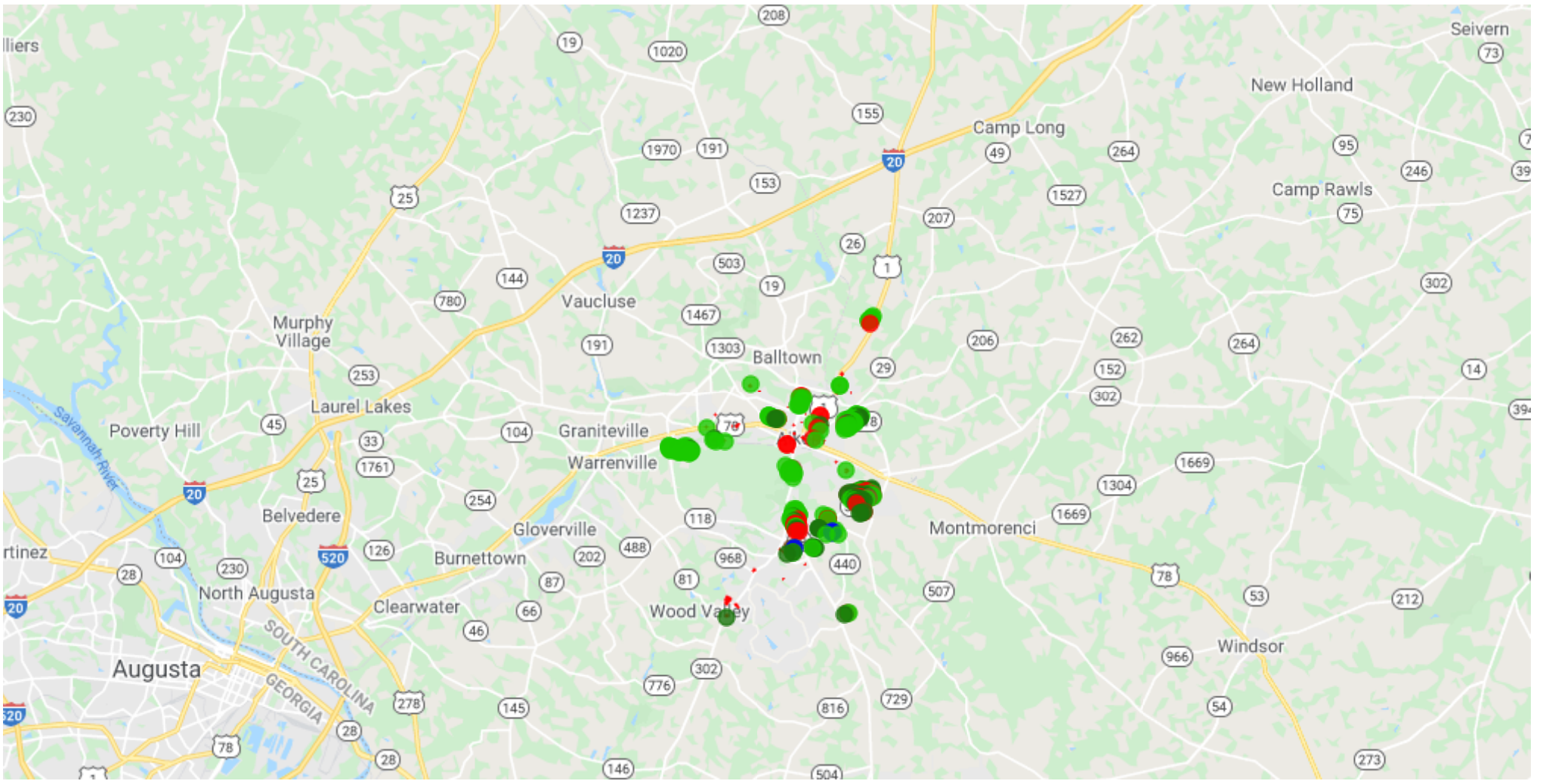
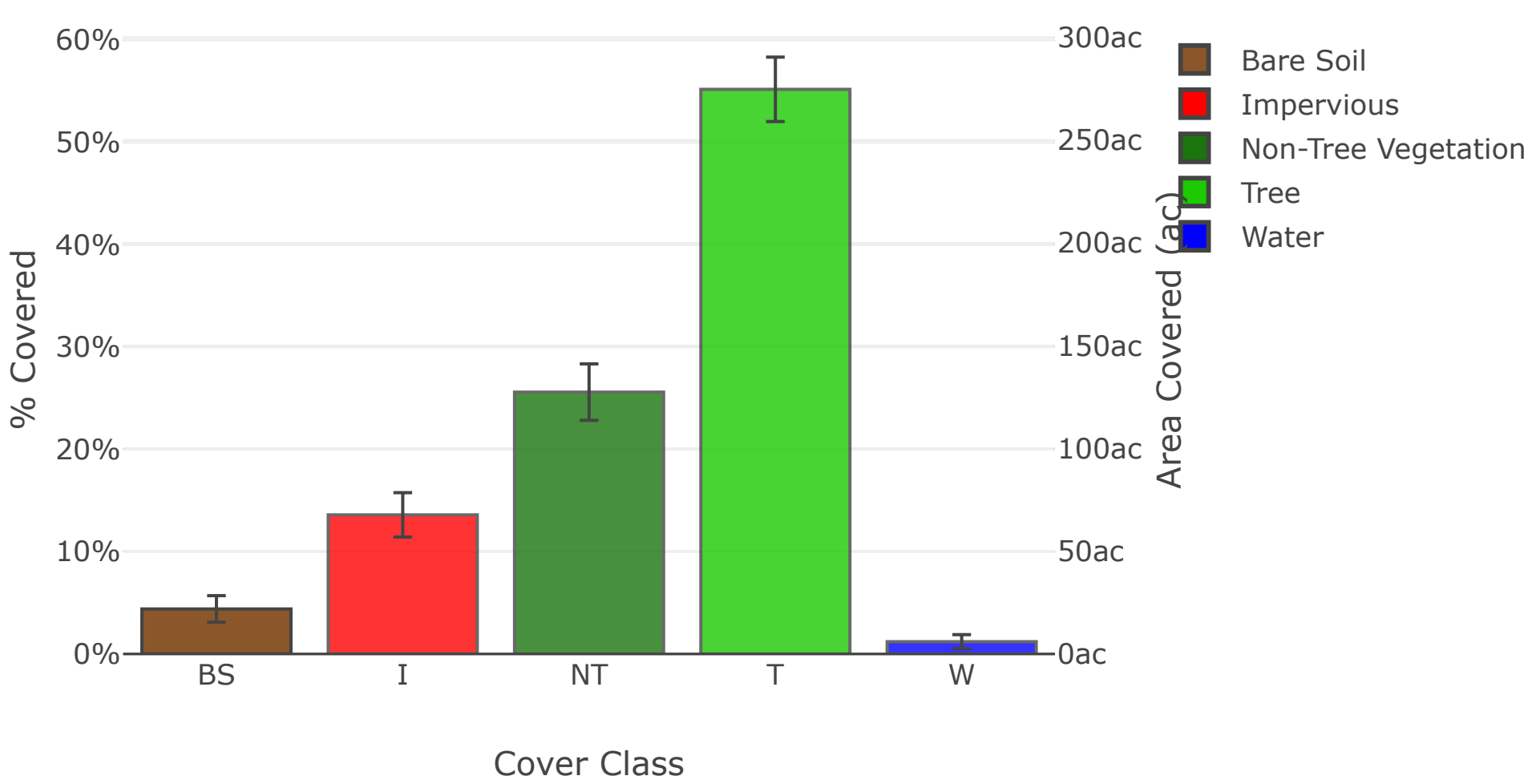
i-Tree Canopy v7.0

