

Summary of Aboveground Carbon Storage by Property

Project Name	Biomass (kg)	Aboveground Carbon (kg)	Aboveground Carbon (Mg)	CO ₂ Equivalent (metric tons CO ₂)	EPA \$ Conversion for Aboveground Carbon
Alexander, Robbin	732,829	366,414	366	1,344	\$ 68,520.11
Bloomer, Tom & Rosanne	397,548	198,774	199	729	\$ 37,171.03
Fishbeck, William & Betty (41 acres)	0	0	0	0	\$ -
Fishbeck, William & Betty (116 acres)	598,717	299,358	299	1,098	\$ 55,980.51
Kapp, Dale	1,425,764	712,882	713	2,614	\$ 133,310.17
Cares, John & Jean	2,437,645	1,218,822	1,219	4,469	\$ 227,921.86
Alexander, John and Beverly	238,957	119,478	119	438	\$ 22,342.68
Honke (Cavanaugh)	744,698	372,349	372	1,365	\$ 69,629.90
Maulbetsch	422,278	211,139	211	774	\$ 39,483.32
Botero	749,387	374,693	375	1,374	\$ 70,068.31
Fox	1,024,635	512,318	512	1,879	\$ 95,804.28
Pellerito aka Lakeside Development LLC aka Mitigation Solutions aka Oakland	505,066	252,533	253	926	\$ 47,224.10
Clark, Brad and Mary	1,123,255	561,628	562	2,059	\$ 105,025.33
Landsberg, Carol P. Trust	1,172,774	586,387	586	2,150	\$ 109,655.32
Merkel / Heller	856,602	428,301	428	1,570	\$ 80,092.97
Smyth	1,124,307	562,154	562	2,061	\$ 105,123.68
Whitney	1,743,716	871,858	872	3,197	\$ 163,038.89
Webster Church	2,345,888	1,172,944	1,173	4,301	\$ 219,342.49
Bloch (23 acres)	91,539	45,770	46	168	\$ 8,558.98
Newton (Green Things)	688,270	344,135	344	1,262	\$ 64,353.79
Gould	35,665	17,833	18	65	\$ 3,334.73
Braun, Charles and Catherine	1,309,479	654,739	655	2,401	\$ 122,437.39
Dudley, Open Roads Development	5,666,318	2,833,159	2,833	10,388	\$ 529,805.59
Biltmore / Superior / Geddes aka DBN Investors LLC	789,742	394,871	395	1,448	\$ 73,841.56
Pardon	133,329	66,665	67	244	\$ 12,466.40
Nixon, William and Cherie	665,135	332,568	333	1,219	\$ 62,190.71
Hilton, Walter Trust (Mason)	115,674	57,837	58	212	\$ 10,815.63
Zeeb, Kenny	323,860	161,930	162	594	\$ 30,281.18
Girbach (Vestergaard)	421,195	210,597	211	772	\$ 39,382.06
Braun, Thomas & Theodore	889,909	444,955	445	1,632	\$ 83,207.28
Ledwidge	574,748	287,374	287	1,054	\$ 53,739.41
Geiger (213 acres)	67,556	33,778	34	124	\$ 6,316.58
Geiger (116 acres)	943,418	471,709	472	1,730	\$ 88,210.37
Lindemann and Weidmayer	534,028	267,014	267	979	\$ 49,932.11

