# Branford Community Forest Commission Town Tree Survey

The goal of this survey was to develop an estimate of tree canopy cover in Branford. This was accomplished using aerial imagery and a random sampling process to easily estimate tree cover and other ground cover types such as water, impervious surfaces, lawn, and marsh.

Why?

- **Provide baseline measurements to monitor urban forest canopy cover and change**
- **Prioritize and guide tree plantings**
- **Estimate canopy benefits in terms of carbon dioxide, air pollution, and stormwater impacts**
- **And more!**

Tree cover zones. We estimated tree cover in thirteen zones.
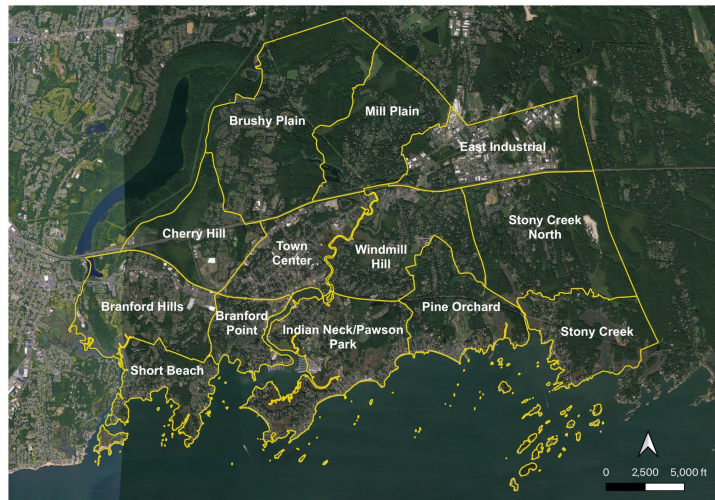
The i-Tree® Canopy tool was used to help classify land and tree cover and to calculate canopy benefits. This tool was developed by the USDA Forest Service and other stakeholders.

Tree cover estimate for Branford town center. About 28% of the town center is covered by trees.

i-Tree Canopy
Cover Assessment and Tree Benefits Report
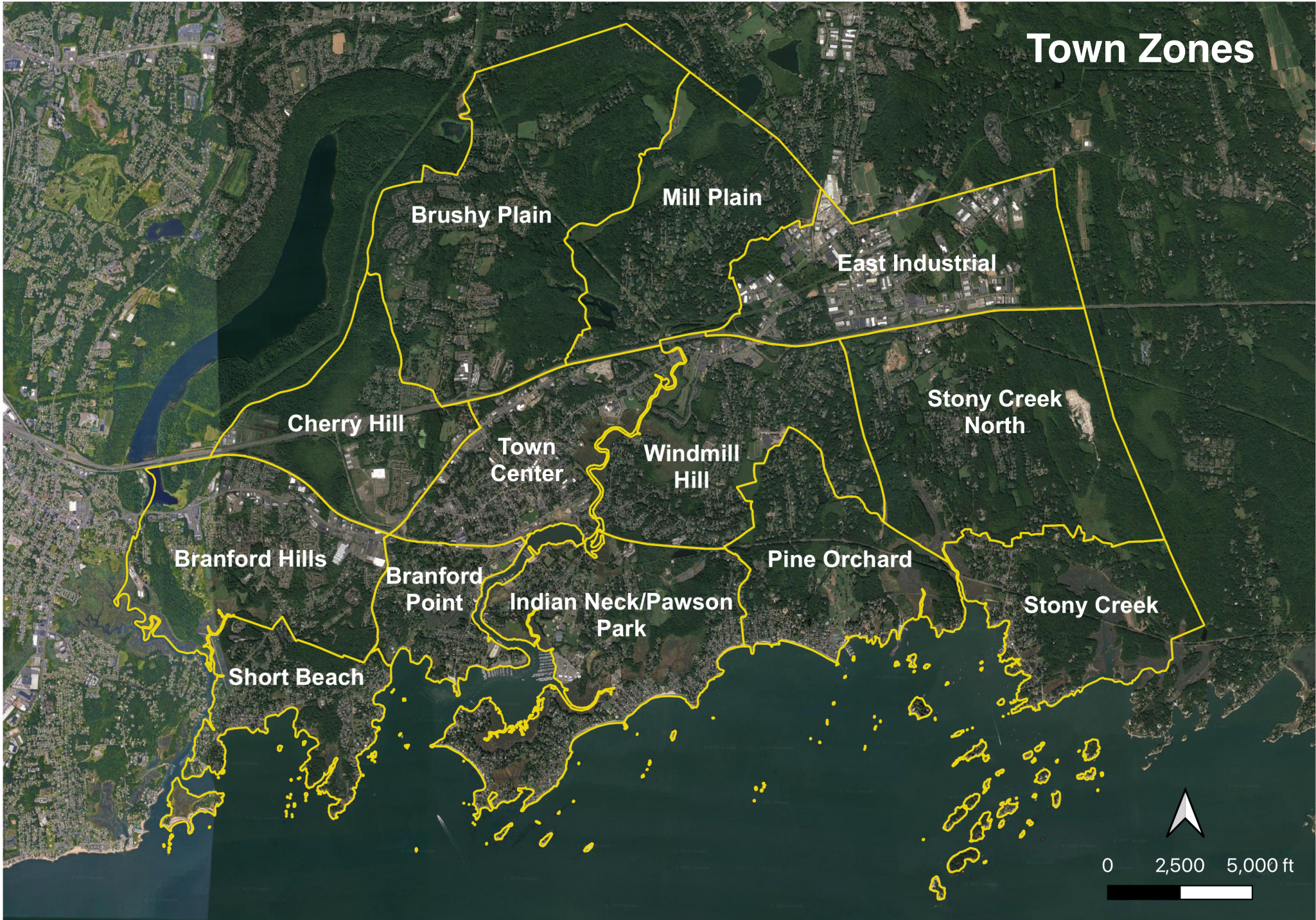Estimated using random sampling statistics on 6/13/2022
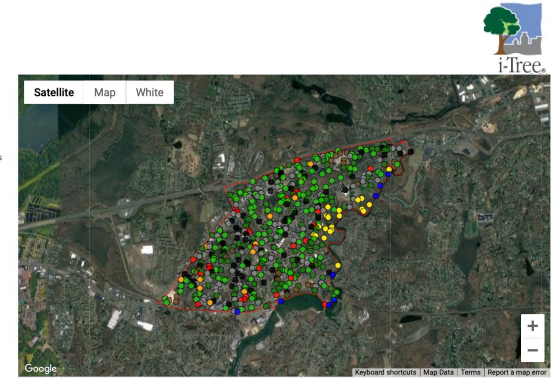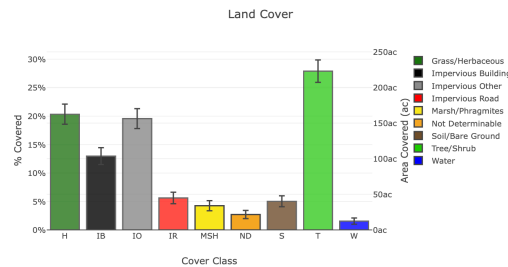
Tree cover in town zones, sorted by percent cover.

Zone	Tree cover
Indian Neck/Pawson Park	27%
Branford Center	28%
Branford Point	35%
East Industrial	39%
Branford Hills	40%
Windmill Hill	40%
Short Beach	44%
Pine Orchard	49%
Stony Creek	53%
Cherry Hill	56%
Brushy Plain	60%
Mill Plain	61%
Stony Creek North	74%

Estimates of tree benefits for Branford town center (based on tree cover estimate). Trees in the town center sequester about 240 tons of carbon dioxide each year.

Town Zones

Brushy Plain

Mill Plain

East Industrial

Cherry Hill

Stony Creek
North

Town
Center

Windmill
Hill

Branford Hills

Branford
Point

Pine Orchard

Stony Creek

Indian Neck/Pawson
Park

Short Beach

0   2,500   5,000 ft

Tree cover by town zones, sorted by percent cover.

Zone	Tree cover
Indian Neck/Pawson Park	27%
Branford Center	28%
Branford Point	35%
East Industrial	39%
Branford Hills	40%
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Tree cover by town zones, sorted by zone name.

