

Geography and Environment

This section presents a variety of information on the physical environment of the United States, starting with basic area measurement data and ending with climatic data for selected weather stations around the country. The subjects covered between those points are mostly concerned with environmental trends but include related subjects such as land use, water consumption, air pollutant emissions, toxic releases, oil spills, hazardous waste sites, municipal waste and recycling, threatened and endangered wildlife, and the environmental industry.

The information in this section is selected from a wide range of federal agencies that compile the data for various administrative or regulatory purposes, such as the Environmental Protection Agency, U.S. Geological Survey, National Oceanic and Atmospheric Administration (NOAA), Natural Resources Conservation Service, and General Services Administration.

Area—For the 1990 census, area measurements were calculated by computer based on the information contained in a single, consistent geographic database, the TIGER® file (described below), rather than relying on historical, local, and manually calculated information. This especially affects water area figures reported in 1990; these had only included those bodies of water of at least 40 acres and those streams with a width of at least one-eighth of a statute mile from 1940 to 1980. Water area figures for 1990 increased because the data reflected all water recorded in the Census Bureau's geographic database including coastal, Great Lakes, and territorial waters.

Geography—The U.S. Geological Survey conducts investigations, surveys, and research in the fields of geography, geology, topography, geographic information systems, mineralogy, hydrology, and geothermal energy resources as well as natural hazards. The U.S. Geological Survey provides United States cartographic data

through the Earth Sciences Information Center, water resources data through the National Water Data Exchange (NAWDEx), and a variety of research and Open-File reports which are announced monthly in *New Publications of the U.S. Geological Survey*.

In a joint project with the U.S. Census Bureau, during the 1980s, the U.S. Geological Survey provided the basic information on geographic features for input into a national geographic and cartographic database prepared by the Census Bureau, called the TIGER® (Topologically Integrated Geographic Encoding and Referencing) database. Since then, using a variety of sources, the Census Bureau has updated these features and their related attributes (names, descriptions, etc.) and inserted current information on the boundaries, names, and codes of legal and statistical geographic entities; very few of these updates added aerial water features, however. Maps prepared by the Census Bureau using the TIGER database show the names and boundaries of entities and are available on a current basis. An inventory is available for the 1990 census, both on computer tape and CD-ROM as the *1990 TIGER/GICS (Geographic Identification Code Scheme)* and for the 1997 economic censuses in the *Geographic Reference Manual (EC97-R-1)*. The Census Bureau maintains a current inventory of governmental units and their legal boundaries primary through its Boundary and Annexation Survey. The information is available to the public in several files, all available on line: TIGER/Line®, TIGER/CTSI, TIGER/GICS, and several series of maps for Census 2000: P.L. County Block Maps, Census Tract Outline Maps, and Voting District/State Legislative District Outline Maps.

An inventory of the nation's land resources by type of use/cover was conducted by the National Resource Recovery Conservation Service (formerly the Soil Conservation Service) every 5 years

beginning in 1982. The most recent survey results, which were published in the 1997 National Resources Inventory, cover all nonfederal land in Puerto Rico, the Virgin Islands, and the United States except Alaska. Tables 345 and 346 provide results from the survey.

Environment—The principal federal agency responsible for pollution abatement and control activities is the Environmental Protection Agency (EPA). It is responsible for establishing and monitoring national air quality standards, water quality activities, solid and hazardous waste disposal, and control of toxic substances. Many of these series now appear on the EPA Web site at the Center for Environmental Information and Statistics and can be accessed at <http://www.epa.gov/ceis/>.

National Ambient Air Quality Standards (NAAQS) for suspended particulate matter, sulfur dioxide, photochemical oxidants, carbon monoxide, and nitrogen dioxide were originally set by the EPA in April 1971. Every 5 years, each of the NAAQS is reviewed and revised if new health or welfare data indicates that a change is necessary. The standard for photochemical oxidants, now called ozone, was revised in February 1979. Also, a new NAAQS for lead was promulgated in October 1978 and for suspended particulate matter in 1987. Table 355 gives some of the health-related standards for the six air pollutants having NAAQS. Data gathered from state networks are periodically submitted to EPA's National Aerometric Information Retrieval System (AIRS) for summarization in annual reports on the nationwide status and trends in air quality; for details, see *National Air Quality and Emissions Trends Report, 1998*.

