

Low and High Estimates of the Area of Land Close to Sea Level, by Region: Mid-Atlantic¹ (square kilometers)

Jurisdiction	Meters above Spring High Water																			
	low	high	low	high	low	high	low	high	low	high	low	high	low	high	low	high	low	high		
	0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
-----Cumulative (total) amount of Dry Land below a given elevation-----																				
L.I. Sound and Peconic	6	31	22	59	42	86	63	111	85	135	106	158	127	181	149	200	170	216	190	229
South Shore Long Island	19	70	59	134	108	198	161	250	216	293	266	335	309	369	347	400	380	429	410	450
NY Harbor/ Raritan Bay Total	5	72	47	143	93	200	139	230	185	260	215	288	240	316	265	343	290	360	314	374
New York	0	13	8	25	16	37	24	44	32	51	40	58	46	65	52	72	59	76	65	78
New Jersey	5	59	39	117	77	163	115	186	153	209	175	230	194	251	213	271	231	284	249	295
New Jersey Shore	18	61	66	129	131	186	184	237	223	283	262	327	304	369	344	409	382	445	418	481
Delaware Bay Total	19	62	52	108	88	154	124	206	166	259	217	312	268	366	321	421	374	470	427	512
New Jersey	3	19	15	36	27	53	39	73	52	94	70	114	90	134	109	154	127	170	146	182
Delaware	15	43	38	71	61	101	85	133	114	165	146	198	178	232	212	267	247	300	281	330
Delaware River Total	17	80	56	146	103	210	152	262	201	315	249	368	296	417	342	467	386	512	430	549
Delaware: fresh	2	6	5	10	8	14	11	19	15	24	19	28	24	32	28	36	32	39	35	42
Delaware: saline	5	13	12	20	17	27	23	33	29	40	35	47	41	54	49	62	56	70	64	77
New Jersey: fresh	0	18	7	35	17	52	28	67	39	83	52	98	65	114	77	130	90	144	102	154
New Jersey: saline	6	27	21	48	37	68	53	82	68	96	82	109	95	121	108	133	119	143	130	152
Pennsylvania	4	17	11	33	24	49	37	61	50	73	61	85	71	96	81	106	90	115	99	123
Atlantic Coast of Del-Mar-Va Total	27	87	81	148	140	212	200	275	259	334	318	390	373	443	425	495	477	548	529	599
Delaware	11	32	28	53	46	74	64	95	82	117	104	139	126	163	149	187	172	210	196	234
Maryland	3	17	20	40	44	69	74	97	101	123	126	145	148	163	165	180	182	196	199	211
Virginia	13	37	33	55	49	69	62	82	75	94	87	106	99	117	111	129	122	141	134	154

		low	high	low	high	low	high	low	high	low	high	low	high	low	high	low	high				
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
Chesapeake Bay Total		102	466	441	906	791	1357	1193	1827	1587	2334	1973	2859	2448	3378	2962	3818	3446	4234	3865	4633
Delaware		1	2	1	3	3	5	4	7	6	10	9	14	12	18	15	24	20	29	26	36
Maryland		66	290	306	530	515	763	738	1007	952	1227	1141	1451	1352	1670	1572	1865	1778	2047	1966	2213
fresh		9	35	33	70	63	115	106	167	152	212	192	263	243	325	307	394	377	466	449	533
vulnerable		49	187	234	344	379	477	515	605	633	704	731	804	830	892	911	958	974	1011	1024	1058
saline		8	68	39	117	74	171	118	235	167	311	218	385	280	454	354	513	427	570	492	623
District of Columbia		2	3	3	4	4	6	5	7	7	9	9	11	11	13	13	15	14	16	16	18
Virginia		34	172	131	369	268	583	445	805	622	1088	815	1383	1073	1677	1362	1915	1634	2141	1857	2366
fresh		1	26	15	50	33	75	50	106	67	152	89	198	125	244	169	292	214	340	260	394
vulnerable		3	8	7	17	14	26	22	35	30	40	37	44	42	48	46	51	50	53	52	55
saline		30	138	108	302	222	482	373	665	525	896	689	1140	906	1385	1147	1573	1370	1748	1545	1916
Virginia Beach Atlantic Coast		7	27	25	56	45	99	78	142	118	180	158	219	196	257	235	288	272	299	293	310
Pamlico Albemarle Sounds		621	1028	1186	1519	1684	2052	2239	2601	2774	3108	3274	3629	3827	4244	4449	4789	4932	5173	5269	5441
Atlantic Coast of North Carolina		103	151	182	238	273	336	370	429	458	507	529	579	603	655	682	740	768	829	855	908
Total NY to NC		945	2136	2218	3585	3498	5089	4903	6569	6272	8008	7567	9463	8991	10994	10520	12370	11876	13515	13001	14486
Wetlands	Tidal	-----Cumulative (total) amount of Nontidal Wetlands below a given elevation-----																			
L.I. Sound and Peconic	36	1	2	2	4	3	6	4	7	6	8	7	9	8	10	9	11	10	12	11	13
South Shore Long Island	104	1	4	4	7	6	9	8	10	9	11	11	12	11	13	12	13	13	14	14	15
NY Harbor/ Raritan Bay Total	66	0	3	2	6	4	8	6	9	7	10	9	11	9	12	10	13	11	14	12	16
New York	9	0	1	0	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2
New Jersey	57	0	2	2	5	3	7	5	7	6	8	7	9	8	10	9	11	9	12	10	13
New Jersey Shore	399	11	52	42	92	72	129	101	157	128	181	152	205	174	227	196	249	216	269	237	286
Delaware Bay Total	496	16	54	45	90	72	121	98	139	121	156	140	173	157	188	172	202	186	214	199	224
New Jersey	260	9	38	30	67	51	92	72	106	91	119	105	132	118	142	129	153	139	161	148	167
Delaware	236	7	16	15	23	20	29	26	33	31	37	35	41	39	46	43	49	47	53	51	57