Thomas and Lobato	158,643	79,322	79	291	\$ 14,833.28
VanNatter	52,430	26,215	26	96	\$ 4,902.25
Bloch (33 acres)	778,365	389,183	389	1,427	\$ 72,777.80
Ford-Goldsmith	308,685	154,342	154	566	\$ 28,862.29
Boike (Maulbetsch)	23	12	0	0	\$ 2.16
Drake - South	3,170,849	1,585,425	1,585	5,813	\$ 296,477.08
Schultz, Robert	735,373	367,686	368	1,348	\$ 68,757.99
Schumacher, Carol	504,207	252,103	252	924	\$ 47,143.74
Hornback, Dan and Amy (Kadykowski)	2,076,656	1,038,328	1,038	3,807	\$ 194,169.10
Wolf and Sheldon	5,512	2,756	3	10	\$ 515.41
Novick, Jack and Kerry Kelly	453	226	0	1	\$ 42.34
Drake - North	18,900	9,450	9	35	\$ 1,767.17
Domino Farms aka DF Land Development (12 acres)	573,514	286,757	287	1,051	\$ 53,624.03
Moore	106,534	53,267	53	195	\$ 9,961.04
Polley	49,196	24,598	25	90	\$ 4,599.84
White aka McCleery	37,450	18,725	19	69	\$ 3,501.60
VanCurler	5,372,843	2,686,421	2,686	9,850	\$ 502,365.38
DF Land Development LLC (81 acres)	904,060	452,030	452	1,657	\$ 84,530.34
Guenther - West	331,566	165,783	166	608	\$ 31,001.74
Guenther - East	856,469	428,235	428	1,570	\$ 80,080.59
Hall, James S. Revocable Trust	2,475,211	1,237,606	1,238	4,538	\$ 231,434.34
Smith, Carol Trust	2,906,246	1,453,123	1,453	5,328	\$ 271,736.45
Pringle, John and Beverly Mitchell (shared with LAC)	760,298	380,149	380	1,394	\$ 71,088.53
Rogers	84,221	42,110	42	154	\$ 7,874.72
Lada Rolling Acres, LLC	995,213	497,606	498	1,825	\$ 93,053.25
DeVine-Koselka	3,359,476	1,679,738	1,680	6,159	\$ 314,113.91
Seeley Farm	770,421	385,210	385	1,412	\$ 72,034.98
Shatter Family Trust	688,310	344,155	344	1,262	\$ 64,357.53
Stiles-Kaldjian	1,054,217	527,109	527	1,933	\$ 98,570.20
Lepkowski	1,235,910	617,955	618	2,266	\$ 115,558.65
Koch	50,631	25,315	25	93	\$ 4,734.04
Stepien	546,459	273,229	273	1,002	\$ 51,094.34
Haas	1,208,086	604,043	604	2,215	\$ 112,957.10
Lambarth	1,497,117	748,558	749	2,745	\$ 139,981.67
Boss & Bull Holdings, LLC	74,787	37,394	37	137	\$ 6,992.67
Moehrle	549,374	274,687	275	1,007	\$ 51,366.89

Totals	Biomass (kg)	Aboveground Carbon (kg)	Aboveground Carbon (Mg)	CO ₂ Equivalent (metric tons CO ₂)	EPA \$ Conversion for Aboveground Carbon
	65,191,634	32,595,817	32,596	119,519	\$ 6,095,473.15

To convert mass of aboveground carbon stored in kilograms to other metrics that communicate their value, we used a variety of available sources and conversion standards. The table below shows the social cost and carbon emission equivalents for all current Greenbelt properties. The social cost of carbon represents the societal costs, in terms of the long-term

damage done to both the environment and human health, that are associated with the emission of one extra ton of CO₂ (U.S. EPA, 2016). Social cost and passenger vehicle mile emission estimates came from the EPA's Greenhouse Gases Equivalencies Calculator, airline mile emission estimates were sourced from BlueSkyModel, and yearly average household emission data was gathered using the CoolClimate Household Calculator (U.S. EPA, 2021; BlueSkyModel; CoolClimate Network). A different valuation model from Hungate et al. (2017) estimates the social cost of carbon at \$42 to \$400 per metric ton of C, with a median value of \$137. The estimates from this model are lower than those calculated using the EPA social cost of carbon because the units of this model are metric tons of C while the units for the EPA model are metric tons of CO₂. Using the median value from the Hungate et al. (2017) model, we calculated the social cost of aboveground carbon storage for all Greenbelt properties to be \$4,465,626.90.

