New York Cumulative On-Shore Wind Impacts - Wind Resource Area Required and Annual Avian Deaths

			2009 NREL acres/MW		% of agricultural land		Fraction of Suitable Land		Annual Avian Deaths		
Source	**Year**	**Capacity (MW)**	**30**	**141**	**Low**	**High**	**Low**	**High**	**Bald Eagle**	**Eastern Golden**	**Bats**
2019 Installed Nameplate Capacity	2019	1,985	59,550	279,885	0.7%	3.2%	0.05	0.22	45	11	185
2016 FSEIS - Base Case	2030	4,000	120,000	564,000	1.4%	6.4%	0.09	0.43	91	23	373
2016 FSEIS - High Load (CLCPA SGEIS)	2030	5,905	177,150	832,605	2.0%	9.5%	0.14	0.64	135	33	551
NYISO CARIS 70x30 Scenario	2030	6,476	194,280	913,116	2.2%	10.4%	0.15	0.70	148	37	604
NYISO CARIS Base Load	2030	8,722	261,660	1,229,802	3.0%	14.0%	0.20	0.95	199	49	814
E3 Decarbonization Pathways	2030	4,700	141,000	662,700	1.6%	7.5%	0.11	0.51	107	27	438
E3 Decarbonization Pathways	2050	9,000	270,000	1,269,000	3.1%	14.4%	0.21	0.98	206	51	840
Brattle Base Case	2030	9,700	291,000	1,367,700	3.3%	15.6%	0.22	1.05	222	55	905
Brattle Base Case	2040	23,300	699,000	3,285,300	8.0%	37.4%	0.54	2.53	532	132	2,173
Maximum Feasible Builds DPS	2030	10,000	300,000	1,410,000	3.4%	16.0%	0.23	1.08	228	56	933
Maximum Feasible Builds NYSERDA	2030	8,000	240,000	1,128,000	2.7%	12.8%	0.18	0.87	183	45	746
NREL Technical Potential		26,000	780,000	3,666,000	8.9%	41.7%	0.60	2.82	594	147	2,425
Analysis Group	2040	35,200	1,056,000	4,963,200	12.0%	56.5%	0.81	3.82	804	199	3,283

1,300,000	Acres	New York Natural Heritage Program economically and biologically area suitable for land-based wind energy
8,790,000	Acres	Recent estimate of 8.79 million acres of agricultural lands in NYS
2.28	Annual deaths/100 MW	85 Bald Eagles per 124 MW of wind turbines over the 30-year lifetime of project
0.56	Annual deaths/100 MW	21 Golden Eagles per 124 MW of wind turbines over the 30-year lifetime of project
9.33	Annual deaths/100 MW	347 bat deaths per year per 125 MW