King County Forest Carbon Program: 2018 Urban Forest Carbon Project
Year 6 (2025) Monitoring Report

Project Operator Name: King County Department of Natural Resources and Parks
Project Name: King County 2018 Urban Forest Carbon Project
Project Location: Soaring Eagle Park Addition, Near Sammamish in King County, Washington
Deadline to Submit to CFC *(triennial on the date of the first Verification Report):* May 10, 2025

1. Has the contact info for the Project Operator changed? If so, please provide new contact info.

   No

2. Have there been changes in land ownership of the Project Area?

   No

3. Have there been any changes in the Project Design?

   No

4. Have there been any changes in the implementation or management of the Project?

   No

5. Have there been any significant tree or canopy losses? Are there any areas of canopy change, growth or loss, that are important to note? (Provide any Google Earth Imaging or photos to show no significant changes).

   There has been no significant tree or canopy loss based on comparison of the most recent aerial image on Google Earth (April 2025) with those from July 2018 (Year 0) and July 2022 (Year 3).

   See Attachment A: Google Earth Aerial Images of 2018 Urban Forest Carbon Project

   See Attachment B: i-Tree Canopy Reports of the Project Area from 2018, 2021, and 2025.

6. Please estimate the number of acres of significant soil disturbance since the previous monitoring report. Examples include plowing and removal of topsoil. For the purposes of these reports, areas of soil exposed by trees tipping over are not counted as areas of significant soil disturbance.

   No area within the Project Area has experienced significant soil disturbance.

7. Any other significant elements to report?

   There are no other significant elements to report.

8. Please provide a photo of staff in, or the public using, the forest. (This is optional.)

Signed on May 19th in 2025, by Kathleen Farley Wolf for King County Department of Natural Resources and Parks.

Signed by:
Kathleen Farley Wolf
A5B44BCDDA604EC...

