

# i-Tree Canopy v7.0

## Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 5/1/2020



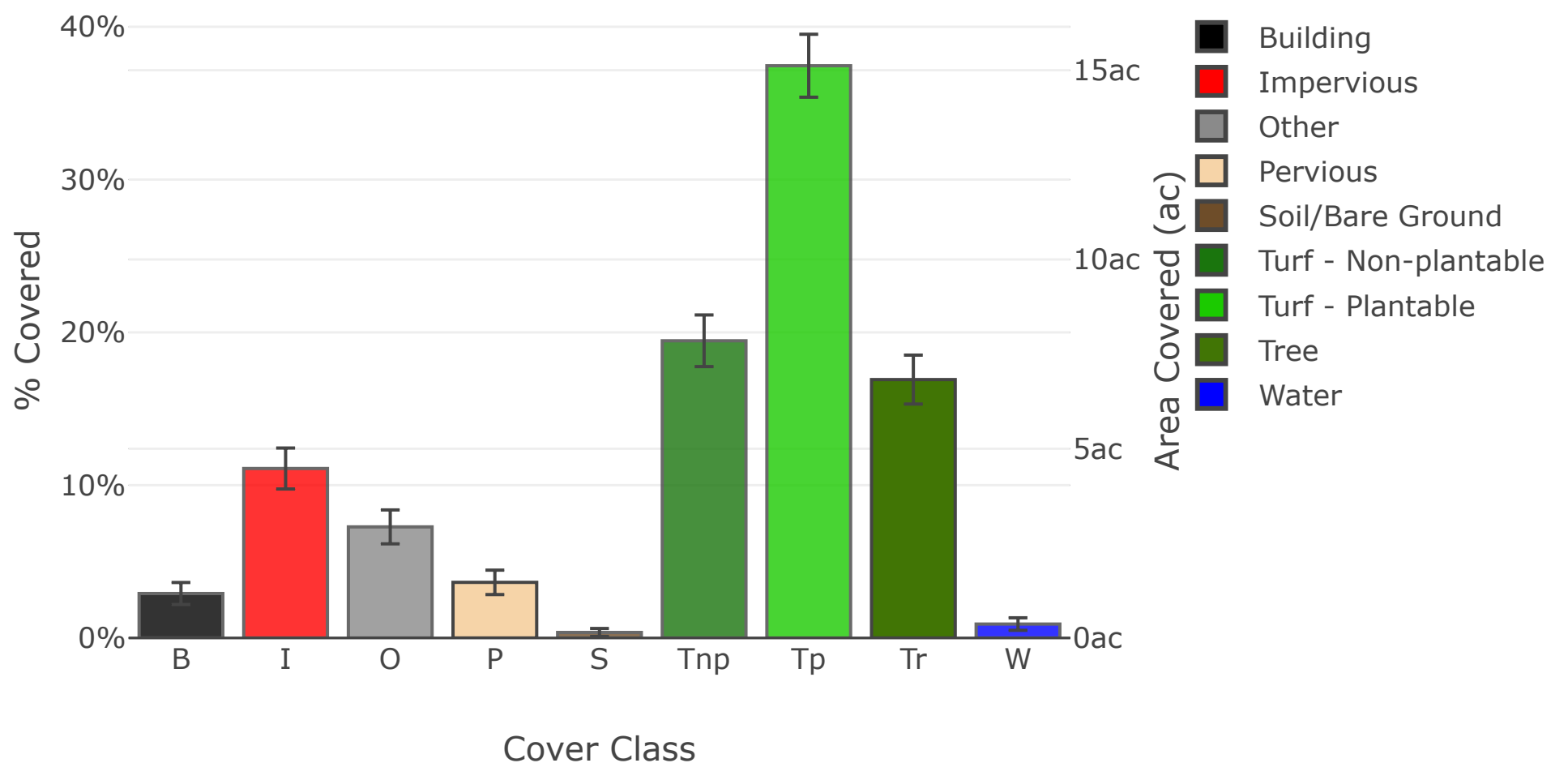
### Riverside Park



Google

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### Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
B	Building	building, infrastructure	16	2.91 ± 0.72	1.17 ± 0.29
I	Impervious	road, paved pathway, sidewalk, tennis court	61	11.09 ± 1.34	4.48 ± 0.54
O	Other	other, unknown	40	7.27 ± 1.11	2.94 ± 0.45
P	Pervious	garden	20	3.64 ± 0.80	1.47 ± 0.32
S	Soil/Bare Ground	bare ground, unpaved pathway	2	0.36 ± 0.26	0.15 ± 0.10
Tnp	Turf - Non-plantable	golf course feature, athletic field	107	19.45 ± 1.69	7.85 ± 0.68
Tp	Turf - Plantable	no conflict	206	37.45 ± 2.06	15.12 ± 0.83
Tr	Tree	canopy cover	93	16.91 ± 1.60	6.82 ± 0.65
W	Water	pond, lake, stream, pool	5	0.91 ± 0.41	0.37 ± 0.16
<b>Total</b>			<b>550</b>	<b>100.00</b>	<b>40.36</b>

### Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO <sub>2</sub> Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	9.31	±0.88	34.15	±3.23	\$794	±75
Stored in trees (Note: this benefit is not an annual rate)	233.93	±22.11	857.75	±81.08	\$19,949	±1,886

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	7.39	±0.70	\$5	±0
NO <sub>2</sub>	Nitrogen Dioxide removed annually	45.52	±4.30	\$11	±1
O <sub>3</sub>	Ozone removed annually	344.56	±32.57	\$755	±71
PM <sub>10</sub> *	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	49.53	±4.68	\$155	±15
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns removed annually	25.88	±2.45	\$2,283	±216
SO <sub>2</sub>	Sulfur Dioxide removed annually	26.01	±2.46	\$2	±0
<b>Total</b>		<b>498.89</b>	<b>±47.16</b>	<b>\$3,212</b>	<b>±304</b>

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 1.083 @ \$0.67 | NO<sub>2</sub> 6.670 @ \$0.25 | O<sub>3</sub> 50.493 @ \$2.19 | PM<sub>10</sub>\* 7.259 @ \$3.13 | PM<sub>2.5</sub> 3.792 @ \$88.21 | SO<sub>2</sub> 3.811 @ \$0.07 (English units: lb = pounds, ac = acres)

### Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	142.87	±13.50	\$1,277	±121
E	Evaporation	660.13	±62.40	N/A	N/A
I	Interception	661.87	±62.56	N/A	N/A
T	Transpiration	738.12	±69.77	N/A	N/A
PE	Potential Evaporation	3,734.43	±352.99	N/A	N/A
PET	Potential Evapotranspiration	2,752.97	±260.22	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 Kgal/ac/yr @ \$/Kgal/yr:

AVRO 20.937 @ \$8.94 | E 96.738 @ N/A | I 96.993 @ N/A | T 108.167 @ N/A | PE 547.258 @ N/A | PET 403.431 @ N/A (English units: Kgal = thousands 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.



Use of this tool indicates acceptance of the [EULA](#).