The Toxics Release Inventory (TRI), published by the U.S. EPA, is a valuable source of information regarding toxic chemicals that are being used, manufactured, treated, transported, or released into the environment. Two rules, Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 6607 of the Pollution Prevention

Act (PPA), mandate that a publicly accessible toxic chemical database be developed and maintained by U.S. EPA. This database, known as the TRI, contains information concerning waste management activities and the release of toxic chemicals by facilities that manufacture, process, or otherwise use said materials.

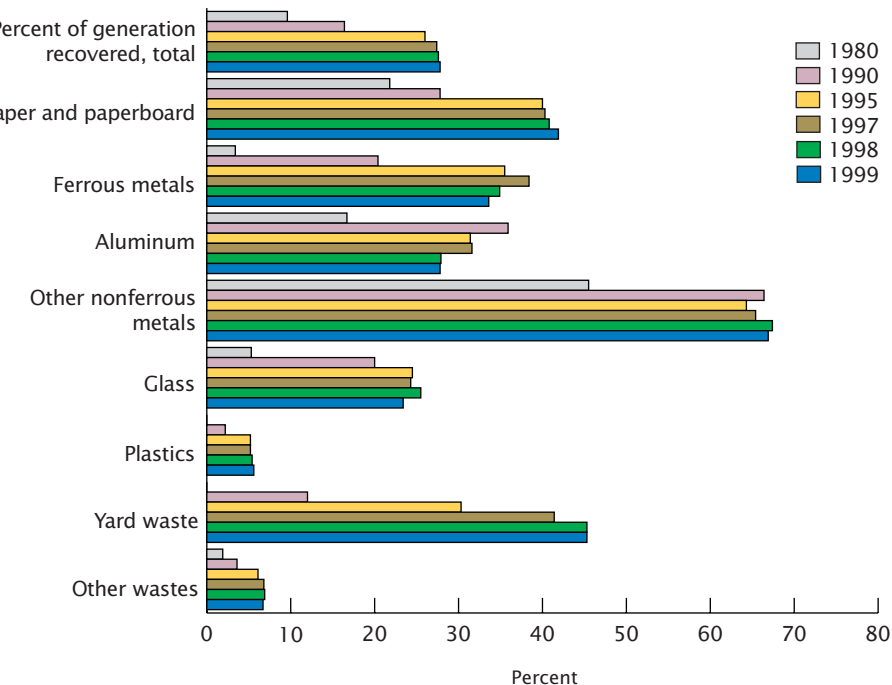
Data on the release of these chemicals are collected from manufacturing facilities and facilities added in 1998 that have the equivalent of 10 or more full-time employees and meet the established thresholds for manufacturing, processing, or "otherwise use" of listed chemicals. Facilities must report their releases and other waste management quantities. Federal facilities have been required to report since 1994, regardless of industry classification. In May 1997, EPA added seven new industry sectors that reported to the TRI for the first time in July 1999 for the 1998 reporting year.

Climate—NOAA, through the National Weather Service and the National Environmental Satellite, Data, and Information Service, is responsible for data on climate. NOAA maintains about 11,600 weather stations, of which over 3,000 produce autographic precipitation records, about 600 take hourly readings of a series of weather elements, and the remainder record data once a day. These data are reported monthly in the *Climatological Data* and *Storm Data*, published monthly, and annually in the *Local Climatological Data* (published by location for major cities).

The normal climatological temperatures, precipitation, and degree days listed in this publication are derived for comparative purposes and are averages for the 30-year period, 1961-90. For stations that did not have continuous records for the entire 30 years from the same instrument site, the normals have been adjusted to provide representative values for the current location. The information in all other tables is based on data from the beginning of the record at that location through 1999, except as noted.

Figure 6.1

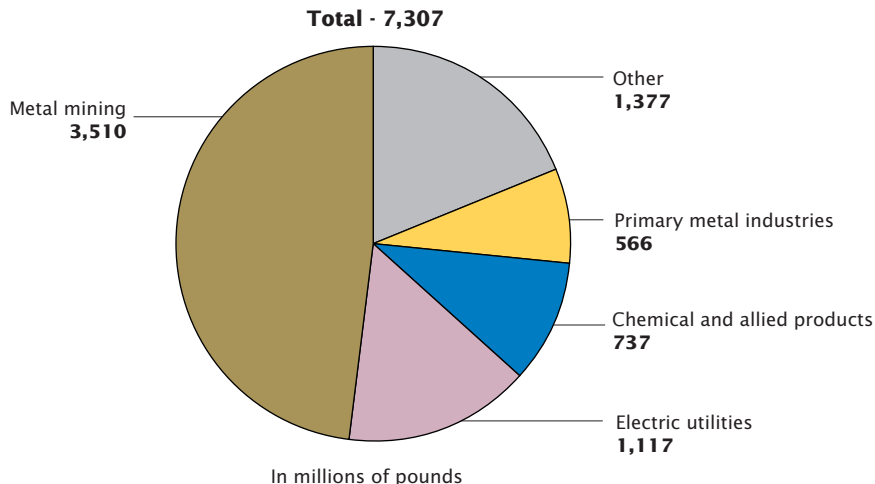
Waste Recovery of Selected Materials in Municipal Solid Wastes: 1999