Kathleen Farley Wolf
(206) 477-4363
kfarleywolf@kingcounty.gov

Attachment A

Attachment A: Google Earth Aerial Images of 2018 Urban Forest Carbon Project

FIGURE 1 JULY 2018 AERIAL IMAGE OF 2018 URBAN FOREST CARBON PROJECT

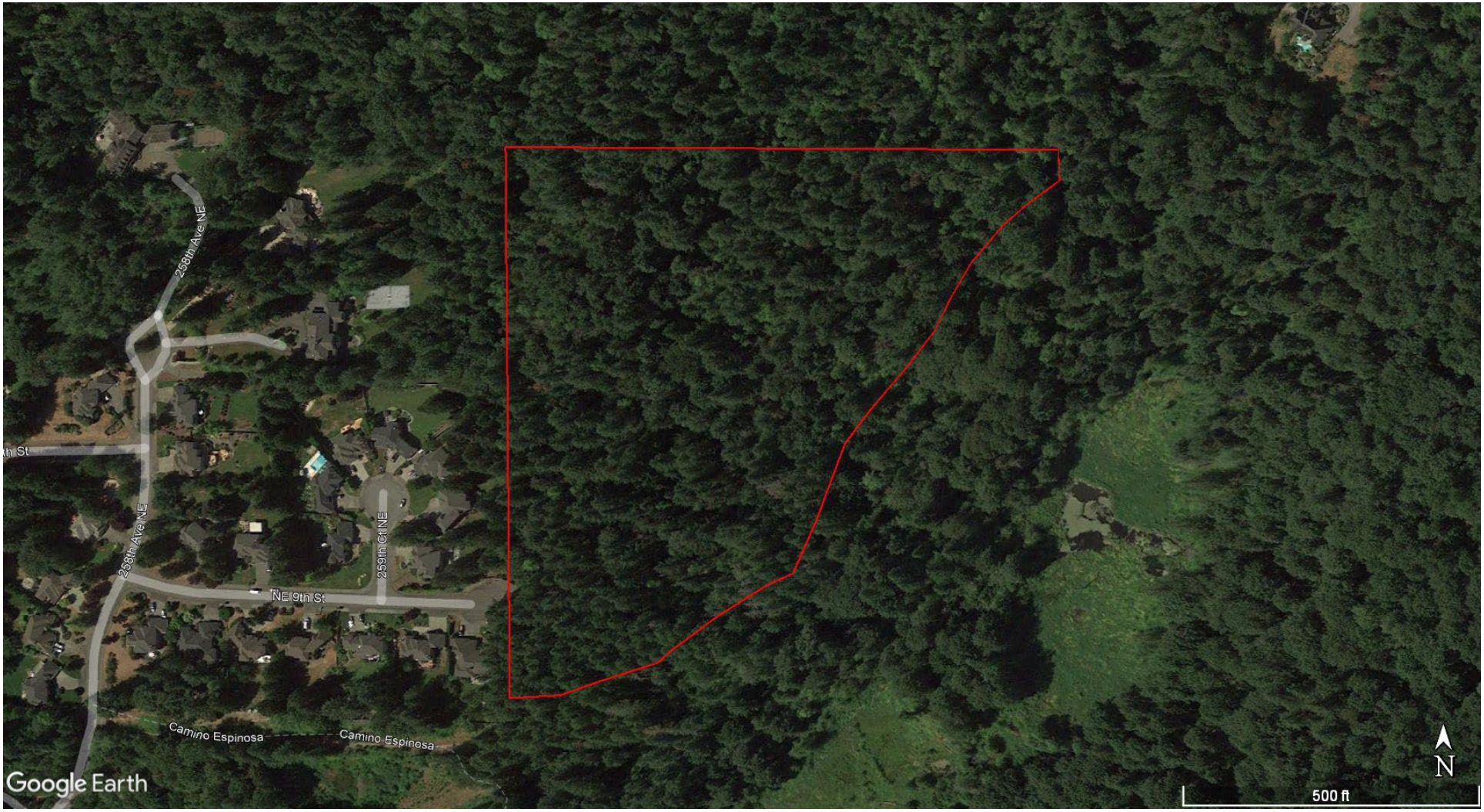


FIGURE 2 JULY 2022 (YEAR 3) AERIAL IMAGE OF 2018 URBAN FOREST CARBON PROJECT

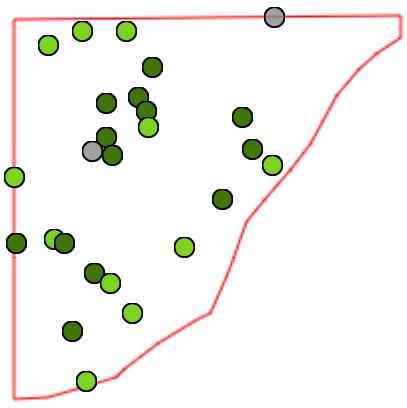
FIGURE 3 APRIL 2025 (YEAR 6) AERIAL IMAGE OF 2018 URBAN FOREST CARBON PROJECT

Attachment B

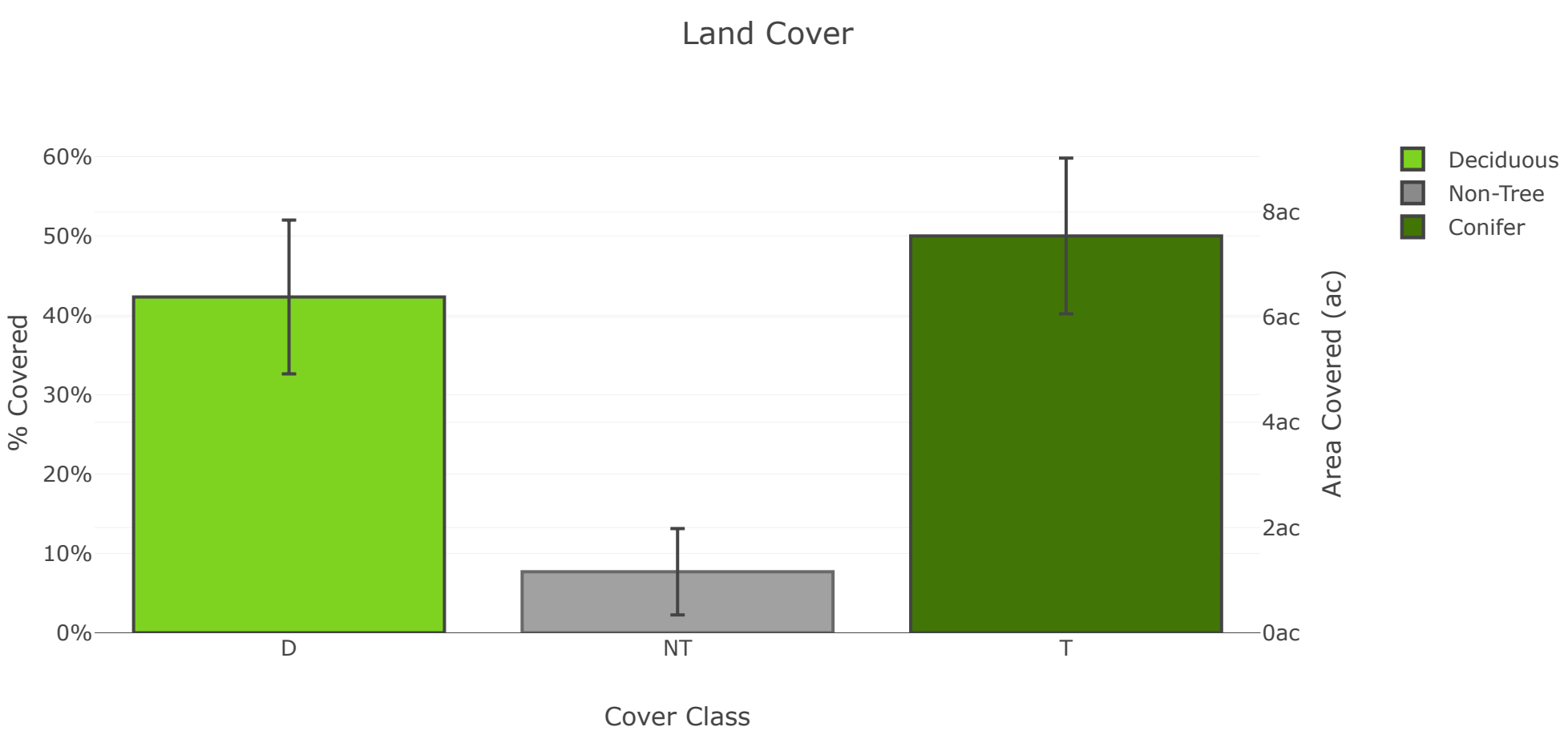
i-Tree Canopy Report

i-Tree Benefits and Cover Assessment

Estimated using random sampling statistics on 4/9/2025



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
D	Decidious		11	42.31 ± 9.69	6.38 ± 1.46
NT	Non-Tree	All other surfaces	2	7.69 ± 5.44	1.16 ± 0.82
T	Conifer	C	13	50.00 ± 9.81	7.54 ± 1.48
Total			**26**	**100.00**	**15.08**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO_2 Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	19.00	±1.08	69.66	±3.94	$8,220	±465
Stored in trees (Note: this benefit is not an annual rate)	477.08	±27.01	1,749.30	±99.03	$206,446	±11,688

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 1.365 T of Carbon, or 5.005 T of CO_2, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO_2, per ac and rounded. Value (USD) is based on $432.73/T of Carbon, or $118.02/T of CO_2 and rounded. (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	12.57	±0.71	$2	±0