Zone	Tree cover
Branford Center	28%
Branford Hills	40%
Branford Point	35%
Brushy Plain	60%
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East Industrial	39%
Mill Plain	61%
Indian Neck/Pawson Park	27%
Pine Orchard	49%
Short Beach	44%
Stony Creek	53%
Stony Creek North	74%
Windmill Hill	40%

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2022

Branford Town Center

Land Cover
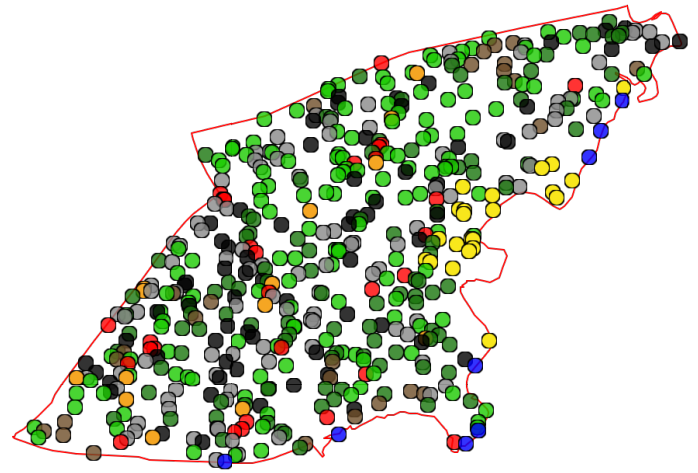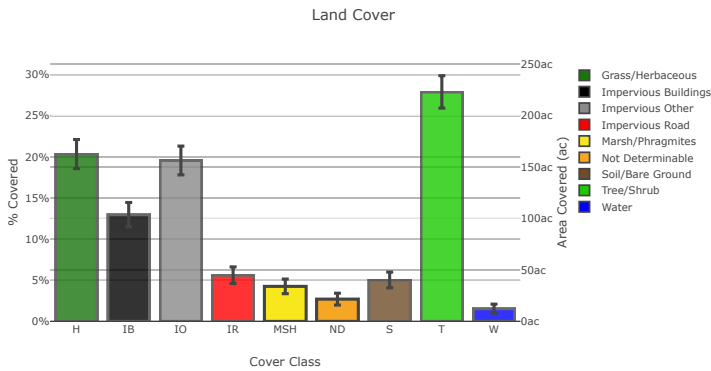
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		105	20.35 ± 1.77	162.50 ± 14.15
IB	Impervious Buildings		67	12.98 ± 1.48	103.69 ± 11.82
IO	Impervious Other		101	19.57 ± 1.75	156.31 ± 13.95
IR	Impervious Road		29	5.62 ± 1.01	44.88 ± 8.10
MSH	Marsh/Phragmites		22	4.26 ± 0.89	34.05 ± 7.10
ND	Not Determinable		14	2.71 ± 0.72	21.67 ± 5.71
S	Soil/Bare Ground		26	5.04 ± 0.96	40.24 ± 7.69
T	Tree/Shrub		144	27.91 ± 1.97	222.86 ± 15.77
W	Water		8	1.55 ± 0.55	12.38 ± 4.38
Total			**516**	**100.00**	**798.58**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	237.60	±16.81	871.21	±61.64	$40,523	±2,867

	Amount (T)	±SE	Amount (T CO_2)	±SE	Value (USD)	±SE
Stored in trees (Note: this benefit is not an annual rate)	7,639.91	±540.57	28,013.01	±1,982.10	$1,302,993	±92,195

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	270.44	±19.14	$66	±5
NO2	Nitrogen Dioxide removed annually	886.00	±62.69	$97	±7
O3	Ozone removed annually	9,264.78	±655.54	$4,457	±315
SO2	Sulfur Dioxide removed annually	308.46	±21.83	$10	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	323.15	±22.87	$7,450	±527
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	1,551.13	±109.75	$1,644	±116
Total		12,603.95	±891.81	$13,723	±971

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 1.213 @ $0.24 | NO2 3.976 @ $0.11 | O3 41.572 @ $0.48 | SO2 1.384 @ $0.03 | PM2.5 1.450 @ $23.05 | PM10* 6.960 @ $1.06 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	102.07	±7.22	$912	±65
E	Evaporation	1,704.07	±120.57	N/A	N/A
I	Interception	1,707.28	±120.80	N/A	N/A
T	Transpiration	3,043.38	±215.34	N/A	N/A
PE	Potential Evaporation	15,688.84	±1,110.08	N/A	N/A
PET	Potential Evapotranspiration	11,082.17	±784.13	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

About i-Tree Canopy

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Limitations of i-Tree Canopy

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Additional support provided by:

*Use of this tool indicates acceptance of the EULA.*

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2022

Branford Hills

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		96	18.93 ± 1.74	202.95 ± 18.65
IB	Impervious Buildings		50	9.86 ± 1.32	105.70 ± 14.19
IO	Impervious Other		44	8.68 ± 1.25	93.02 ± 13.40
IR	Impervious Road		27	5.33 ± 1.00	57.08 ± 10.69
MSH	Marsh/Phragmites		41	8.09 ± 1.21	86.68 ± 12.98
ND	Not Determinable		1	0.20 ± 0.20	2.11 ± 2.11
S	Soil/Bare Ground		13	2.56 ± 0.70	27.48 ± 7.52
T	Tree/Shrub		203	40.04 ± 2.18	429.16 ± 23.32
W	Water		32	6.31 ± 1.08	67.65 ± 11.58
Total			**507**	**100.00**	**1071.83**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	457.55	±24.87	1,677.67	±91.18	$78,035	±4,241

Stored in trees (Note: this benefit is not an annual rate)	14,711.95	±799.57	53,943.81	±2,931.75	$2,509,134 ±136,367

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	520.77	±28.30	$126	±7
NO2	Nitrogen Dioxide removed annually	1,706.14	±92.73	$187	±10
O3	Ozone removed annually	17,840.91	±969.62	$8,582	±466
SO2	Sulfur Dioxide removed annually	593.99	±32.28	$19	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	622.29	±33.82	$14,347	±780
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	2,986.96	±162.34	$3,166	±172
Total		**24,271.05**	**±1,319.09**	**$26,427**	**±1,436**

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	196.55	±10.68	$1,756	±95
E	Evaporation	3,281.48	±178.34	N/A	N/A
I	Interception	3,287.65	±178.68	N/A	N/A
T	Transpiration	5,860.55	±318.51	N/A	N/A
PE	Potential Evaporation	30,211.53	±1,641.94	N/A	N/A
PET	Potential Evapotranspiration	21,340.61	±1,159.82	N/A	N/A

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AVRO 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

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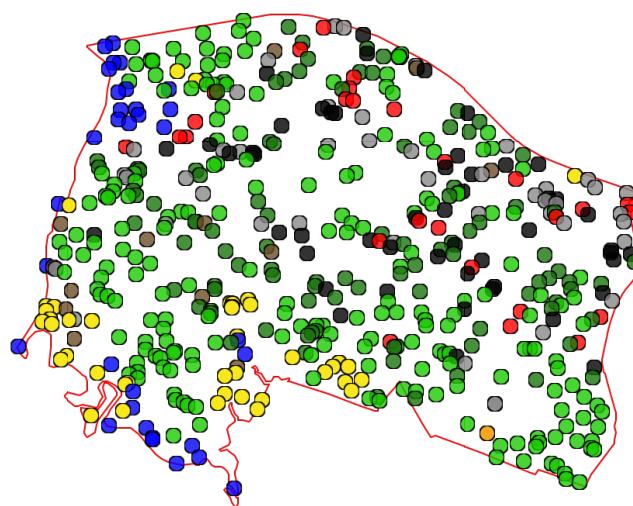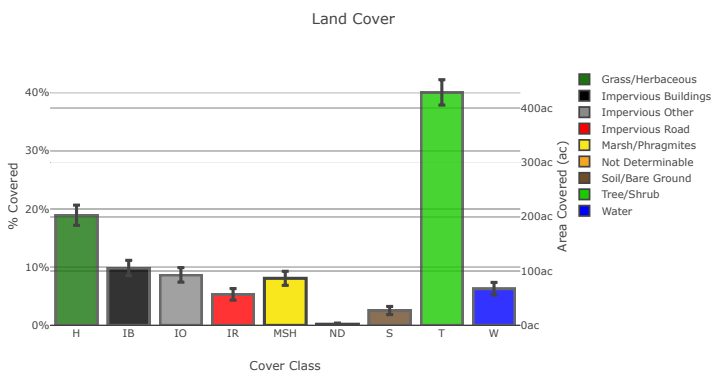
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i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Branford Point