Total Aboveground Carbon (kg)	Social Cost (\$)*	Hungate et al. (2017)**	Passenger Vehicle Miles Equivalent (mi)	Airline Miles Equivalent (mi)	Avg. Annual Ann Arbor Household Emissions Equivalent (# of households)
32,595,817	\$ 6,095,473.15	\$4,465,626.90	80,682,715	1,348,245	2,716

* These calculations used the 2021 social cost of carbon value of \$51/metric ton CO₂

** This is described by Hungate et al. (2017) as the median estimate of carbon reduction benefit with a value of \$137/metric ton C

Summary of Belowground Carbon Storage by Property

Project Name	Forest Soil Carbon (kg)	Wetland Soil Carbon (kg)	Total Belowground Carbon (kg)	Total Belowground Carbon (Mg)	CO ₂ Equivalent (metric tons CO ₂)	EPA \$ Conversion for Soil Carbon
Alexander, Robbin	53,880	247,218	301,098	301	1,104	\$ 56,305.79
Bloomer, Tom & Rosanne	166,044	1,569,516	1,735,559	1,736	6,364	\$ 324,552.53
Fishbeck, William & Betty (41 acres)	0	0	0	0	0	\$ -
Fishbeck, William & Betty (116 acres)	498,922	58,069	556,991	557	2,042	\$ 104,158.19
Kapp, Dale	340,861	104,315	445,175	445	1,632	\$ 83,248.56
Cares, John & Jean	719,254	241,116	960,370	960	3,521	\$ 179,590.88
Alexander, John and Beverly	111,275	47,513	158,788	159	582	\$ 29,693.68
Honke (Cavanaugh)	253,124	1,359,905	1,613,029	1,613	5,914	\$ 301,639.19
Maulbetsch	172,213	1,601,561	1,773,774	1,774	6,504	\$ 331,698.77
Botero	262,790	4,212,790	4,475,580	4,476	16,411	\$ 836,941.06
Fox	734,321	80,059	814,380	814	2,986	\$ 152,290.39
Pellerito aka Lakeside Development LLC aka Mitigation Solutions aka Oakland	197,595	369,054	566,648	567	2,078	\$ 105,964.23
Clark, Brad and Mary	8,742	1,019,168	1,027,910	1,028	3,769	\$ 192,220.91
Landsberg, Carol P. Trust	588,876	1,414,184	2,003,060	2,003	7,345	\$ 374,575.72
Merkel / Heller	251,221	25,819	277,040	277	1,016	\$ 51,807.01
Smyth	208,129	0	208,129	208	763	\$ 38,920.40
Whitney	2,510,091	5,988,566	8,498,657	8,499	31,162	\$ 1,589,263.37
Webster Church	44,484	1,298,287	1,342,772	1,343	4,924	\$ 251,100.56
Bloch (23 acres)	4,980	86,829	91,808	92	337	\$ 17,168.31
Newton (Green Things)	330,965	134,056	465,020	465	1,705	\$ 86,959.62
Gould	0	0	0	0	0	\$ -
Braun, Charles and Catherine	921,222	390,070	1,311,292	1,311	4,808	\$ 245,213.77
Dudley, Open Roads Development	1,641,390	94,994	1,736,384	1,736	6,367	\$ 324,706.75
Biltmore / Superior / Geddes aka DBN Investors LLC	349,643	74,128	423,772	424	1,554	\$ 79,246.06
Pardon	89,513	47,621	137,134	137	503	\$ 25,644.36
Nixon, William and Cherie	276,189	58,779	334,968	335	1,228	\$ 62,639.54