NO2	Nitrogen Dioxide removed annually	62.88	±3.56	$1	±0
O3	Ozone removed annually	668.51	±37.85	$39	±2
SO2	Sulfur Dioxide removed annually	62.80	±3.56	$0	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	33.04	±1.87	$81	±5
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	237.56	±13.45	$233	±13
Total		**1,077.35**	**±60.99**	**$356**	**±20**

Currency is in USD and rounded. 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 and rounded:
CO 0.903 @ $0.20 | NO2 4.518 @ $0.01 | O3 48.036 @ $0.06 | SO2 4.512 @ $0.00 | PM2.5 2.374 @ $2.46 | PM10* 17.070 @ $0.98 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	12.50	±0.71	$112	±6
E	Evaporation	1,030.98	±58.37	N/A	N/A
I	Interception	1,036.13	±58.66	N/A	N/A
T	Transpiration	1,597.59	±90.45	N/A	N/A
PE	Potential Evaporation	7,838.94	±443.79	N/A	N/A
PET	Potential Evapotranspiration	7,838.94	±443.79	N/A	N/A

Currency is in USD and rounded. 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 and rounded:
AVRO 0.898 @ $8.94 | E 74.082 @ N/A | I 74.452 @ N/A | T 114.796 @ N/A | PE 563.274 @ N/A | PET 563.274 @ 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)