Land Cover
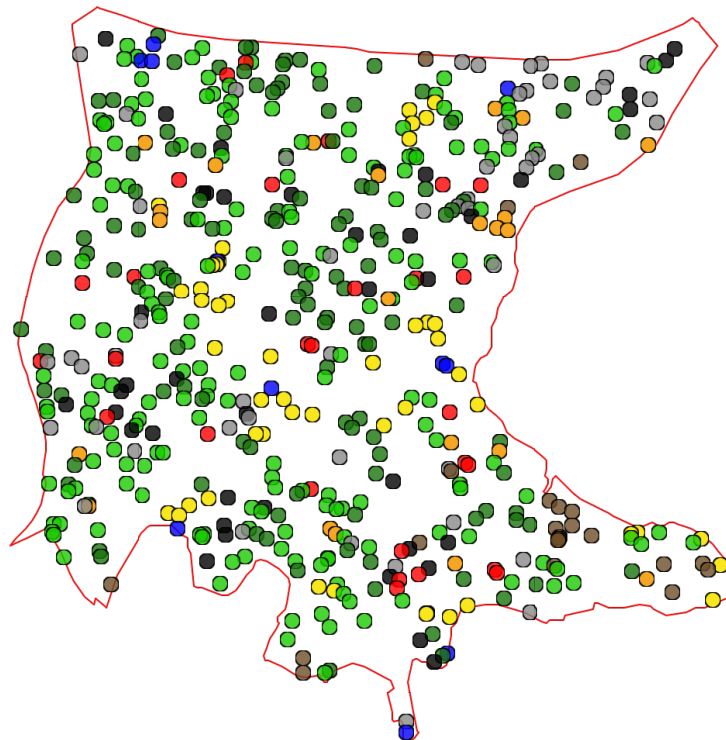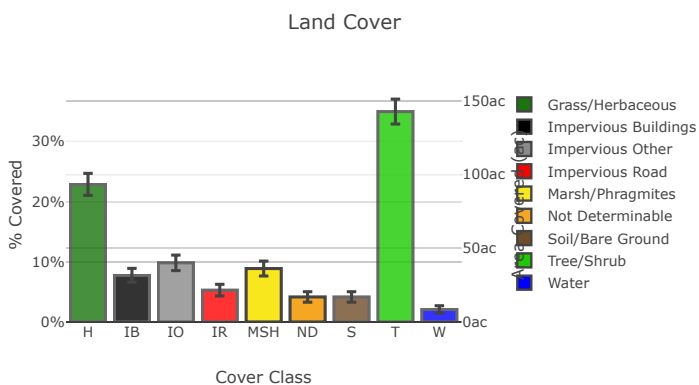
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		121	22.87 ± 1.83	93.33 ± 7.45
IB	Impervious Buildings		41	7.75 ± 1.16	31.62 ± 4.74
IO	Impervious Other		52	9.83 ± 1.29	40.11 ± 5.28
IR	Impervious Road		28	5.29 ± 0.97	21.60 ± 3.97
MSH	Marsh/Phragmites		47	8.88 ± 1.24	36.25 ± 5.05
ND	Not Determinable		22	4.16 ± 0.87	16.97 ± 3.54
S	Soil/Bare Ground		22	4.16 ± 0.87	16.97 ± 3.54
T	Tree/Shrub		185	34.97 ± 2.07	142.69 ± 8.46
W	Water		11	2.08 ± 0.62	8.48 ± 2.53
Total			**529**	**100.00**	**408.02**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE

Sequestered annually in trees	152.13	±9.02	557.81	±33.07	$25,946	±1,538
Stored in trees (Note: this benefit is not an annual rate)	4,891.57	±290.01	17,935.76	±1,063.37	$834,261	±49,462

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	173.15	±10.27	$42	±2
NO2	Nitrogen Dioxide removed annually	567.27	±33.63	$62	±4
O3	Ozone removed annually	5,931.92	±351.69	$2,853	±169
SO2	Sulfur Dioxide removed annually	197.50	±11.71	$6	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	206.90	±12.27	$4,770	±283
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	993.13	±58.88	$1,053	±62
Total		**8,069.87**	**±478.45**	**$8,787**	**±521**

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 1.213 @ $0.24 | NO2 3.976 @ $0.11 | O3 41.572 @ $0.48 | SO2 1.384 @ $0.03 | PM2.5 1.450 @ $23.05 | PM10* 6.960 @ $1.06 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	65.35	±3.87	$584	±35
E	Evaporation	1,091.06	±64.69	N/A	N/A
I	Interception	1,093.11	±64.81	N/A	N/A
T	Transpiration	1,948.57	±115.53	N/A	N/A
PE	Potential Evaporation	10,045.02	±595.55	N/A	N/A
PET	Potential Evapotranspiration	7,095.53	±420.68	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

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Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Brushy Plain

Land Cover
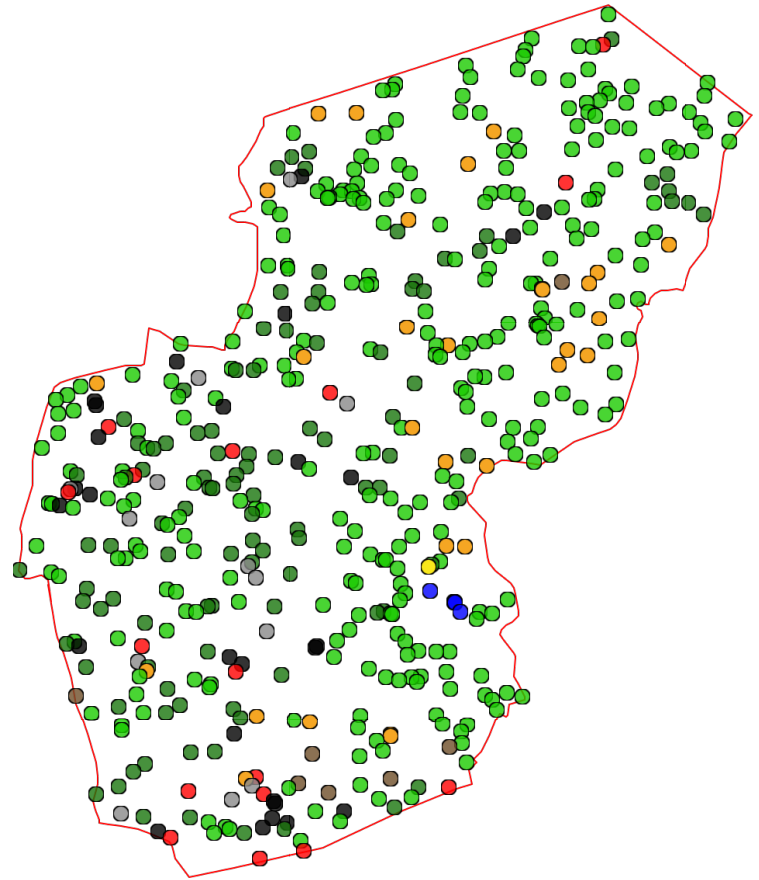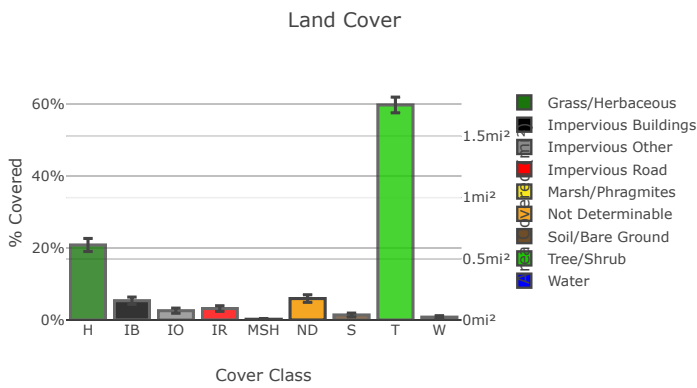
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (mi²) ± SE
H	Grass/Herbaceous		105	20.83 ± 1.81	0.61 ± 0.05
IB	Impervious Buildings		27	5.36 ± 1.00	0.16 ± 0.03
IO	Impervious Other		13	2.58 ± 0.71	0.08 ± 0.02
IR	Impervious Road		16	3.17 ± 0.78	0.09 ± 0.02
MSH	Marsh/Phragmites		1	0.20 ± 0.20	0.01 ± 0.01
ND	Not Determinable		30	5.95 ± 1.05	0.18 ± 0.03
S	Soil/Bare Ground		7	1.39 ± 0.52	0.04 ± 0.02
T	Tree/Shrub		301	59.72 ± 2.18	1.76 ± 0.06
W	Water		4	0.79 ± 0.40	0.02 ± 0.01
Total			**504**	**100.00**	**2.95**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (kT)	±SE	CO₂ Equiv. (kT)	±SE	Value (USD)	±SE

Sequestered annually in trees	1.20	±0.04	4.41	±0.16	$205,077	±7,502
Stored in trees (Note: this benefit is not an annual rate)	38.66	±1.41	141.77	±5.19	$6,594,037	±241,213

