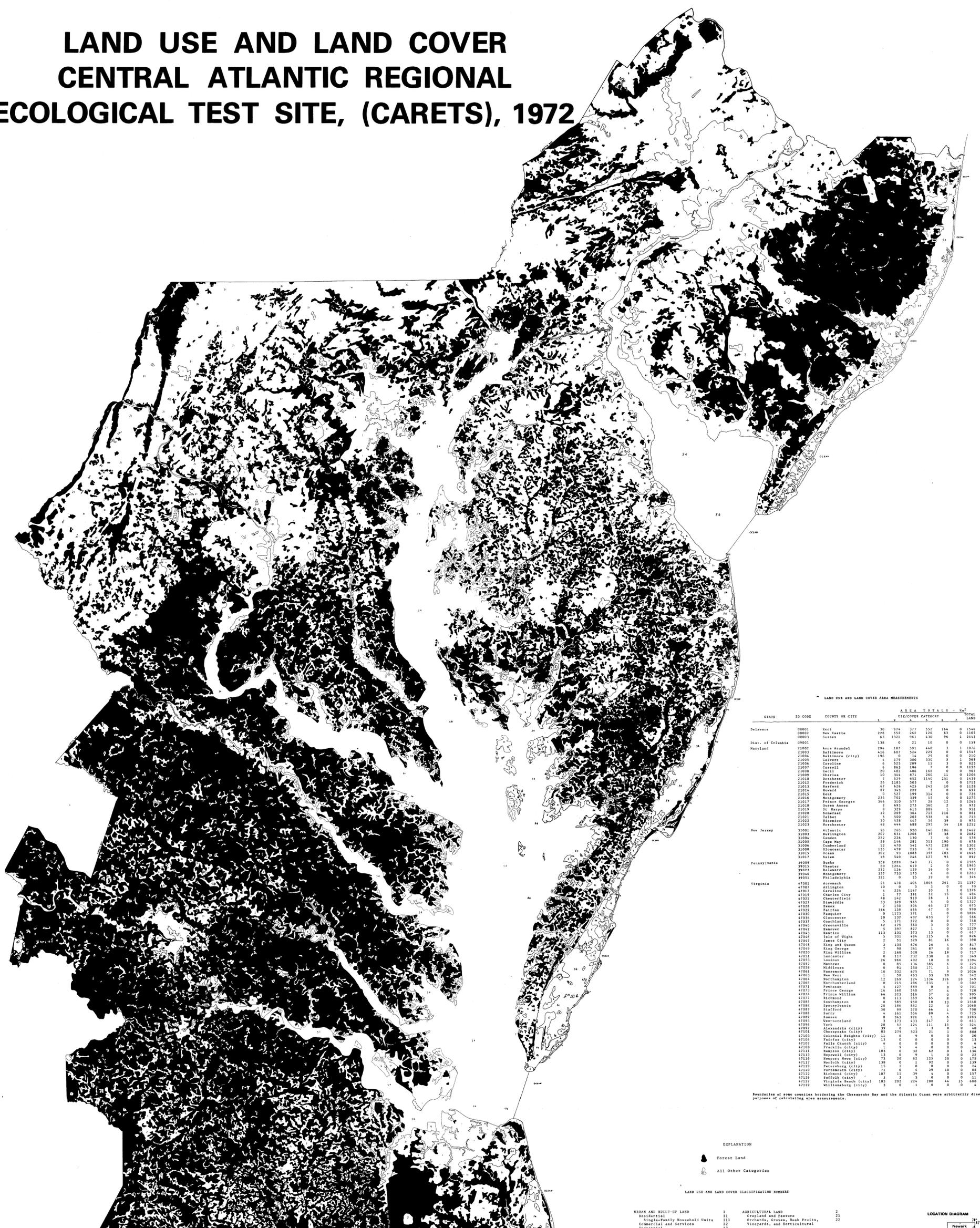


# LAND USE AND LAND COVER CENTRAL ATLANTIC REGIONAL ECOLOGICAL TEST SITE, (CARETS), 1972

40°N  
39°  
38°  
37°



LAND USE AND LAND COVER AREA MEASUREMENTS

STATE	FID CODE	COUNTY OR CITY	AREA TOTALS - Ha							TOTAL LANDS	
			1	2	3	4	5	6	7		
Delaware	08001	Kent	30	974	377	552	164	0	0	1546	2098
	08002	New Castle	228	532	252	100	63	0	0	1300	2123
	08003	Sussex	63	1321	961	430	96	1	0	2402	2872
	09001	Dist. of Columbia	138	0	21	10	0	0	0	159	149
	21000	Anne Arundel	284	182	582	448	3	1	0	1026	1524
Maryland	21001	Baltimore	416	607	524	229	0	0	0	1547	1776
	21004	Calvert	4	179	360	310	5	1	0	949	859
	21005	Carroll	4	232	289	15	3	0	0	622	528
	21006	Cecil	4	963	186	0	0	0	0	1155	1162
	21007	Chesapeake	10	481	406	15	3	0	0	982	1024
	21008	Charles	10	814	871	268	11	0	0	1926	1866
	21009	Frederick	7	329	852	1140	251	0	0	1439	2319
	21010	Garrett	2	2189	575	0	0	0	0	2774	1717
	21011	Hagerston	87	626	423	245	10	0	0	1128	1373
	21012	Harford	82	363	252	3	0	0	0	652	653
	21013	Kent	0	527	199	314	0	0	0	1046	1040
	21014	Montgomery	234	302	198	15	0	0	0	452	1292
	21015	Prince Georges	360	310	577	18	12	0	0	1365	1293
	21016	Queen Anne's	2	495	278	360	2	0	0	972	1332
	21017	St. Mary's	8	329	613	889	1	0	0	961	1840
21018	Talbot	12	249	284	15	238	0	0	661	1578	
21019	Washington	30	458	447	316	38	0	0	974	1030	
21020	Worcester	48	444	488	195	18	0	0	1232	1547	
New Jersey	31001	Atlantic	96	285	920	146	186	0	0	1447	1413
	31003	Burlington	207	631	1236	30	38	0	0	2020	2121
	31004	Camden	72	216	130	7	0	0	0	278	285
	31005	Capitan	38	144	230	311	160	0	0	616	1187
	31006	Cumberland	53	410	542	475	238	0	0	1302	1377
	31008	Gloucester	133	199	232	62	6	0	0	493	619
	31011	Ocean	162	93	1088	355	103	0	0	1844	2001
	31012	Salem	38	340	244	127	35	0	0	687	1024
	31013	Union	305	1028	248	17	0	0	0	1546	1622
	31014	Warren	80	234	419	1	0	0	0	1063	1045
Pennsylvania	39023	Delaware	212	126	139	16	0	0	0	477	493
	39044	Montgomery	157	373	173	4	0	0	0	1263	1267
	39051	Philadelphia	321	0	25	19	0	0	0	346	345