		low	high	low	high	low	high	low	high	low	high	low	high	low	high	low	high				
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
Delaware River Total	216	12	41	33	64	49	85	65	93	80	101	90	108	97	115	103	122	109	127	116	133
Delaware: fresh	5	0	1	1	1	1	2	2	2	2	2	2	3	2	3	3	3	3	3	3	3
Delaware: saline	69	1	3	3	3	3	4	4	5	4	5	5	6	5	6	6	7	6	7	7	8
New Jersey: fresh	29	0	10	6	20	12	29	19	31	25	34	29	37	32	40	34	43	37	46	39	48
New Jersey: saline	107	10	25	22	35	30	44	37	47	44	50	47	52	50	55	52	57	54	59	56	62
Pennsylvania	6	1	2	1	4	3	6	4	8	6	9	7	10	8	11	9	12	9	12	10	12
Atlantic Coast of Del-Mar-Va Total	757	4	14	13	28	26	42	39	55	52	64	62	73	70	80	78	85	84	90	89	95
Delaware	41	2	5	4	7	7	10	9	12	11	14	13	16	15	17	16	18	18	20	19	21
Maryland	105	0	4	5	8	9	13	14	17	18	22	22	26	26	28	29	31	31	33	33	34
Virginia	611	2	5	4	12	10	20	16	25	23	28	26	31	30	34	33	36	35	38	37	40
Chesapeake Bay Total	1903	43	150	143	257	229	371	331	483	420	582	504	690	610	799	714	900	817	996	909	1119
Delaware	7	1	2	2	3	2	4	3	4	4	5	5	6	6	8	7	9	8	11	10	13
Maryland	1011	29	88	92	137	136	194	189	244	231	282	267	329	315	377	361	420	404	458	441	497
fresh	161	2	9	7	18	14	28	23	38	32	48	42	62	57	79	74	99	94	119	114	142
vulnerable	741	26	69	79	101	110	137	147	166	170	182	188	206	213	228	232	242	245	251	253	259
saline	109	1	10	6	18	12	29	19	40	28	51	36	61	45	70	55	79	64	87	73	95
District of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia	884	14	60	49	117	91	174	138	235	185	295	233	354	288	414	346	470	404	527	457	609
fresh	168	1	12	8	21	14	30	21	37	27	44	34	52	40	59	47	70	56	83	66	118
vulnerable	88	2	5	4	11	9	18	15	25	21	28	26	31	30	35	33	38	36	41	39	45
saline	628	11	43	37	85	68	125	103	173	137	222	173	271	219	320	267	362	313	403	352	446
Virginia Beach Atlantic Coast	124	6	21	20	37	33	47	42	57	52	66	61	73	69	81	76	88	84	92	89	96
Pamlico Albemarle Sounds	829	2083	2625	2772	3039	3130	3320	3401	3562	3640	3789	3852	3984	4045	4173	4235	4352	4409	4532	4592	4695
Atlantic Coast of North Carolina	443	197	255	275	315	335	374	393	429	448	481	495	525	538	568	583	616	632	666	680	710
Total NY to NC	5372	2374	3221	3351	3940	3959	4512	4487	5001	4963	5449	5381	5864	5788	6266	6189	6652	6571	7026	6948	7401

		low	high	low	high	low	high	low	high	low	high	low	high	low	high	low	high				
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		Cumulative (total) amount of land below a given elevation																			
Dry Land		945	2136	2218	3585	3498	5089	4903	6569	6272	8008	7567	9463	8991	10994	10520	12370	11876	13515	13001	14486
Nontidal Wetlands		2374	3221	3351	3940	3959	4512	4487	5001	4963	5449	5381	5864	5788	6266	6189	6652	6571	7026	6948	7401
All Land	5372	8691	10729	10942	12898	12829	14974	14762	16943	16607	18830	18321	20699	20151	22633	22081	24394	23819	25914	25321	27260

Source: J.G. Titus and J. Wang, 2008. "Maps of Lands Close to Sea Level along the Middle Atlantic Coast of the United States: An Elevation Data Set to Use While Waiting for LIDAR." In J.G. Titus and E. Strange (eds) *Background Documents Supporting Climate Change Science Program Synthesis and Assessment Product 4.1*. Environmental Protection Agency, Washington DC. and J.G. Titus and D. Cacela, 2008 "Uncertainty Ranges." In Titus and Strange (eds).

1. Low and high are an uncertainty range based on the contour interval and/or stated root mean square error (RMSE) of the input elevation data. Calculations assume that half of the RMSE is random error and half is systematic error. For a discussion of these calculations, see Titus and Cacela 2008 or <http://maps.risingsea.net>.