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 0.682 kT of Carbon, or 2.502 kT of CO_2, per mi²/yr and rounded. Amount stored is based on 21.940 kT of Carbon, or 80.446 kT of CO_2, per mi² and rounded. Value (USD) is based on $170,550.73/kT of Carbon, or $46,513.84/kT of CO_2 and rounded. (English units: kT = kilotons (1,000 tons), mi² = square miles)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	1,368.59	±50.06	$332	±12
NO2	Nitrogen Dioxide removed annually	4,483.75	±164.02	$490	±18
O3	Ozone removed annually	46,886.15	±1,715.12	$22,554	±825
SO2	Sulfur Dioxide removed annually	1,561.02	±57.10	$49	±2
PM2.5	Particulate Matter less than 2.5 microns removed annually	1,635.38	±59.82	$37,704	±1,379
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	7,849.76	±287.15	$8,321	±304
Total		**63,784.66**	**±2,333.27**	**$69,450**	**±2,541**

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/mi²/yr @ $/lb/yr and rounded:
CO 776.625 @ $0.24 | NO2 2,544.358 @ $0.11 | O3 26,606.139 @ $0.48 | SO2 885.820 @ $0.03 | PM2.5 928.018 @ $23.05 | PM10* 4,454.447 @ $1.06 (English units: lb = pounds, mi² = square miles)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	516.53	±18.89	$4,616	±169
E	Evaporation	8,623.78	±315.46	N/A	N/A
I	Interception	8,639.99	±316.06	N/A	N/A
T	Transpiration	15,401.60	±563.40	N/A	N/A
PE	Potential Evaporation	79,396.30	±2,904.36	N/A	N/A
PET	Potential Evapotranspiration	56,083.41	±2,051.56	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/mi²/yr @ $/Kgal/yr and rounded:
AVRO 293.110 @ $8.94 | E 4,893.673 @ N/A | I 4,902.874 @ N/A | T 8,739.834 @ N/A | PE 45,054.429 @ N/A | PET 31,825.238 @ N/A (English units: Kgal = thousands of gallons, mi² = square miles)

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Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2022

Cherry Hill

Land Cover
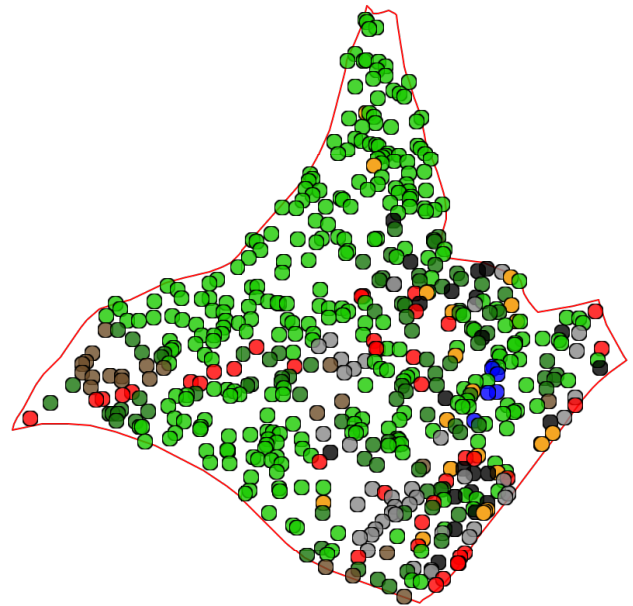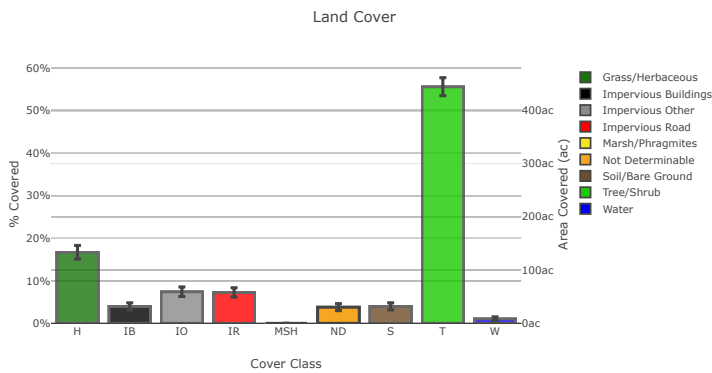
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		92	16.73 ± 1.59	133.53 ± 12.70
IB	Impervious Buildings		22	4.00 ± 0.84	31.93 ± 6.67
IO	Impervious Other		41	7.45 ± 1.12	59.51 ± 8.94
IR	Impervious Road		40	7.27 ± 1.11	58.06 ± 8.84
MSH	Marsh/Phragmites		0	0.00 ± 0.00	0.00 ± 0.00
ND	Not Determinable		21	3.82 ± 0.82	30.48 ± 6.52
S	Soil/Bare Ground		22	4.00 ± 0.84	31.93 ± 6.67
T	Tree/Shrub		306	55.64 ± 2.12	444.12 ± 16.91
W	Water		6	1.09 ± 0.45	8.71 ± 3.56
Total			**550**	**100.00**	**798.26**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO$_2$ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	473.50	±18.03	1,736.18	±66.11	$80,756	±3,075

Stored in trees (Note: this benefit is not an annual rate)	15,225.04	±579.71	55,825.16	±2,125.61	$2,596,642 ±98,870

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	538.93	±20.52	$131	±5
NO2	Nitrogen Dioxide removed annually	1,765.64	±67.23	$193	±7
O3	Ozone removed annually	18,463.13	±703.00	$8,882	±338
SO2	Sulfur Dioxide removed annually	614.71	±23.41	$19	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	643.99	±24.52	$14,847	±565
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	3,091.13	±117.70	$3,277	±125
Total		**25,117.53**	**±956.38**	**$27,348**	**±1,041**

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 1.213 @ $0.24 | NO2 3.976 @ $0.11 | O3 41.572 @ $0.48 | SO2 1.384 @ $0.03 | PM2.5 1.450 @ $23.05 | PM10* 6.960 @ $1.06 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	203.40	±7.74	$1,818	±69
E	Evaporation	3,395.93	±129.30	N/A	N/A
I	Interception	3,402.31	±129.55	N/A	N/A
T	Transpiration	6,064.94	±230.93	N/A	N/A
PE	Potential Evaporation	31,265.18	±1,190.46	N/A	N/A
PET	Potential Evapotranspiration	22,084.88	±840.91	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

About i-Tree Canopy

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Additional support provided by:

Use of this tool indicates acceptance of the EULA.

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2022

East Industrial

Land Cover
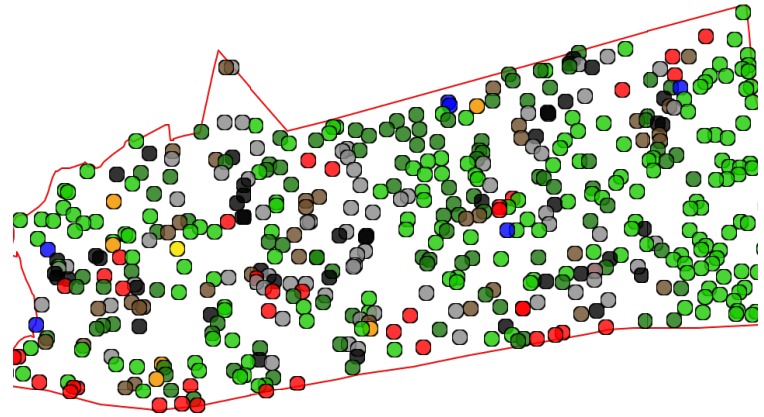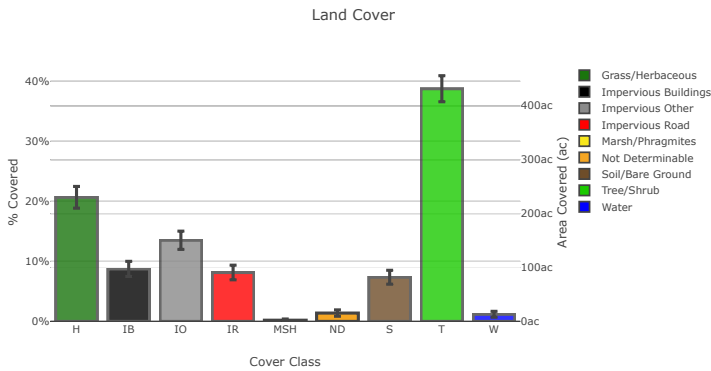
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		104	20.68 ± 1.81	230.18 ± 20.10
IB	Impervious Buildings		44	8.75 ± 1.26	97.38 ± 14.02
IO	Impervious Other		68	13.52 ± 1.52	150.50 ± 16.97
IR	Impervious Road		41	8.15 ± 1.22	90.74 ± 13.58
MSH	Marsh/Phragmites		1	0.20 ± 0.20	2.21 ± 2.21
ND	Not Determinable		7	1.39 ± 0.53	15.49 ± 5.86
S	Soil/Bare Ground		37	7.36 ± 1.16	81.89 ± 12.96
T	Tree/Shrub		195	38.77 ± 2.17	431.59 ± 24.18
W	Water		6	1.19 ± 0.49	13.28 ± 5.42
Total			**503**	**100.00**	**1113.27**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO$_2$ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	460.14	±25.78	1,687.17	±94.54	$78,477	±4,398

