

i-Tree Canopy_{v6.1}

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 4/14/20



Cover Class	Description	Abbr.	Points	% Cover
Tree	Tree, non-shrub	T	17	17.0 ±3.76
Non-Tree	All other surfaces	NT	83	83.0 ±3.76

Tree Benefit Estimates

Abbr.	Benefit Description	Value (USD)	±SE	Amount	±SE
CO	Carbon Monoxide removed annually	365,019.05 USD	±80,654.78	4,305.44 T	±951.33
NO2	Nitrogen Dioxide removed annually	628,426.58 USD	±138,857.43	23,476.53 T	±5,187.38
O3	Ozone removed annually	32,727,189.28 USD	±7,231,415.13	233,815.87 T	±51,664.07
PM2.5	Particulate Matter less than 2.5 microns removed annually	67,653,096.09 USD	±14,948,659.93	11,361.51 T	±2,510.44
SO2	Sulfur Dioxide removed annually	109,836.12 USD	±24,269.44	14,794.32 T	±3,268.96
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	23,759,097.07 USD	±5,249,821.26	78,319.62 T	±17,305.54
CO2seq	Carbon Dioxide sequestered annually in trees	2,215,275,375.12 USD	±489,488,288.61	47,797,332.36 T	±10,561,321.04
CO2stor	Carbon Dioxide stored in trees (Note: this benefit is not an annual rate)	55,633,876,887.95 USD	±12,292,887,598.82	1,200,370,362.18 T	±265,234,399.70

i-Tree Canopy Annual Tree Benefit Estimates based on these values in lbs/acre/yr and USD/T/yr: CO 0.902 @ 85.08 USD | NO2 4.917 @ 26.86 USD | O3 48.968 @ 140.47 USD | PM2.5 2.379 @ 5,975.67 USD | SO2 3.098 @ 7.45 USD | PM10 16.403 @ 304.43 USD | CO2seq 10,010.267 @ 46.51 USD | CO2stor is a total biomass amount of 251,395.359 @ 46.51 USD*

Note: Currency is in USD

Note: Standard errors of removal amounts and benefits were calculated based on standard errors of sampled and classified points.

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.

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