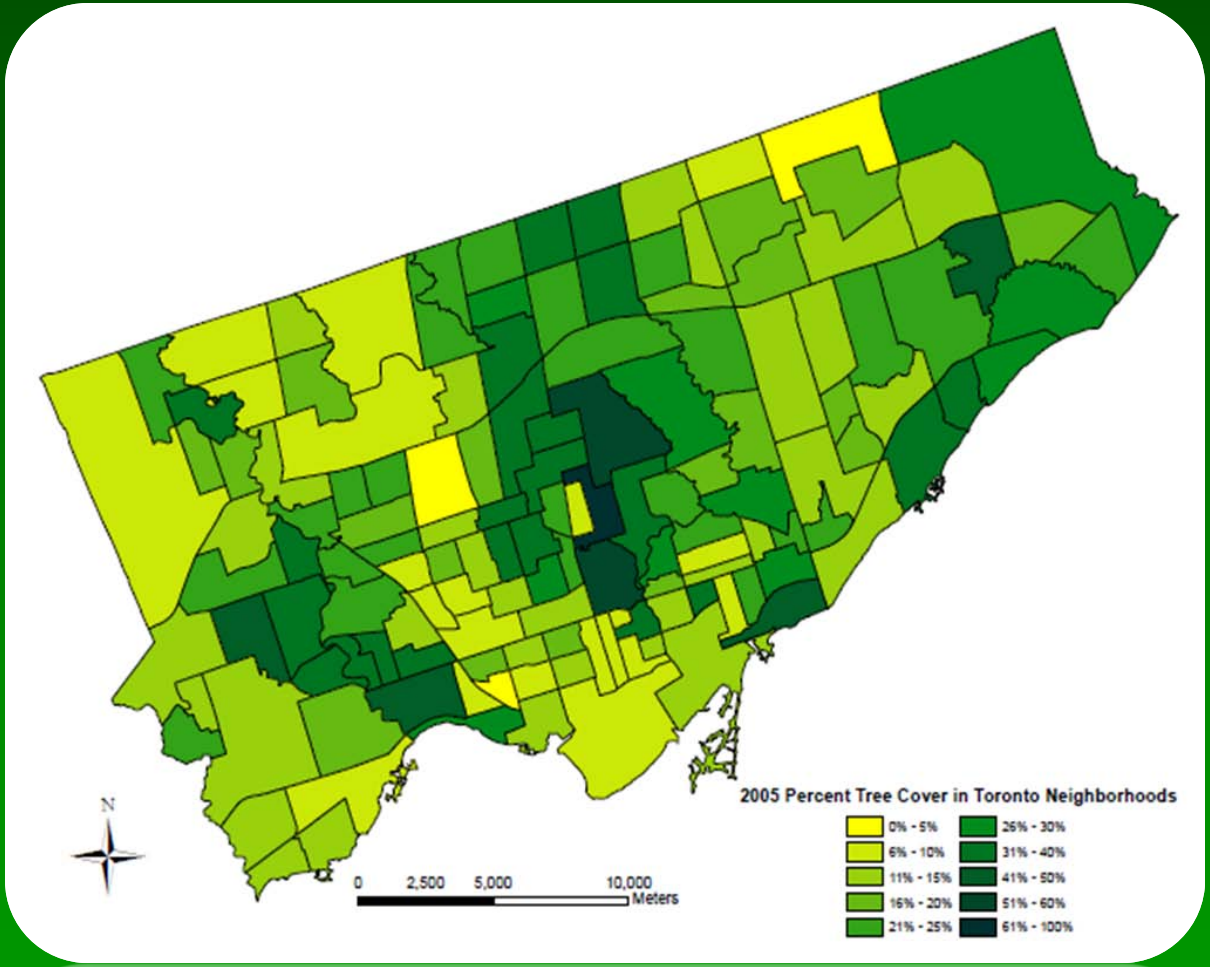
You choose the cover classes



Classify random points

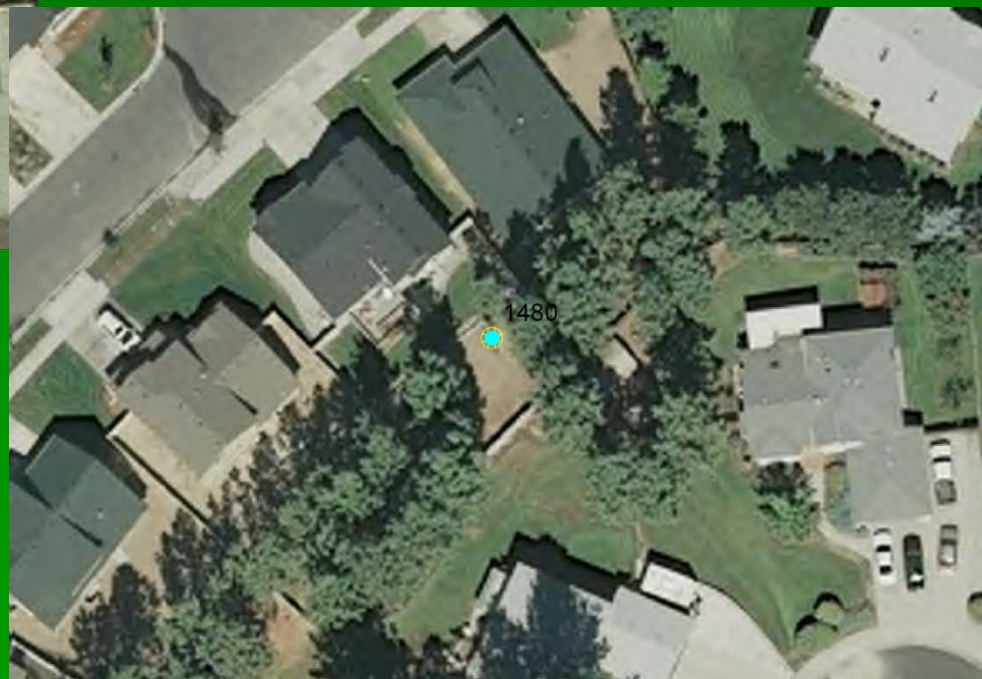


PI Mapping


2005 Percent Tree Cover in Toronto Neighborhoods
0% - 5%
6% - 10%
11% - 15%
16% - 20%
21% - 25%
26% - 30%
31% - 40%
41% - 50%
51% - 60%
61% - 100%
N
0
2,500
5,000
10,000
Meters

Change Analysis

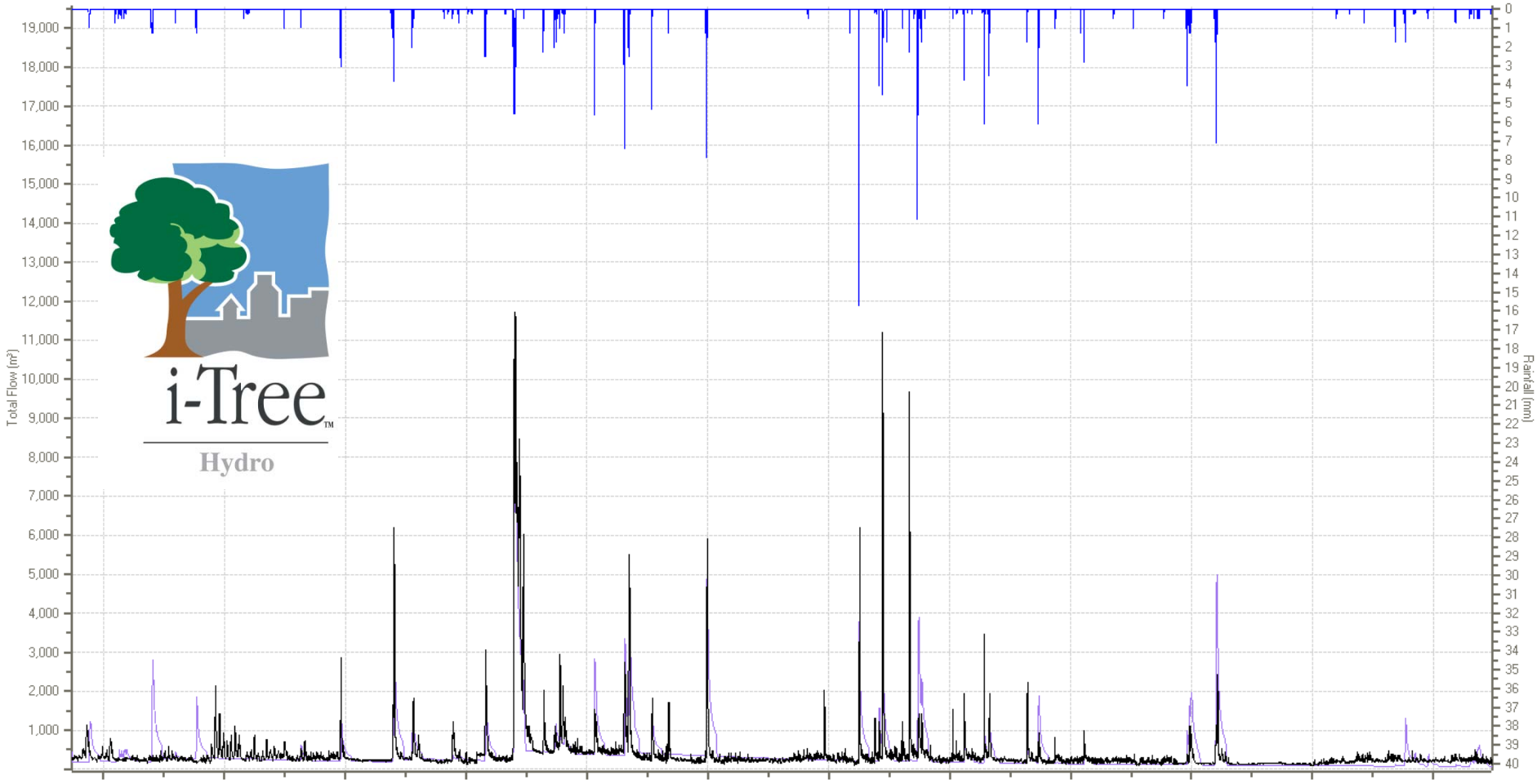
2002



2007

i-Tree-Hydro

- Separate GIS program
- Calibrates against stream flow data



i-Tree Hydro

- More complicated model
- Simulates stream flow
  - Watershed based analysis
- More data requirements
- Better than just estimating interception /transpiration
  - Links to flow
  - Just because a tree intercepts water does not mean it affects stream flow
  - Hydro processes being linked to Eco and Design

Hydro Steps

1) Determine your watershed
2) Download and process national digital elevation data
3) Determine cover attributes
4) Get started with Hydro
5) Calibrate the model
6) Model new scenarios

dnowak@fs.fed.us

nrs.fs.fed.us/units/urban