Source: Chart prepared by U.S. Census Bureau. For data, see Table 360.

Figure 6.2

Toxic Chemical Releases by Industry: 1998



Source: Chart prepared by U.S. Census Bureau. For data, see Table 363.

No. 343. Land and Water Area of States and Other Entities: 1990

[One square mile=2.59 square kilometers. Excludes territorial water, which was included in the 1993 edition of the *Statistical Abstract*]

State and other area	Total area		Land area		Water area				
	Sq. mi.	Sq. km.	Sq. mi.	Sq. km.	Total		Inland sq. mi.	Coastal sq. mi.	Great Lakes sq. mi.
					Sq. mi.	Sq. km.			
United States . . .	3,717,796	9,629,091	3,536,278	9,158,960	181,518	470,131	78,937	42,528	60,052
Alabama	52,237	135,293	50,750	131,443	1,486	3,850	968	519	-
Alaska	615,230	1,593,444	570,374	1,477,268	44,856	116,177	17,501	27,355	-
Arizona	114,006	295,276	113,642	294,333	364	943	364	-	-
Arkansas	53,182	137,742	52,075	134,875	1,107	2,867	1,107	-	-
California	158,869	411,470	155,973	403,971	2,895	7,499	2,674	222	-
Colorado	104,100	269,618	103,729	268,658	371	960	371	-	-
Connecticut	5,544	14,358	4,845	12,550	698	1,808	161	538	-
Delaware	2,396	6,206	1,955	5,062	442	1,144	71	371	-
District of Columbia	68	177	61	159	7	18	7	-	-
Florida	59,928	155,214	53,937	139,697	5,991	15,517	4,683	1,308	-
Georgia	58,977	152,750	57,919	150,010	1,058	2,740	1,011	47	-
Hawaii	6,459	16,729	6,423	16,636	36	93	36	-	-
Idaho	83,574	216,456	82,751	214,325	823	2,131	823	-	-
Illinois	57,918	150,007	55,593	143,987	2,325	6,021	750	-	1,575
Indiana	36,420	94,328	35,870	92,904	550	1,424	315	-	235
Iowa	56,276	145,754	55,875	144,716	401	1,038	401	-	-
Kansas	82,282	213,110	81,823	211,922	459	1,189	459	-	-
Kentucky	40,411	104,665	39,732	102,907	679	1,759	679	-	-
Louisiana	49,651	128,595	43,566	112,836	6,085	15,759	4,153	1,931	-
Maine	33,741	87,388	30,865	79,939	2,876	7,449	2,263	613	-
Maryland	12,297	31,849	9,775	25,316	2,522	6,533	680	1,842	-
Massachusetts	9,241	23,934	7,838	20,300	1,403	3,634	424	979	-
Michigan	96,705	250,465	56,809	147,136	39,895	103,329	1,704	-	38,192
Minnesota	86,943	225,182	79,617	206,207	7,326	18,975	4,780	-	2,546
Mississippi	48,286	125,060	46,914	121,506	1,372	3,553	781	591	-
Missouri	69,709	180,546	68,898	178,446	811	2,100	811	-	-
Montana	147,046	380,849	145,556	376,991	1,490	3,859	1,490	-	-
Nebraska	77,358	200,358	76,878	199,113	481	1,245	481	-	-
Nevada	110,567	286,367	109,806	284,396	761	1,971	761	-	-
New Hampshire	9,283	24,044	8,969	23,231	314	813	314	-	-
New Jersey	8,215	21,277	7,419	19,215	796	2,062	371	425	-
New Mexico	121,598	314,939	121,364	314,334	234	605	234	-	-
New York	53,989	139,833	47,224	122,310	6,766	17,523	1,888	976	3,901
North Carolina	52,672	136,421	48,718	126,180	3,954	10,241	3,954	-	-
North Dakota	70,704	183,123	68,994	178,695	1,710	4,428	1,710	-	-
Ohio	44,828	116,103	40,953	106,067	3,875	10,036	376	-	3,499
Oklahoma	69,903	181,048	68,679	177,877	1,224	3,171	1,224	-	-
Oregon	97,132	251,571	96,002	248,646	1,129	2,925	1,050	80	-
Pennsylvania	46,058	119,291	44,820	116,083	1,239	3,208	490	-	749
Rhode Island	1,231	3,189	1,045	2,707	186	482	168	18	-
South Carolina	31,189	80,779	30,111	77,988	1,078	2,791	1,006	72	-
South Dakota	77,121	199,744	75,896	196,571	1,225	3,174	1,225	-	-
Tennessee	42,146	109,158	41,219	106,758	926	2,400	926	-	-
Texas	267,277	692,248	261,914	678,358	5,363	13,890	4,959	404	-
Utah	84,904	219,902	82,168	212,815	2,736	7,086	2,736	-	-
Vermont	9,615	24,903	9,249	23,956	366	947	366	-	-
Virginia	42,326	109,625	39,598	102,558	2,729	7,067	1,000	1,728	-
Washington	70,637	182,949	66,581	172,445	4,055	10,503	1,545	2,511	-
West Virginia	24,231	62,759	24,087	62,384	145	375	145	-	-
Wisconsin	65,499	169,643	54,314	140,672	11,186	28,971	1,831	-	9,355
Wyoming	97,818	253,349	97,105	251,501	714	1,848	714	-	-
Other areas:									
Puerto Rico	3,508	9,085	3,427	8,875	81	210	65	16	-
American Samoa	90	233	77	200	13	33	7	6	-
Guam	217	561	210	543	7	18	7	-	-
No. Mariana Islands	189	490	179	464	10	26	2	8	-
Palau	241	624	177	458	64	165	40	24	-
U.S. Virgin Islands	171	443	134	346	37	96	17	20	-