Stored in trees (Note: this benefit is not an annual rate)	14,795.30 ±829.08	54,249.44 ±3,039.97	$2,523,349 ±141,401

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	523.72	±29.35	$127	±7
NO2	Nitrogen Dioxide removed annually	1,715.80	±96.15	$188	±11
O3	Ozone removed annually	17,941.99	±1,005.41	$8,631	±484
SO2	Sulfur Dioxide removed annually	597.36	±33.47	$19	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	625.81	±35.07	$14,428	±809
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	3,003.88	±168.33	$3,184	±178
Total		24,408.56	±1,367.78	$26,577	±1,489

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	197.66	±11.08	$1,766	±99
E	Evaporation	3,300.07	±184.93	N/A	N/A
I	Interception	3,306.28	±185.27	N/A	N/A
T	Transpiration	5,893.75	±330.27	N/A	N/A
PE	Potential Evaporation	30,382.69	±1,702.55	N/A	N/A
PET	Potential Evapotranspiration	21,461.52	±1,202.64	N/A	N/A

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AVRO 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ 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

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Mill Plain

Land Cover
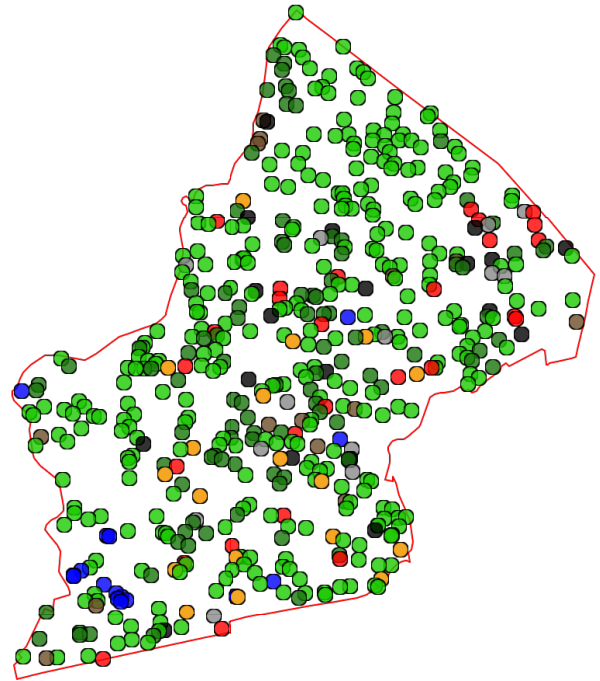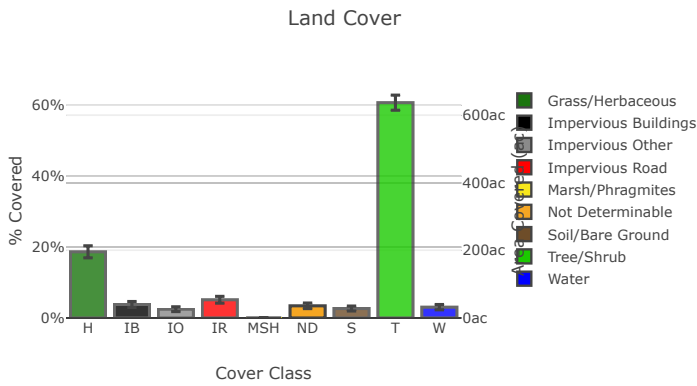
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		98	18.67 ± 1.70	195.95 ± 17.85
IB	Impervious Buildings		20	3.81 ± 0.84	39.99 ± 8.77
IO	Impervious Other		13	2.48 ± 0.68	25.99 ± 7.12
IR	Impervious Road		27	5.14 ± 0.96	53.99 ± 10.12
MSH	Marsh/Phragmites		0	0.00 ± 0.00	0.00 ± 0.00
ND	Not Determinable		18	3.43 ± 0.79	35.99 ± 8.34
S	Soil/Bare Ground		14	2.67 ± 0.70	27.99 ± 7.38
T	Tree/Shrub		319	60.76 ± 2.13	637.84 ± 22.37
W	Water		16	3.05 ± 0.75	31.99 ± 7.88
Total			**525**	**100.00**	**1049.73**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE

(Description | Carbon (T) | ±SE | CO$_2$ Equiv. (T) | ±SE | Value (USD) | ±SE)

Sequestered annually in trees	680.03	±23.85	2,493.46	±87.45	$115,980	±4,068
Stored in trees (Note: this benefit is not an annual rate)	21,865.82	±766.87	80,174.68	±2,811.87	$3,729,232	±130,791

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	774.00	±27.15	$188	±7
NO2	Nitrogen Dioxide removed annually	2,535.76	±88.93	$277	±10
O3	Ozone removed annually	26,516.28	±929.97	$12,755	±447
SO2	Sulfur Dioxide removed annually	882.83	±30.96	$28	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	924.88	±32.44	$21,323	±748
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	4,439.40	±155.70	$4,706	±165
Total		**36,073.16**	**±1,265.15**	**$39,277**	**±1,378**

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:

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	292.12	±10.25	$2,610	±92
E	Evaporation	4,877.15	±171.05	N/A	N/A
I	Interception	4,886.31	±171.37	N/A	N/A
T	Transpiration	8,710.32	±305.49	N/A	N/A
PE	Potential Evaporation	44,902.26	±1,574.81	N/A	N/A
PET	Potential Evapotranspiration	31,717.75	±1,112.40	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

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Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Indian Neck/Pawson Park
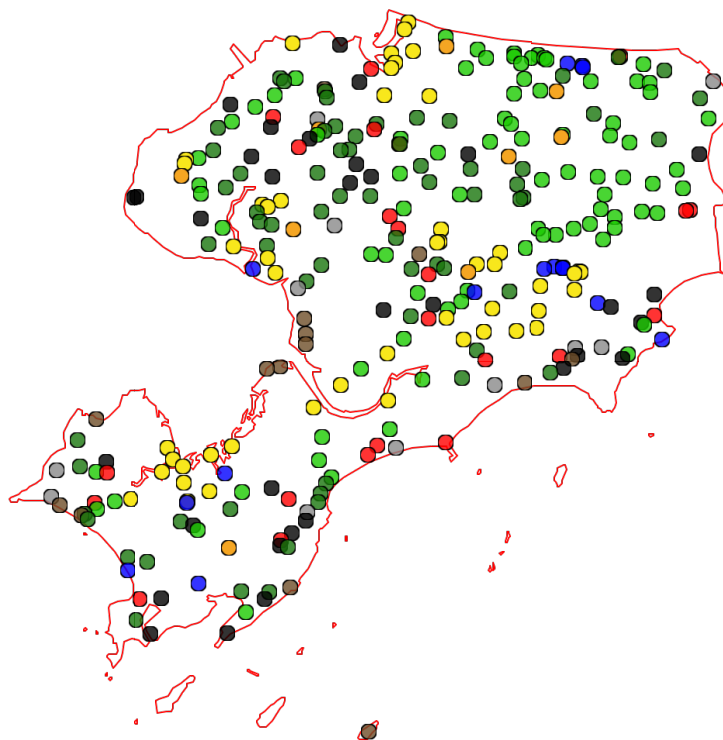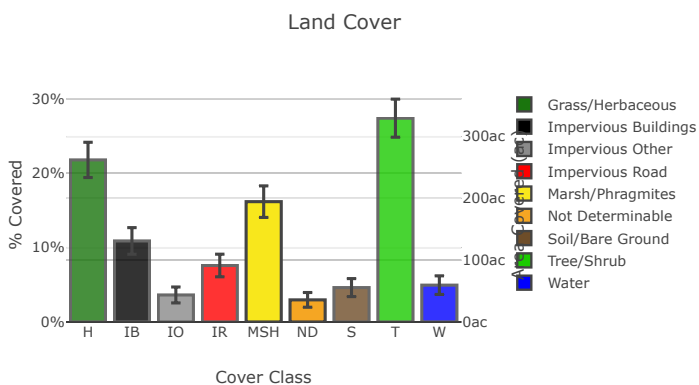
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		66	21.78 ± 2.37	262.19 ± 28.54
IB	Impervious Buildings		33	10.89 ± 1.79	131.09 ± 21.54
IO	Impervious Other		11	3.63 ± 1.07	43.70 ± 12.93
IR	Impervious Road		23	7.59 ± 1.52	91.37 ± 18.31
MSH	Marsh/Phragmites		49	16.17 ± 2.12	194.66 ± 25.46
ND	Not Determinable		9	2.97 ± 0.99	35.75 ± 11.92
S	Soil/Bare Ground		14	4.62 ± 1.21	55.62 ± 14.52
T	Tree/Shrub		83	27.39 ± 2.56	329.72 ± 30.84
W	Water		15	4.95 ± 1.25	59.59 ± 15.00
Total			**303**	**100.00**	**1203.69**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE

