

Biomass as a Fuel Resource in Electric Generation

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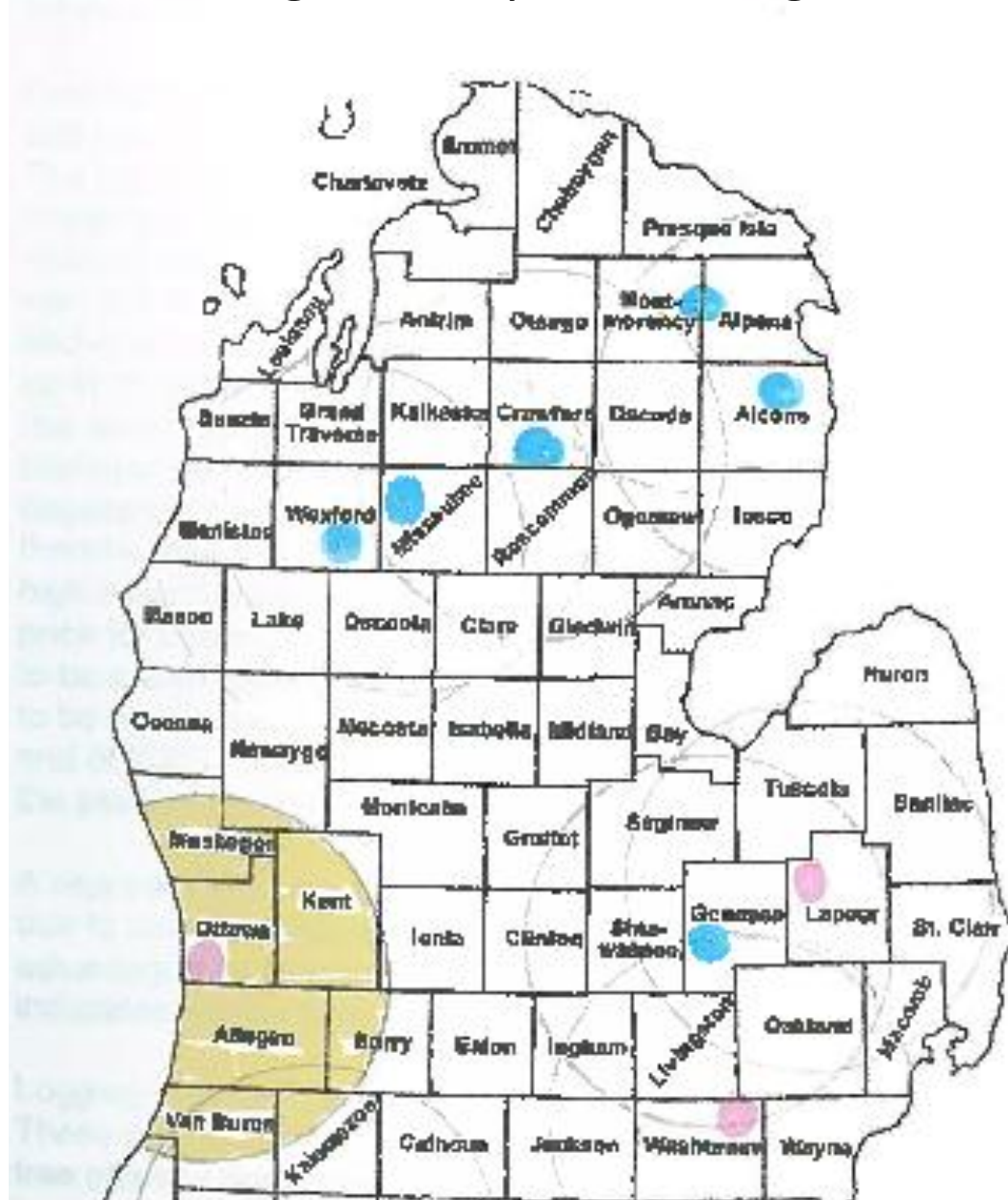
Map of Holland BPW Woodshed Areas



Wood Resources within the Woodshed

County	Total Acres x1000	Forested Acres x1000	Timber Volume Green Tons (x1000)
Allegan	530	178	8245
Barry	356	111	8245
Ionia	367	75	3954
Kalamazoo	360	75	5015
Kent	548	155	9190
Montcalm	453	133	8133
Muskegon	326	160	5515
Newaygo	539	331	23508
Oceana	346	182	10526
Ottawa	362	79	4903
Van Buren	391	122	7130
Total	4578	1601	94364

Map of Wood Using Industry's in Michigan's Lower Peninsula



Potential Biomass Fuel Providers

Supplier	County	Type*	Green Tons**	Delivered Price***	Miles to Plant***
Post Hardwoods	Allegan	SMC	3000	32	20
Buskirk Sawmill	Barry	SMC	20000	30	50
Maple Rapids Lumer	Clinton	SMC	3000	34	90
Quality Hardwoods	Eaton	SMC	10000	34	70
Pallet One	Indiana	SMC	20000	32	110
Blough Hardwoods	Ionia	SMC	4000	28	50
Devereaux Sawmill	Ionia	SMC	2000	34	90
Atwood Forest Prod	Kent	SMC	4000	32	50
TD Johnson	Kent	WTC	40000	28	60
Elders Forest Prod	Kent	SMC	2000	32	50
Rothig Forest Prod	Lake	WTC	50000	28	110
Gentz Forest Prod	Manistee	WTC	50000	30	90
John Doyle & Sons	Mecosta	WTC	50000	29	90
Bisballe Forest Prod	Missaukee	WTC	25000	28	140
Biewer Sawmill	Missaukee	SMC	12000	30	130
Biewer Sawmill	Missaukee	Saw Dust	24000	17	130
Mid-Michigan Logging	Missaukee	WTC	15000	28	140
Roger Bazuin & Sons	Missaukee	WTC	15000	26	130
Rush's Forest Prod	Montcalm	WTC	20000	30	80
Pulpwood & Forestry	Muskegon	WTC	30000	27	40
Integrity Tree Services	Ottawa	WTC	50000	27	20
Al Northrup Logging	St. Joseph	WTC	40000	29	70
	Total Tons		489000		

*WTC=Whole Tree Chip; SMC=Sawmill Chip **These are potential volumes to Holland; actual volumes may be higher or lower ***This is the dollars per green ton delivered to Holland in 2010 dollars ****Miles from supplier home base, miles from harvest location could be more or less.