Virginia	47001	Accomack	21	408	1809	261	21	0	0	1387	1292
	47002	Adams	0	0	0	0	0	0	0	0	0
	47003	Arlington	70	0	0	0	0	0	0	170	173
	47004	Bedford	4	160	1147	10	1	0	0	1127	1284
	47005	Charlottesville	1	17	391	52	15	0	0	486	526
	47006	Chesapeake	48	102	818	28	1	0	0	1120	1138
	47007	Dinwiddie	33	329	965	5	0	0	0	1327	1312
	47008	Essex	0	1105	645	17	0	0	0	1827	1810
	47009	Fairfax	366	128	446	47	0	0	0	940	1037
	47010	Fredricksburg	0	1122	212	1	0	0	0	1444	1399
	47011	Gloucester	30	127	372	0	0	0	0	548	748
	47012	Greenland	2	192	640	3	0	0	0	917	960
	47013	Henrico	5	397	827	1	0	0	0	1229	1230
	47014	James City	2	91	239	82	16	0	0	398	419
	47015	King and Queen	2	135	676	26	4	0	0	817	843
	47016	King George	7	186	232	18	0	0	0	419	478
	47017	King William	2	188	528	26	19	0	0	717	743
	47018	Lancaster	0	117	232	230	18	0	0	449	478
	47019	Lee	26	966	402	18	0	0	0	1396	1412
	47020	Madison	0	85	126	383	8	0	0	522	610
	47021	Middlesex	0	322	635	71	9	0	0	1026	1097
	47022	Montgomery	0	215	260	23	0	0	0	498	517
	47023	Norfolk	12	249	124	1336	176	18	0	349	1845
	47024	Northampton	0	115	609	27	0	0	0	701	701
	47025	Prince George	14	107	549	0	0	0	0	670	670
	47026	Prince William	66	273	516	37	0	0	0	905	912
	47027	Richmond	0	113	609	27	0	0	0	701	701
	47028	Southampton	0	985	830	13	0	0	0	1548	1558
	47029	Spartanburg	22	186	862	22	0	0	0	1068	1090
	47030	Stafford	30	90	0	0	0	0	0	120	150
47031	Suffolk	4	161	516	80	1	0	0	735	805	
47032	Tazewell	8	143	274	11	0	0	0	427	435	
47033	Warrenton	3	173	433	247	2	0	0	611	638	
47034	York	18	93	111	11	0	0	0	200	218	
47035	Chesapeake Bay	39	0	0	0	0	0	0	40	43	
47036	Calvert Cliffs	11	0	0	0	0	0	0	20	20	
47037	College Park	33	0	0	0	0	0	0	13	13	
47038	Falls Church	5	0	0	0	0	0	0	16	16	
47039	Franklin	3	0	0	0	0	0	0	14	14	
47040	Haymarket	13	0	0	0	0	0	0	22	22	
47041	Haymarket	13	0	0	0	0	0	0	22	22	
47042	Herndon	138	0	0	0	0	0	0	139	139	
47043	Leesville	15	0	0	0	0	0	0	24	24	
47044	Portsmouth	71	0	0	0	0	0	0	83	84	
47045	Richmond	107	11	39	0	0	0	0	111	112	
47046	Suffolk	183	202	274	280	0	0	0	669	648	
47047	Williamsburg	3	0	0	0	0	0	0	4	4	