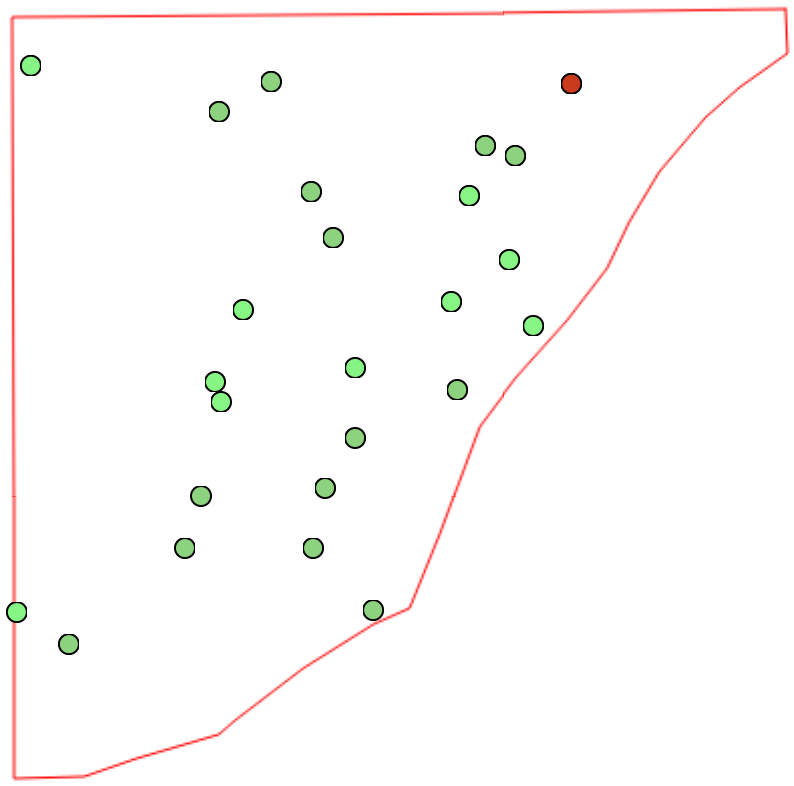
Limitations of i-Tree Canopy

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.

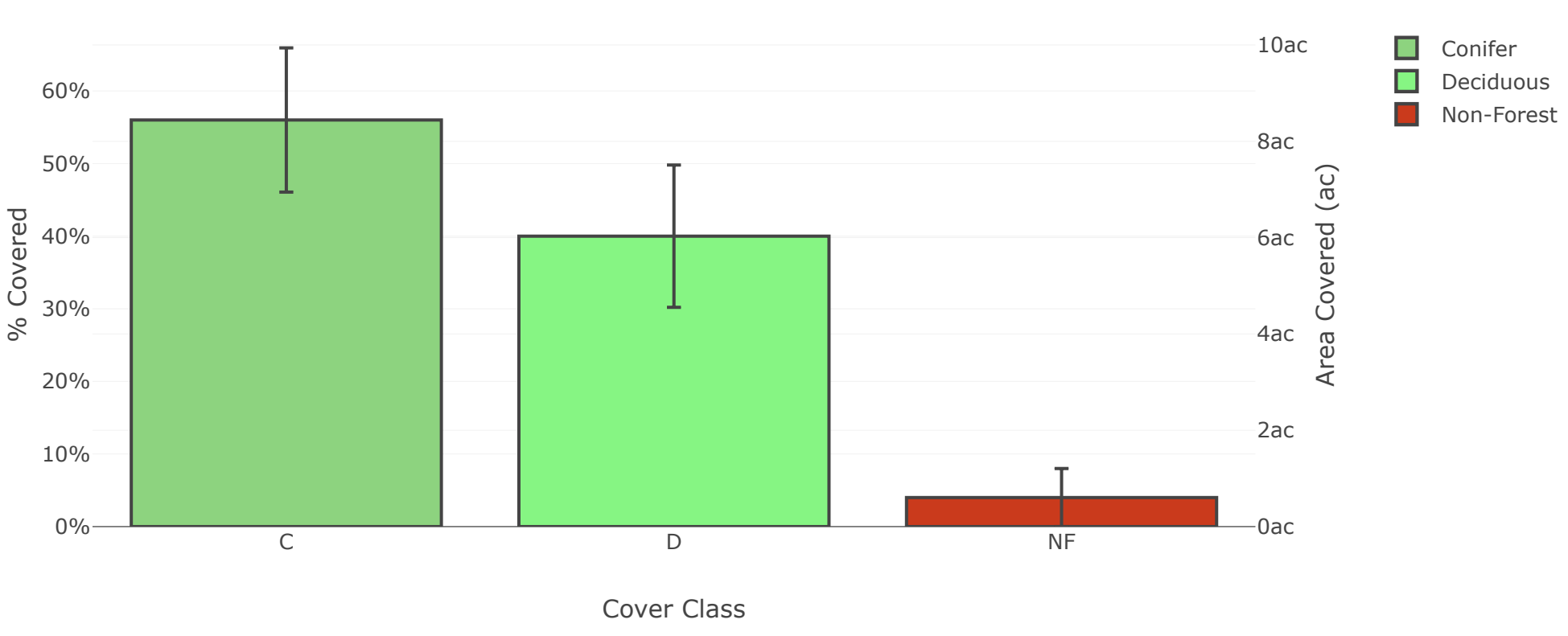
i-Tree Canopy v7.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 2/7/2022