Sequestered annually in trees	351.54	±32.88	1,288.96	±120.56	$59,955	±5,608
Stored in trees (Note: this benefit is not an annual rate)	11,303.28	±1,057.20	41,445.38	±3,876.39	$1,927,784	±180,306

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	400.11	±37.42	$97	±9
NO2	Nitrogen Dioxide removed annually	1,310.83	±122.60	$143	±13
O3	Ozone removed annually	13,707.29	±1,282.04	$6,594	±617
SO2	Sulfur Dioxide removed annually	456.37	±42.68	$14	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	478.11	±44.72	$11,023	±1,031
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	2,294.90	±214.64	$2,433	±228
Total		**18,647.61**	**±1,744.11**	**$20,304**	**±1,899**

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	151.01	±14.12	$1,349	±126
E	Evaporation	2,521.18	±235.81	N/A	N/A
I	Interception	2,525.92	±236.25	N/A	N/A
T	Transpiration	4,502.70	±421.14	N/A	N/A
PE	Potential Evaporation	23,211.71	±2,170.99	N/A	N/A
PET	Potential Evapotranspiration	16,396.13	±1,533.53	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:

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Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Pine Orchard
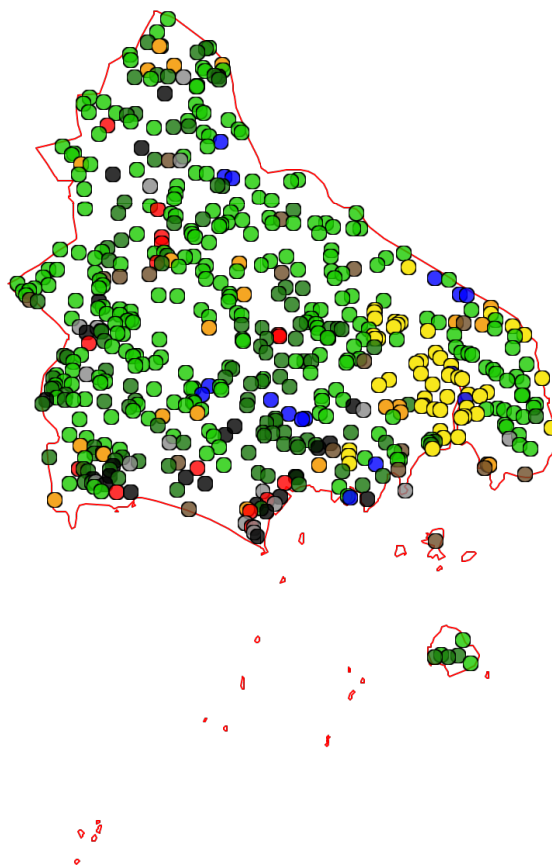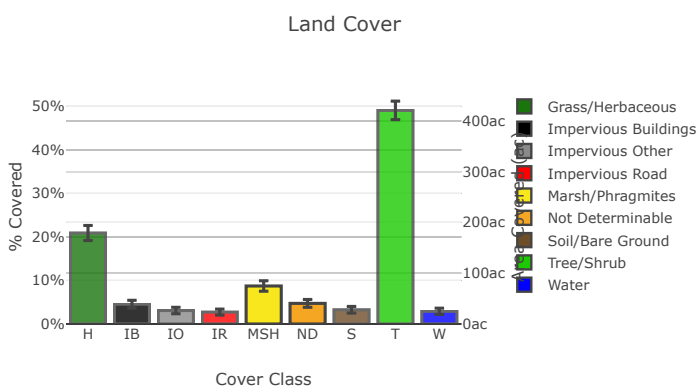
Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		115	20.91 ± 1.73	179.19 ± 14.86
IB	Impervious Buildings		25	4.55 ± 0.89	38.95 ± 7.61
IO	Impervious Other		17	3.09 ± 0.74	26.49 ± 6.32
IR	Impervious Road		15	2.73 ± 0.69	23.37 ± 5.95
MSH	Marsh/Phragmites		48	8.73 ± 1.20	74.79 ± 10.31
ND	Not Determinable		26	4.73 ± 0.90	40.51 ± 7.76
S	Soil/Bare Ground		18	3.27 ± 0.76	28.05 ± 6.50
T	Tree/Shrub		270	49.09 ± 2.13	420.71 ± 18.27
W	Water		16	2.91 ± 0.72	24.93 ± 6.14
Total			**550**	**100.00**	**857.00**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO$_2$ Equiv. (T)	±SE	Value (USD)	±SE

Sequestered annually in trees	448.54	±19.48	1,644.65	±71.42	$76,499	±3,322
Stored in trees (Note: this benefit is not an annual rate)	14,422.40	±626.26	52,882.13	±2,296.28	$2,459,751	±106,809

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Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	510.52	±22.17	$124	±5
NO2	Nitrogen Dioxide removed annually	1,672.56	±72.63	$183	±8
O3	Ozone removed annually	17,489.78	±759.45	$8,413	±365
SO2	Sulfur Dioxide removed annually	582.30	±25.29	$18	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	610.04	±26.49	$14,064	±611
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	2,928.17	±127.15	$3,104	±135
Total		**23,793.37**	**±1,033.17**	**$25,907**	**±1,125**

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	192.68	±8.37	$1,722	±75
E	Evaporation	3,216.90	±139.69	N/A	N/A
I	Interception	3,222.95	±139.95	N/A	N/A
T	Transpiration	5,745.21	±249.47	N/A	N/A
PE	Potential Evaporation	29,616.92	±1,286.04	N/A	N/A
PET	Potential Evapotranspiration	20,920.60	±908.43	N/A	N/A

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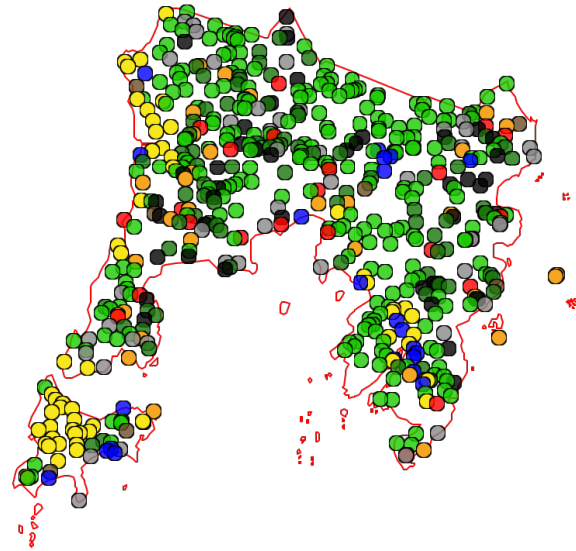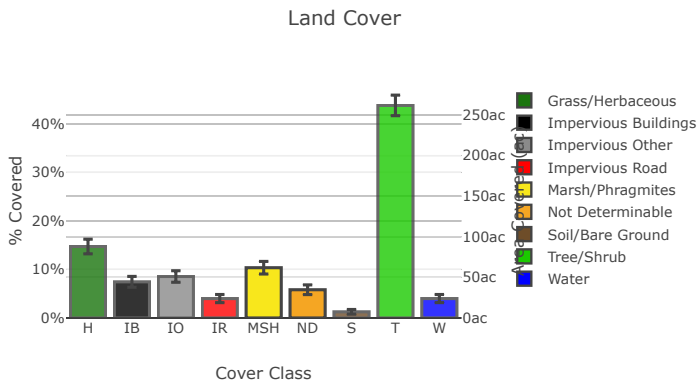
Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Short Beach

