ALB Host Tree Estimate Analysis

Table 1.

	Entire Regulated Area						
		Majority of Parcel in Land Use Category	Total Parcel Area (acres)	Estimated Trees per Acre	Estimated Host Trees per Acre	Estimated Total Trees	Estimated Total Host Trees
Land Use	Deciduous Forests	102	313	3,266	307	1,021,998	95,964
	Mixed Forest	247	911	3,840	159	3,497,542	144,635
	Evergreen Forest	1,843	6,249	3,370	96	21,061,469	599,231
	Woody Wetlands	1,773	11,662	3,456	151	40,302,826	1,757,725
	Emergent Herbaceous Wetlands	481	6,812	405	96	2,759,385	653,233
	Shrub/Scrub	1,778	3,318	1,921	151	6,374,131	500,074
	Open Water	22	2,508	52	30	131,581	76,105

- Table 1 *estimates total host trees per acre* and per land use category, as well as *total trees* (host and non-host) *per acre* and per land use category.
- *Estimated total trees per acre* is a product of the U.S. Forest Service. This nationally modeled dataset includes all stems with DBH >= 1 inch.
- Because of inclusive stem count and the scale of the dataset (trees per acre scaled to 30m grid cells at the national level), the *total number of trees per acre* may be overcounted and less reliable then the *estimated host trees per acre*.
- Data elements related to host tree are a product of the merged survey data plus the contract tree survey scaled to the entire regulated area.
- *Majority of Parcel in Land Use Category* qualifies parcel by their majority land use category to show the proportions of parcels in different land uses.

Table 2.

		Surveyed Trees					Estimated Trees			
		Total Trees Surveyed	**Mean DBH**	**DBH <= 6"**	**DBH > 6"**	**DBH >= 12”**	**Estimated Total Host Trees**	**Estimated DBH <= 6"**	**Estimated DBH > 6"**	**Estimated DBH >= 12"**
Land Use	**Deciduous Forests**	444	7.29	254	103	87	95,964	54,898	22,262	18,804
	Mixed Forest	887	9.39	480	200	207	144,635	78,269	32,612	33,754
	Evergreen Forest	6012	8.29	3,402	1,445	1,165	599,231	339,086	144,027	116,118
	Woody Wetlands	26023	7.65	13,709	6,791	5,523	1,757,725	925,975	458,699	373,051
	Emergent Herbaceous Wetlands	280	9.27	122	91	67	653,233	284,623	212,301	156,309
	Shrub/Scrub	1741	8.27	936	419	386	500,074	268,851	120,351	110,872
	Open Water	99	7.03	50	23	26	76,105	38,437	17,681	19,987

- Table 2 uses the survey efforts of the ALB program to estimate DBH across the regulated area.
- Surveyed tree metrics are modeled from merged surveys data plus the contract tree survey. The point survey data is then parsed by land cover type and binned by DHB as a proportion of the whole.
- Once binned, the surveyed data are scaled to the estimate total host trees across the entire regulated area.

Table 3.

	All Contract Trees						
		Majority of Parcel in Land Use Category	**Total Parcel Area (acres)**	**Total Contract Trees**	**Contract Trees per Acre**	**Mean DBH – Contract Trees**	**Estimated Total Host Trees (For Regulated Area)**
Land Use	**Deciduous Forests**	1	18.97	177	20.31	8.89	5,971
	Mixed Forest	0	53.6	119	1.98	6.09	761
	Evergreen Forest	18	286.88	1309	8.46	7.08	55,009
	Woody Wetlands	59	860.81	16,847	13.68	7.71	225,108
	Emergent Herbaceous Wetlands	0	22.87	102	14.19	7.87	80,582
	Shrub/Scrub	14	78.37	523	9.72	7.51	32,381
	Open Water	1	32.65	42	4.64	10.24	1,357

- Data on contract tree totals, per acre counts, and DHB come from the contract tree survey data. The data is then scaled to the entire regulated area to estimate total host trees.
- The number of parcels containing contract tree surveys represent about 1.5% of the total parcels in the regulated area.
- *Estimated total host trees* per land use type or per acre may undercount the *estimated total host trees* compared to the combined dataset in table 2.