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
C	Conifer	Coniferous canopy (estimated based on satellite imagery)	14	56.00 ± 9.93	8.44 ± 1.50
D	Deciduous	Deciduous canopy (estimated based on satellite imagery)	10	40.00 ± 9.80	6.03 ± 1.48
NF	Non-Forest	Not forest canopy (estimated based on satellite imagery)	1	4.00 ± 4.00	0.60 ± 0.60
Total			**25**	**100.00**	**15.08**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO_2 Equiv. (T)	±SE	Value (USD)	±SE
Squestered annually in trees	19.76	±0.81	72.44	±2.96	3,369 USD	±138
Stored in trees (Note: this benefit is not an annual rate)	496.17	±20.26	1,819.27	±74.27	84,617 USD	±3,454

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 1.365 T of Carbon, or 5.005 T of CO_2, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO_2, per ac and rounded. Value (USD) is based on 170.54 USD/T of Carbon, or 46.51 USD/T of CO_2 and rounded. (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	11.40	±0.47	1 USD	±0
NO2	Nitrogen Dioxide removed annually	101.56	±4.15	3 USD	±0
O3	Ozone removed annually	789.70	±32.24	225 USD	±9
SO2	Sulfur Dioxide removed annually	37.15	±1.52	1 USD	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	44.03	±1.80	632 USD	±26
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	215.41	±8.79	119 USD	±5
Total		**1,199.25**	**±48.96**	**982 USD**	**±40**

Currency is in USD and rounded. 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 @ USD/lb/yr and rounded:
CO 0.787 @ 0.12 USD | NO2 7.017 @ 0.03 USD | O3 54.562 @ 0.28 USD | SO2 2.567 @ 0.01 USD | PM2.5 3.042 @ 14.36 USD | PM10* 14.883 @ 0.55 USD (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	238.22	±9.73	2,129 USD	±87
E	Evaporation	1,725.80	±70.46	N/A	N/A
I	Interception	1,740.23	±71.04	N/A	N/A
T	Transpiration	3,546.50	±144.79	N/A	N/A
PE	Potential Evaporation	5,533.90	±225.92	N/A	N/A
PET	Potential Evapotranspiration	4,804.46	±196.14	N/A	N/A

Currency is in USD and rounded. 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 @ USD/Kgal/yr and rounded:
AVRO 16.459 @ 8.94 USD | E 119.240 @ N/A | I 120.236 @ N/A | T 245.035 @ N/A | PE 382.350 @ N/A | PET 331.951 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