Hilton, Walter Trust (Mason)	48,425	7,673	56,098	56	206	\$ 10,490.46
Zeeb, Kenny	284,012	0	284,012	284	1,041	\$ 53,110.78
Girbach (Vestergaard)	62,286	27,930	90,216	90	331	\$ 16,870.53
Braun, Thomas & Theodore	690,653	4,264	694,917	695	2,548	\$ 129,950.75
Ledwidge	85,991	0	85,991	86	315	\$ 16,080.41
Geiger (213 acres)	277,975	24,109	302,084	302	1,108	\$ 56,490.23
Geiger (116 acres)	77,575	300,547	378,122	378	1,386	\$ 70,709.48
Lindemann and Weidmayer	255,741	80,366	336,107	336	1,232	\$ 62,852.53
Thomas and Lobato	10,850	0	10,850	11	40	\$ 2,029.02
VanNatter	23,918	0	23,918	24	88	\$ 4,472.74
Bloch (33 acres)	171,888	28,773	200,661	201	736	\$ 37,524.01
Ford-Goldsmith	36,197	0	36,197	36	133	\$ 6,768.88
Boike (Maulbetsch)	2,151	0	2,151	2	8	\$ 402.30
Drake - South	282,368	488,402	770,770	771	2,826	\$ 144,135.36
Schultz, Robert	219,998	55,408	275,406	275	1,010	\$ 51,501.33
Schumacher, Carol	591,787	215,209	806,995	807	2,959	\$ 150,909.48
Hornback, Dan and Amy (Kadykowski)	1,514,977	280,553	1,795,530	1,796	6,584	\$ 335,767.21
Wolf and Sheldon	0	0	0	0	0	\$ -
Novick, Jack and Kerry Kelly	34,193	0	34,193	34	125	\$ 6,394.24
Drake - North	0	0	0	0	0	\$ -
Domino Farms aka DF Land Development (12 acres)	217,793	13,701	231,494	231	849	\$ 43,289.75
Moore	47,108	0	47,108	47	173	\$ 8,809.23
Polley	0	16,645	16,645	17	61	\$ 3,112.62
White aka McCleery	14,323	0	14,323	14	53	\$ 2,678.48
VanCurler	784,057	257,796	1,041,853	1,042	3,820	\$ 194,828.34
DF Land Development LLC (81 acres)	377,239	501,359	878,598	879	3,222	\$ 164,299.29
Guenther - West	18,867	38,404	57,271	57	210	\$ 10,709.78
Guenther - East	460,284	0	460,284	460	1,688	\$ 86,073.98
Hall, James S. Revocable Trust	618,644	579,314	1,197,958	1,198	4,393	\$ 224,020.26
Smith, Carol Trust	546,760	964,729	1,511,489	1,511	5,542	\$ 282,651.09
Pringle, John and Beverly Mitchell (shared with LAC)	386,462	134,047	520,509	521	1,909	\$ 97,336.15

Rogers	17,078	0	17,078	17	63	\$ 3,193.59
Lada Rolling Acres, LLC	175,632	226,655	402,287	402	1,475	\$ 75,228.28
DeVine-Koselka	1,399,421	187,782	1,587,203	1,587	5,820	\$ 296,809.60
Seeley Farm	278,233	23,383	301,616	302	1,106	\$ 56,402.70
Shatter Family Trust	203,291	111,562	314,852	315	1,154	\$ 58,877.94
Stiles-Kaldjian	1,334,490	540,049	1,874,539	1,875	6,873	\$ 350,541.93
Lepkowski	181,391	381,207	562,598	563	2,063	\$ 105,206.78
Koch	8,438	0	8,438	8	31	\$ 1,577.84
Stepien	82,812	40,364	123,177	123	452	\$ 23,034.22
Haas	774,854	0	774,854	775	2,841	\$ 144,899.08
Lambarth	147,046	180,256	327,302	327	1,200	\$ 61,206.08
Boss & Bull Holdings, LLC	17,405	38,938	56,343	56	207	\$ 10,536.20
Moehrle	107,501	126,852	234,353	234	859	\$ 43,824.39

Totals	Forest Soil Carbon (kg)	Wetland Soil Carbon (kg)	Total Belowground Carbon (kg)	Total Belowground Carbon (Mg)	CO ₂ Equivalent (metric tons CO ₂)	EPA \$ Conversion for Soil Carbon
	23,605,839	26,399,893	50,005,732	50,006	183,356	\$ 9,351,156.96