Land Cover

Legend:
- Grass/Herbaceous
- Impervious Buildings
- Impervious Other
- Impervious Road
- Marsh/Phragmites
- Not Determinable
- Soil/Bare Ground
- Tree/Shrub
- Water

Google

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		81	14.73 ± 1.51	87.97 ± 9.03
IB	Impervious Buildings		41	7.45 ± 1.12	44.53 ± 6.69
IO	Impervious Other		47	8.55 ± 1.19	51.05 ± 7.12
IR	Impervious Road		22	4.00 ± 0.84	23.89 ± 4.99
MSH	Marsh/Phragmites		57	10.36 ± 1.30	61.91 ± 7.76
ND	Not Determinable		32	5.82 ± 1.00	34.75 ± 5.96
S	Soil/Bare Ground		7	1.27 ± 0.48	7.60 ± 2.87
T	Tree/Shrub		241	43.82 ± 2.12	261.75 ± 12.64
W	Water		22	4.00 ± 0.84	23.89 ± 4.99
Total			**550**	**100.00**	**597.35**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO$_2$ Equiv. (T)	±SE	Value (USD)	±SE

Sequestered annually in trees	279.06	±13.47	1,023.23	±49.40	$47,594	±2,298
Stored in trees (Note: this benefit is not an annual rate)	8,973.00	±433.24	32,901.00	±1,588.54	$1,530,352	±73,889

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	317.62	±15.34	$77	±4
NO2	Nitrogen Dioxide removed annually	1,040.59	±50.24	$114	±5
O3	Ozone removed annually	10,881.39	±525.38	$5,234	±253
SO2	Sulfur Dioxide removed annually	362.28	±17.49	$11	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	379.54	±18.33	$8,750	±422
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	1,821.78	±87.96	$1,931	±93
Total		**14,803.22**	**±714.74**	**$16,118**	**±778**

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 1.213 @ $0.24 | NO2 3.976 @ $0.11 | O3 41.572 @ $0.48 | SO2 1.384 @ $0.03 | PM2.5 1.450 @ $23.05 | PM10* 6.960 @ $1.06 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	119.88	±5.79	$1,071	±52
E	Evaporation	2,001.42	±96.63	N/A	N/A
I	Interception	2,005.18	±96.82	N/A	N/A
T	Transpiration	3,574.42	±172.58	N/A	N/A
PE	Potential Evaporation	18,426.39	±889.67	N/A	N/A
PET	Potential Evapotranspiration	13,015.90	±628.44	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

About i-Tree Canopy

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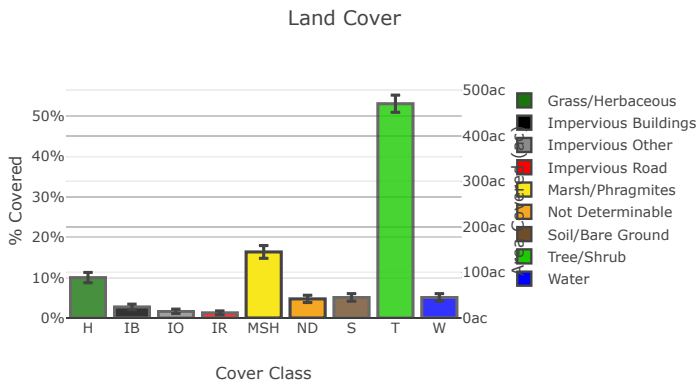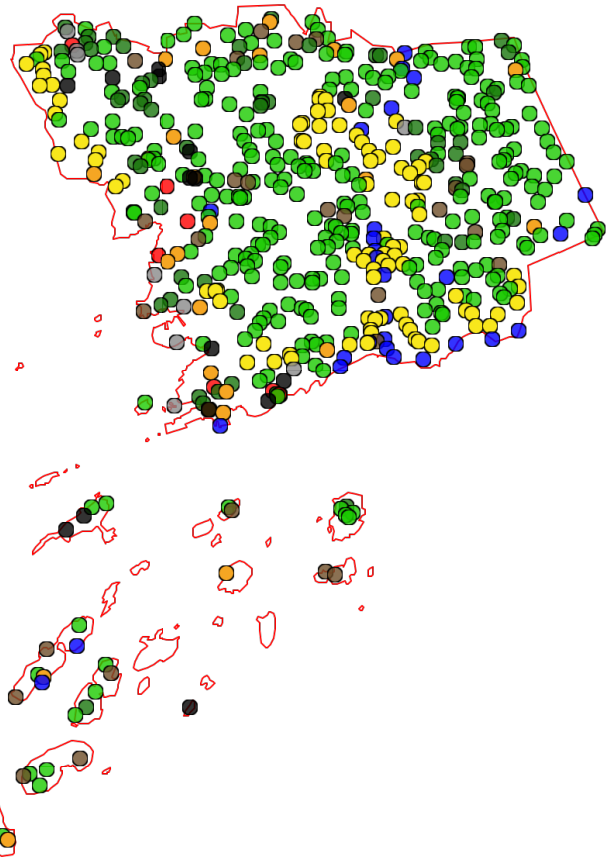
Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Stony Creek

Land Cover

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		55	10.00 ± 1.28	88.68 ± 11.34
IB	Impervious Buildings		15	2.73 ± 0.69	24.19 ± 6.16
IO	Impervious Other		9	1.64 ± 0.55	14.51 ± 4.84
IR	Impervious Road		7	1.27 ± 0.48	11.29 ± 4.27
MSH	Marsh/Phragmites		90	16.36 ± 1.58	145.11 ± 13.99
ND	Not Determinable		26	4.73 ± 0.90	41.92 ± 8.02
S	Soil/Bare Ground		28	5.09 ± 0.94	45.15 ± 8.31
T	Tree/Shrub		292	53.09 ± 2.13	470.81 ± 18.87
W	Water		28	5.09 ± 0.94	45.15 ± 8.31
Total			**550**	**100.00**	**886.81**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO₂ Equiv. (T)	±SE	Value (USD)	±SE

Sequestered annually in trees	501.96	±20.12	1,840.52	±73.77	$85,610	±3,431
Stored in trees (Note: this benefit is not an annual rate)	16,140.01	±646.91	59,180.04	±2,371.99	$2,752,691	±110,330

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	571.32	±22.90	$139	±6
NO2	Nitrogen Dioxide removed annually	1,871.75	±75.02	$205	±8
O3	Ozone removed annually	19,572.70	±784.49	$9,415	±377
SO2	Sulfur Dioxide removed annually	651.65	±26.12	$20	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	682.69	±27.36	$15,739	±631
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	3,276.90	±131.34	$3,474	±139
Total		26,627.00	±1,067.23	$28,992	±1,162

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:

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	215.63	±8.64	$1,927	±77
E	Evaporation	3,600.01	±144.29	N/A	N/A
I	Interception	3,606.78	±144.56	N/A	N/A
T	Transpiration	6,429.42	±257.70	N/A	N/A
PE	Potential Evaporation	33,144.10	±1,328.44	N/A	N/A
PET	Potential Evapotranspiration	23,412.10	±938.38	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 0.458 @ $8.94 | E 7.646 @ N/A | I 7.661 @ N/A | T 13.656 @ N/A | PE 70.398 @ N/A | PET 49.727 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

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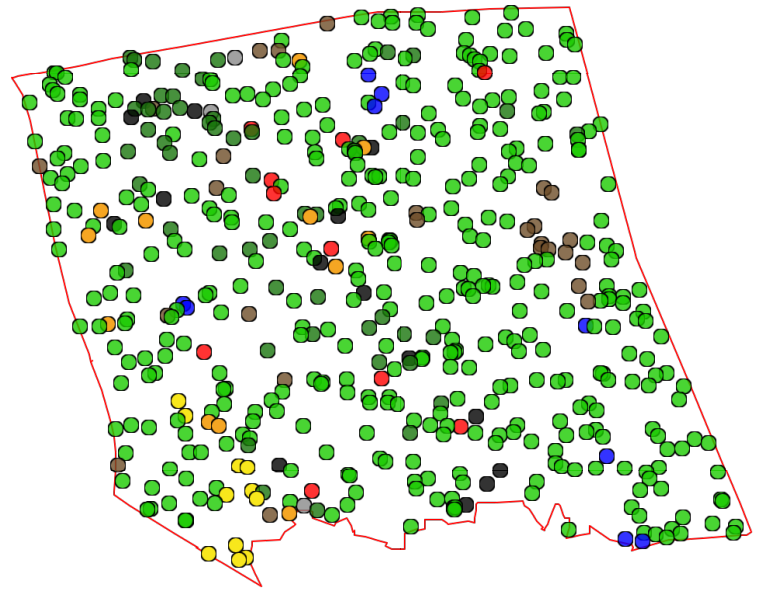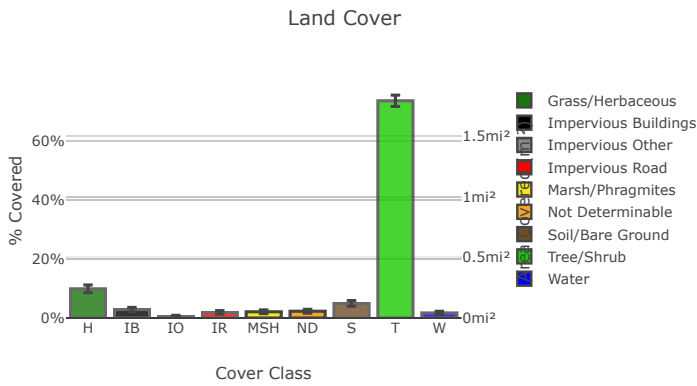
Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 9/17/2023