- Represents or rounds to zero.

Source: U.S. Census Bureau, *1990 Census of Population and Housing*, Series CPH-2; and unpublished data from the TIGER/Geographic Information Control System (TIGER/GICS) computer file. Corrections have been made subsequent to the 1990 census reports.

No. 344. Total and Federally Owned Land by State: 1999

[As of end of fiscal year; see text, Section 8, State and Local Government Finances and Employment. Total land area figures are not comparable with those in Table 343]

State	Total (1,000 acres)	Not owned by federal govern- ment (1,000 acres)	Owned by federal government ¹		State	Total (1,000 acres)	Not owned by federal govern- ment (1,000 acres)	Owned by federal government ¹	
			Acres (1,000)	Per- cent				Acres (1,000)	Per- cent
United States	2,271,343	1,641,078	630,266	27.7	Missouri	44,248	42,154	2,095	4.7
Alabama	32,678	31,444	1,234	3.8	Montana	93,271	67,488	25,783	27.6
Alaska	365,482	137,486	227,996	62.4	Nebraska	49,032	48,385	647	1.3
Arizona	72,688	40,299	32,389	44.6	Nevada	70,264	12,038	58,226	82.9
Arkansas	33,599	30,361	3,238	9.6	New Hampshire	5,769	5,010	759	13.2
California	100,207	56,493	43,713	43.6	New Jersey	4,813	4,695	119	2.5
Colorado	66,886	42,246	24,239	36.5	New Mexico	77,766	51,140	26,626	34.2
Connecticut	3,135	3,121	14	0.5	New York	30,681	30,575	106	0.3
Delaware	1,266	1,258	8	0.6	North Carolina	31,403	29,047	2,356	7.5
District of Columbia	39	30	9	22.7	North Dakota	44,452	42,681	1,771	4.0
Florida	34,721	31,655	3,066	8.8	Ohio	26,222	25,830	392	1.5
Georgia	37,295	35,431	1,864	5.0	Oklahoma	44,088	42,764	1,323	3.0
Hawaii	4,106	3,487	618	15.1	Oregon	61,599	29,284	32,315	52.5
Idaho	52,933	19,854	33,079	62.5	Pennsylvania	28,804	28,135	670	2.3
Illinois	35,795	35,221	574	1.6	Rhode Island	677	673	4	0.6
Indiana	23,158	22,657	501	2.2	South Carolina	19,374	18,267	1,107	5.7
Iowa	35,860	35,665	195	0.5	South Dakota	48,882	46,220	2,662	5.4
Kansas	52,511	51,837	673	1.3	Tennessee	26,728	25,070	1,658	6.2
Kentucky	25,512	24,278	1,234	4.8	Texas	168,218	165,649	2,568	1.5
Louisiana	28,868	27,709	1,159	4.0	Utah	52,697	18,692	34,005	64.5
Maine	19,848	19,679	168	0.8	Vermont	5,937	5,565	372	6.3
Maryland	6,319	6,152	167	2.6	Virginia	25,496	23,212	2,284	9.0
Massachusetts	5,035	4,963	72	1.4	Washington	42,694	30,541	12,152	28.5
Michigan	36,492	32,413	4,079	11.2	West Virginia	15,411	14,232	1,178	7.6
Minnesota	51,206	47,000	4,206	8.2	Wisconsin	35,011	33,139	1,872	5.3
Mississippi	30,223	28,575	1,647	5.5	Wyoming	62,343	31,272	31,071	49.8