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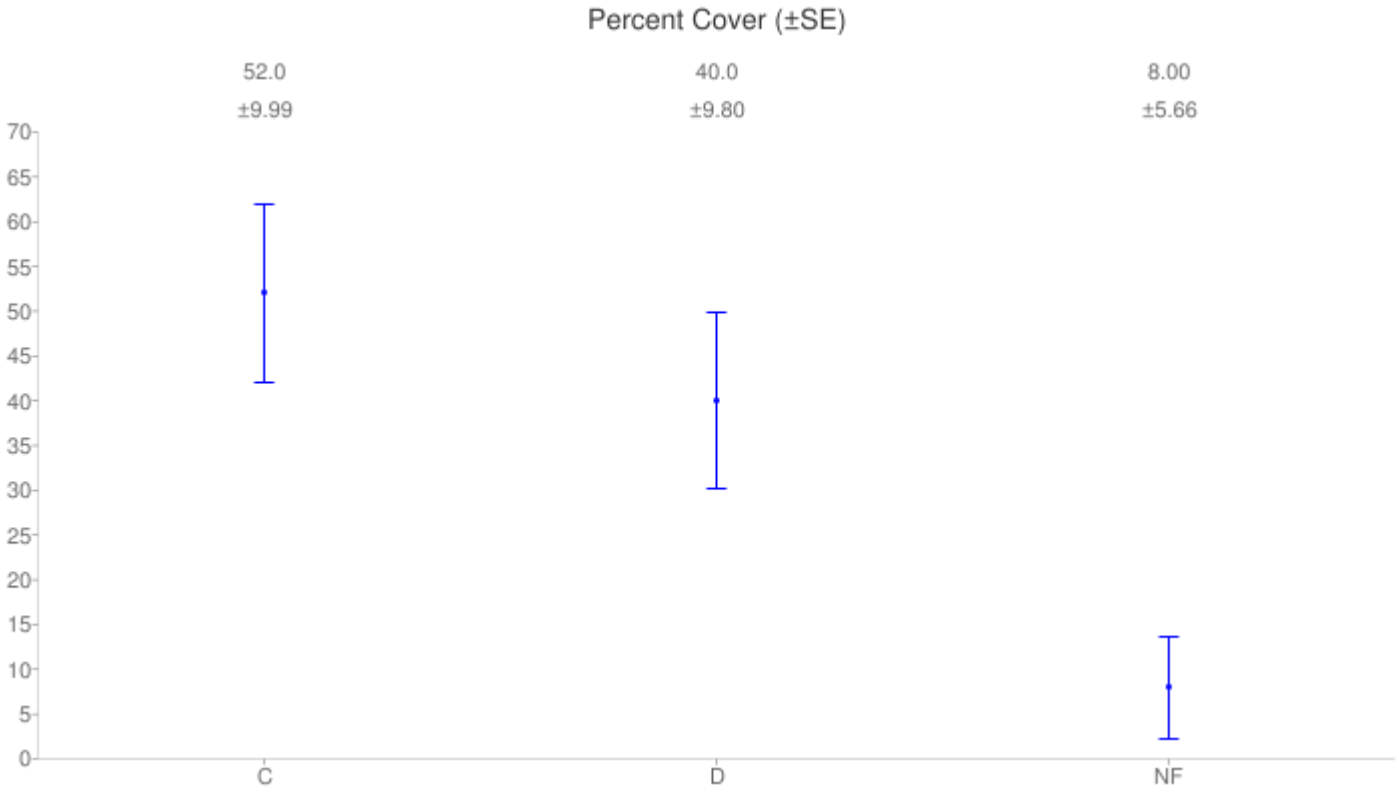
Additional support provided by:

Use of this tool indicates acceptance of the EULA.

i-Tree Canopy v6.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/08/18



Cover Class	Description	Abbr.	Points	% Cover
Conifer	Coniferous canopy (estimated based on satellite imagery)	C	13	52.0 ±9.99
Deciduous	Deciduous canopy (estimated based on satellite imagery)	D	10	40.0 ±9.80
Non-Forest	Not forest canopy (estimated based on satellite imagery)	NF	2	8.00 ±5.66

Tree Benefit Estimates

Abbr.	Benefit Description	Value (USD)	±SE	Amount	±SE
CO	Carbon Monoxide removed annually	1.33 USD	±0.08	10.96 lb	±0.65
NO2	Nitrogen Dioxide removed annually	3.33 USD	±0.20	97.68 lb	±5.76
O3	Ozone removed annually	215.27 USD	±12.70	759.47 lb	±44.79
PM2.5	Particulate Matter less than 2.5 microns removed annually	606.03 USD	±35.74	42.34 lb	±2.50
SO2	Sulfur Dioxide removed annually	0.49 USD	±0.03	35.73 lb	±2.11
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	114.35 USD	±6.74	207.17 lb	±12.22
CO2seq	Carbon Dioxide squestered annually in trees	3,228.95 USD	±190.43	69.67 T	±4.11
CO2stor	Carbon Dioxide stored in trees (Note: this benefit is not an annual rate)	81,091.11 USD	±4,782.49	1,749.64 T	±103.19

i-Tree Canopy Annual Tree Benefit Estimates based on these values in lbs/acre/yr and USD/T/yr: CO 0.787 @ 244.11 USD | NO2 7.017 @ 68.35 USD | O3 54.562 @ 568.91 USD | PM2.5 3.042 @ 28,727.77 USD | SO2 2.567 @ 27.76 USD | PM10 14.883 @ 1,107.85 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.

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A Cooperative Initiative Between:

www.itreetools.org