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 4/29/2020



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
BS	Bare Soil	Areas with exposed soil and no vegetative or impervious cover	11	4.40 ± 1.30	21.91 ± 6.46
I	Impervious	Buildings, sidewalks, roads, and other impervious surfaces	34	13.60 ± 2.17	67.71 ± 10.79
NT	Non-Tree Vegetation	Areas covered with shrubs, grass or herbaceous groundcovers.	64	25.60 ± 2.76	127.46 ± 13.74
T	Tree	Areas covered by the leaves, branches and stems of trees.	138	55.20 ± 3.15	274.84 ± 15.66
W	Water	Lakes, ponds, streams or other water features	3	1.20 ± 0.69	5.97 ± 3.45
Total			**250**	**100.00**	**497.90**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO_2 Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	375.17	±21.38	1,375.61	±78.38	$31,992	±1,823
Stored in trees (Note: this benefit is not an annual rate)	9,421.81	±536.83	34,546.65	±1,968.36	$803,449	±45,778

Currency is in USD. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Carbon sequestered is based on 1.365 T/ac/yr. Carbon stored is based on 34.281 T/ac. Carbon is valued at $23.26/T. (English units: T = tons (2,000 pounds), ac = acres)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	252.48	±14.39	$168	±10
NO2	Nitrogen Dioxide removed annually	1,091.46	±62.19	$124	±7
O3	Ozone removed annually	14,807.38	±843.68	$11,780	±671
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	3,367.62	±191.88	$10,555	±601
PM2.5	Particulate Matter less than 2.5 microns removed annually	781.84	±44.55	$30,866	±1,759
SO2	Sulfur Dioxide removed annually	1,613.34	±91.92	$62	±4
Total		**21,914.13**	**±1,248.60**	**$53,556**	**±3,051**

Currency is in USD. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in lb/ac/yr @ $/lb/yr:
CO 0.919 @ $0.67 | NO2 3.971 @ $0.11 | O3 53.876 @ $0.80 | PM10* 12.253 @ $3.13 | PM2.5 2.845 @ $39.48 | SO2 5.870 @ $0.04 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Mgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	2.66	±0.15	$23,734	±1,352
E	Evaporation	23.09	±1.32	N/A	N/A
I	Interception	23.09	±1.32	N/A	N/A
T	Transpiration	44.78	±2.55	N/A	N/A
PE	Potential Evaporation	196.08	±11.17	N/A	N/A
PET	Potential Evapotranspiration	172.08	±9.80	N/A	N/A

Currency is in USD. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in Mgal/ac/yr @ $/Mgal/yr:
AVRO 0.010 @ $8,936.00 | E 0.084 @ N/A | I 0.084 @ N/A | T 0.163 @ N/A | PE 0.713 @ N/A | PET 0.626 @ N/A (English units: Mgal = millions of gallons, ac = acres)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.