¹ Excludes trust properties.

Source: U.S. General Services Administration, *Summary Report on Real Property Owned by the United States Throughout the World*, annual.

No. 345. Nonfederal Developed Land Use by State and Other Area: 1997

[In thousands of acres (1,944,130 represents 1,944,130,000), except percent. Excludes Alaska and District of Columbia]

State and other area	Total surface area	Developed land			State and other area	Total surface area	Developed land		
		Total	Percent of total	Change, 1992-97			Total	Percent of total	Change, 1992-97
Total	1,944,130	98,252	5.0	11,217	Montana	94,110	1,032	1.1	76
United States	1,941,823	97,745	5.0	11,105	Nebraska	49,510	1,206	2.5	55
Alabama	33,424	2,252	6.8	315	Nevada	70,763	381	0.6	27
Arizona	72,964	1,491	2.1	114	New Hampshire	5,941	589	10.0	63
Arkansas	34,037	1,409	4.2	169	New Jersey	5,216	1,778	34.1	214
California	101,510	5,456	5.4	553	New Mexico	77,823	1,153	1.5	217
Colorado	66,625	1,652	2.5	113	New York	31,361	3,184	10.2	318
Connecticut	3,195	874	27.4	39	North Carolina	33,709	3,856	11.5	507
Delaware	1,534	226	14.8	23	North Dakota	45,251	992	2.2	33
Florida	37,534	5,185	13.9	825	Ohio	26,445	3,611	13.7	365
Georgia	37,741	3,957	10.5	852	Oklahoma	44,738	1,926	4.4	177
Hawaii	4,158	180	4.4	7	Oregon	62,161	1,222	2.0	104
Idaho	53,488	755	1.5	92	Pennsylvania	28,995	3,983	13.8	545
Illinois	36,059	3,181	8.9	247	Rhode Island	813	201	24.7	7
Indiana	23,158	2,260	9.8	195	South Carolina	19,939	2,097	10.6	362
Iowa	36,017	1,702	4.8	69	South Dakota	49,358	960	2.0	58
Kansas	52,661	1,940	3.7	97	Tennessee	26,974	2,371	8.8	402
Kentucky	25,863	1,738	6.8	237	Texas	171,052	8,567	5.1	894
Louisiana	31,377	1,624	5.2	134	Utah	54,339	662	1.3	81
Maine	20,966	712	3.4	111	Vermont	6,154	318	5.2	12
Maryland	7,870	1,236	15.8	178	Virginia	27,087	2,626	9.7	344
Massachusetts	5,339	1,479	27.8	212	Washington	44,035	2,065	4.7	241
Michigan	37,349	3,546	9.5	364	West Virginia	15,508	874	5.7	177
Minnesota	54,010	2,186	4.1	232	Wisconsin	35,920	2,418	6.8	188
Mississippi	30,527	1,474	4.9	206	Wyoming	62,603	644	1.1	34
Missouri	44,614	2,517	5.7	224	Caribbean	2,307	507	22.0	112

Source: U.S. Department of Agriculture, National Resource and Conservation Service, and Iowa State University, Statistical Laboratory, *1997 National Resources Inventory*, reissued December 2000.