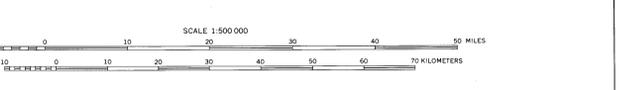
Boundaries of some counties bordering the Chesapeake Bay and the Atlantic Ocean were arbitrarily drawn for purposes of calculating area measurements.

EXPLANATION  
 Forest Land  
 All Other Categories

LAND USE AND LAND COVER CLASSIFICATION NUMBERS

URBAN AND BUILT-UP LAND	1	AGRICULTURAL LAND	2
Residential	11	Cropland and Pasture	21
Single-Family Household Units	111	Orchards, Groves, Bush Fruits, etc.	22
Commercial and Services	12	Vineyards and Horticultural	23
Industrial	13	Forest Land	3
Extractive	14	Heavy Crown Cover (100% and over)	41
Transportation, Communications, and Utilities	15	Light Crown Cover (10% to 99%)	42
Highways, Auto Parking, Bus Terminals, Motor Freight, and Other Facilities	151	Water	5
Railroads and Associated Facilities	152	Streams and Waterways	51
Airports	153	Lakes	52
Institutions	16	Wetlands	53
Strip and Cluster Settlement	17	Bay and Estuaries	54
Open and Other	19	Non-Forest Wetland	6
		Barren Land	7
		Beaches	71

Land use classification categories are in general conformance with those proposed by the Inter-Agency Steering Committee on Land Use Information and Classification in U.S. Geological Survey Circular #11 (1971). Levels II and III categories were determined when possible from Landsat imagery. This compilation is not edited or field checked.



Each sheet was adjusted slightly to fit the map base of the 1:500,000-scale USGS topographic map series, but the fit between these maps and Landsat images was satisfactory.

To provide maps for rapid visual interpretation, each of the four major land use and land cover types was shaded so that the distribution of any one of the categories can be visually assessed. The four major land use and land cover level I categories described in USGS Circular #11, A land-use classification system for use with remote sensor data, by J. B. Anderson and others above on these maps are:

Sheet 3-Open and built-up land  
 Sheet 3-Non-forested wetland  
 Sheet 3-Non-forested wetland

The digital 1:500,000-scale maps were compiled and reduced to these single sheets at a scale of 1:500,000 so that patterns extending over the entire test region can be examined and compared with other regional data. The index map (Sheet 1) will assist the user in locating features of interest, county and state boundaries, and names of the major urban centers, and will facilitate relating information displayed on the map to the quantitative land use and land cover data summaries that are included on each map.

Data shown on these maps also exist in digital form. Each of the original line maps was scanned and digitized by the Canada Geographic Information System, Environment Canada, Government of Canada, through a cooperative agreement between the Canadian and United States governments. One of the products of the digitization of the land use and land cover maps is the list of land use and land cover area measurements by county and independent city, displayed on this map sheet.

A word of caution is in order for the user of these maps. The CARETS project was an experiment. It was not designed to produce definitive land use maps or land cover maps. Rather, it was designed to determine the feasibility of applying remote sensing data to the information as derived from remote sensing data to assist in the solution of the environmental problems. In this test of Landsat data, the mapping accuracy varies from one land use category to the next. The greatest inaccuracies occur in the urban and built-up category. However, overall these maps are accurate to approximately 70 percent, based on field checks of selected point samples.

This method of accuracy analysis included as errors (1) the slight misplacement of boundaries and (2) inaccuracies resulting from land use units too small to show at the scale of map completion. The level of accuracy attained is believed to be adequate to portray regional land use and cover patterns.

These maps were prepared jointly by the National Aeronautics and Space Administration (NASA) and the U.S. Geological Survey under Inter-agency Memorandum of Understanding No. 1-70213-MC. Both resources Technology Satellite Investigation (TSI-12) (IN-0001). Comments and criticisms of the maps, as well as questions concerning other aspects of the CARETS project and the National Aeronautics and Space Administration, may be addressed to the CARETS Project principal investigator, Robert H. Alexander, U.S.G.S., National Center, Mail Stop 730, Reston, Virginia 22092.

The authors thank Edda Jensen for his cooperation of the final drafting and editing of the 486 original 1:500,000-scale land use and land cover maps and Robert Oles for his advice and assistance in the design, construction, format, and selection of scale for these 1:500,000-scale maps.