Stony Creek North

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (mi²) ± SE
H	Grass/Herbaceous		52	9.90 ± 1.30	0.24 ± 0.03
IB	Impervious Buildings		15	2.86 ± 0.73	0.07 ± 0.02
IO	Impervious Other		3	0.57 ± 0.33	0.01 ± 0.01
IR	Impervious Road		10	1.90 ± 0.60	0.05 ± 0.01
MSH	Marsh/Phragmites		11	2.10 ± 0.63	0.05 ± 0.02
ND	Not Determinable		12	2.29 ± 0.65	0.06 ± 0.02
S	Soil/Bare Ground		26	4.95 ± 0.95	0.12 ± 0.02
T	Tree/Shrub		387	73.71 ± 1.92	1.79 ± 0.05
W	Water		9	1.71 ± 0.57	0.04 ± 0.01
Total			**525**	**100.00**	**2.43**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (kT)	±SE	CO₂ Equiv. (kT)	±SE	Value (USD)	±SE

Sequestered annually in trees	1.22	±0.03	4.47	±0.12	$208,093	±5,423
Stored in trees (Note: this benefit is not an annual rate)	39.23	±1.02	143.85	±3.75	$6,691,033	±174,380

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 0.682 kT of Carbon, or 2.502 kT of CO_2, per mi²/yr and rounded. Amount stored is based on 21.940 kT of Carbon, or 80.446 kT of CO_2, per mi² and rounded. Value (USD) is based on $170,550.73/kT of Carbon, or $46,513.84/kT of CO_2 and rounded. (English units: kT = kilotons (1,000 tons), mi² = square miles)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	1,388.72	±36.19	$337	±9
NO2	Nitrogen Dioxide removed annually	4,549.70	±118.57	$498	±13
O3	Ozone removed annually	47,575.83	±1,239.91	$22,886	±596
SO2	Sulfur Dioxide removed annually	1,583.98	±41.28	$50	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	1,659.44	±43.25	$38,258	±997
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	7,965.23	±207.59	$8,444	±220
Total		**64,722.90**	**±1,686.80**	**$70,472**	**±1,837**

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/mi²/yr @ $/lb/yr and rounded:

CO 776.625 @ $0.24 | NO2 2,544.358 @ $0.11 | O3 26,606.139 @ $0.48 | SO2 885.820 @ $0.03 | PM2.5 928.018 @ $23.05 | PM10* 4,454.447 @ $1.06 (English units: lb = pounds, mi² = square miles)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	524.13	±13.66	$4,684	±122
E	Evaporation	8,750.63	±228.06	N/A	N/A
I	Interception	8,767.08	±228.49	N/A	N/A
T	Transpiration	15,628.15	±407.30	N/A	N/A
PE	Potential Evaporation	80,564.18	±2,099.65	N/A	N/A
PET	Potential Evapotranspiration	56,908.37	±1,483.13	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/mi²/yr @ $/Kgal/yr and rounded:

AVRO 293.110 @ $8.94 | E 4,893.673 @ N/A | I 4,902.874 @ N/A | T 8,739.834 @ N/A | PE 45,054.429 @ N/A | PET 31,825.238 @ N/A (English units: Kgal = thousands of gallons, mi² = square miles)

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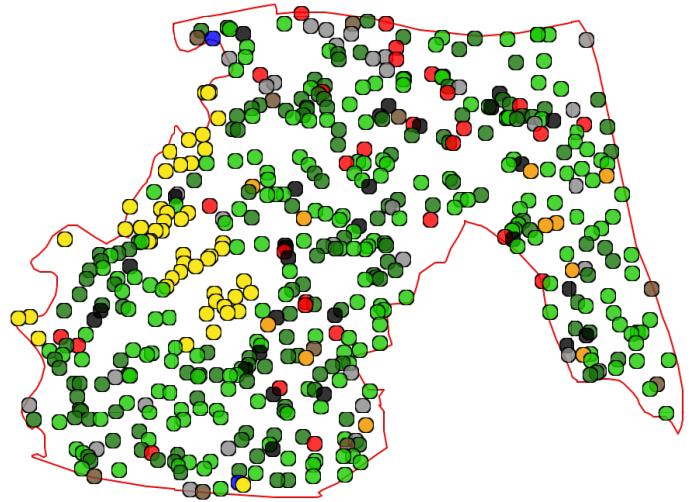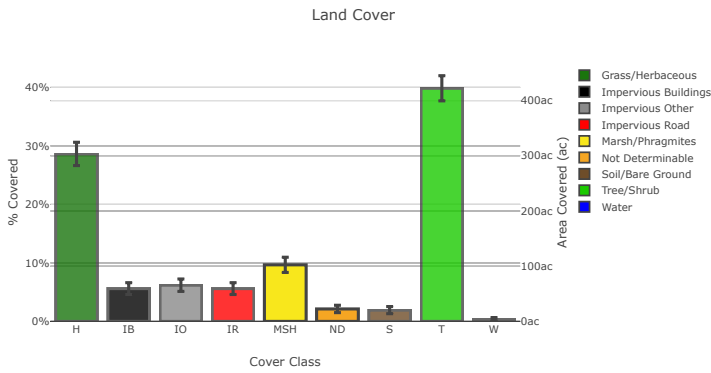
Additional support provided by:

i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2022

Windmill Hill

Land Cover chart legend:
- Grass/Herbaceous
- Impervious Buildings
- Impervious Other
- Impervious Road
- Marsh/Phragmites
- Not Determinable
- Soil/Bare Ground
- Tree/Shrub
- Water

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		148	28.63 ± 1.99	303.34 ± 21.07
IB	Impervious Buildings		29	5.61 ± 1.01	59.44 ± 10.72
IO	Impervious Other		32	6.19 ± 1.06	65.59 ± 11.23
IR	Impervious Road		29	5.61 ± 1.01	59.44 ± 10.72
MSH	Marsh/Phragmites		50	9.67 ± 1.30	102.48 ± 13.77
ND	Not Determinable		11	2.13 ± 0.63	22.55 ± 6.73
S	Soil/Bare Ground		10	1.93 ± 0.61	20.50 ± 6.42
T	Tree/Shrub		206	39.85 ± 2.15	422.22 ± 22.82
W	Water		2	0.39 ± 0.27	4.10 ± 2.90
Total			**517**	**100.00**	**1059.64**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO$_2$ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	450.15	±24.33	1,650.54	±89.19	$76,773	±4,149

Stored in trees (Note: this benefit is not an annual rate)	14,474.05	±782.15	53,071.50	±2,867.89	$2,468,559 ±133,397

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 1.066 T of Carbon, or 3.909 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 $170.55/T of Carbon, or $46.51/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	512.35	±27.69	$124	±7
NO2	Nitrogen Dioxide removed annually	1,678.55	±90.71	$184	±10
O3	Ozone removed annually	17,552.41	±948.50	$8,443	±456
SO2	Sulfur Dioxide removed annually	584.39	±31.58	$18	±1
PM2.5	Particulate Matter less than 2.5 microns removed annually	612.23	±33.08	$14,115	±763
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	2,938.66	±158.80	$3,115	±168
Total		23,878.57	±1,290.36	$25,999	±1,405

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:

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Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	193.37	±10.45	$1,728	±93
E	Evaporation	3,228.42	±174.46	N/A	N/A
I	Interception	3,234.49	±174.79	N/A	N/A
T	Transpiration	5,765.78	±311.57	N/A	N/A
PE	Potential Evaporation	29,722.98	±1,606.18	N/A	N/A
PET	Potential Evapotranspiration	20,995.51	±1,134.56	N/A	N/A

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Additional support provided by:

Use of this tool indicates acceptance of the EULA.