No. 346. Land Cover/Use by State: 1997

[In thousands of acres (1,944,130 represents 1,944,130,000), except percent. Excludes Alaska and District of Columbia]

State and other area	Total surface area	Rural land							
		Rural land, total	Percent of total	Crop-land	CRP land ¹	Pasture land	Range-land	Forest land	Other rural land
Total	1,944,130	1,393,760	71.7	376,998	32,696	119,992	405,977	406,955	51,142
United States	1,941,823	1,392,098	71.7	376,630	32,696	119,549	405,832	406,315	51,077
Alabama	33,424	28,950	86.6	2,954	522	3,528	74	21,261	612
Arizona	72,964	40,858	56.0	1,212	-	73	32,323	4,216	3,035
Arkansas	34,037	28,638	84.1	7,625	230	5,351	38	15,011	384
California	101,510	47,555	46.8	9,635	173	1,049	18,269	13,936	4,494
Colorado	66,625	40,850	61.3	8,770	1,890	1,211	24,574	3,442	964
Connecticut	3,195	2,178	68.2	204	-	112	-	1,759	103
Delaware	1,534	988	64.4	485	1	24	-	352	128
Florida	37,534	25,498	67.9	2,752	120	4,231	3,229	12,536	2,630
Georgia	37,741	30,648	81.2	4,757	595	2,865	-	21,560	872
Hawaii	4,158	3,565	85.7	246	-	36	1,009	1,635	639
Idaho	53,488	18,618	34.8	5,517	785	1,315	6,501	3,948	553
Illinois	36,059	31,675	87.8	24,011	726	2,502	-	3,784	652
Indiana	23,158	20,069	86.7	13,407	378	1,830	-	3,781	674
Iowa	36,017	33,673	93.5	25,310	1,739	3,572	-	2,182	870
Kansas	52,661	49,685	94.3	26,524	2,849	2,322	15,728	1,546	716
Kentucky	25,863	22,327	86.3	5,178	332	5,686	-	10,667	465
Louisiana	31,377	24,664	78.6	5,659	140	2,385	277	13,226	2,976
Maine	20,966	18,794	89.6	413	30	123	-	17,691	537
Maryland	7,870	4,808	61.1	1,616	19	478	-	2,373	321
Massachusetts	5,339	3,394	63.6	277	-	119	-	2,744	254
Michigan	37,349	29,426	78.8	8,540	321	2,032	-	16,354	2,178
Minnesota	54,010	45,356	84.0	21,414	1,544	3,434	-	16,248	2,716
Mississippi	30,527	26,429	86.6	5,352	799	3,679	-	16,209	389
Missouri	44,614	39,358	88.2	13,751	1,606	10,849	88	12,431	634
Montana	94,110	64,958	69.0	15,171	2,721	3,443	36,751	5,431	1,443
Nebraska	49,510	47,187	95.3	19,469	1,245	1,801	23,089	826	757
Nevada	70,763	10,079	14.2	701	2	279	8,372	305	420
New Hampshire	5,941	4,353	73.3	134	-	94	-	3,932	193
New Jersey	5,216	2,766	53.0	589	1	111	-	1,698	367
New Mexico	77,823	50,071	64.3	1,875	467	231	39,990	5,467	2,041
New York	31,361	26,702	85.1	5,417	54	2,722	-	17,702	808
North Carolina	33,709	24,592	73.0	5,639	131	2,039	-	15,959	824
North Dakota	45,251	41,442	91.6	25,004	2,802	1,129	10,689	454	1,363
Ohio	26,445	22,070	83.5	11,627	324	2,006	-	7,081	1,032
Oklahoma	44,738	40,610	90.8	9,737	1,138	7,963	14,033	7,281	459
Oregon	62,161	28,858	46.4	3,762	483	1,961	9,286	12,643	724
Pennsylvania	28,995	23,816	82.1	5,471	90	1,845	-	15,478	932
Rhode Island	813	458	56.3	22	-	25	-	387	24
South Carolina	19,939	16,018	80.3	2,574	263	1,197	-	11,188	797
South Dakota	49,358	44,411	90.0	16,738	1,686	2,108	21,876	518	1,484
Tennessee	26,974	22,597	83.8	4,644	374	4,990	-	12,042	547
Texas	171,052	155,530	90.9	26,938	3,906	15,914	95,745	10,816	2,211
Utah	54,339	17,599	32.4	1,679	216	695	10,733	1,883	2,392
Vermont	6,154	5,183	84.2	607	-	338	-	4,150	88
Virginia	27,087	19,886	73.4	2,918	71	2,995	-	13,316	587
Washington	44,035	28,508	64.7	6,656	1,017	1,193	5,857	12,835	951
West Virginia	15,508	13,252	85.5	864	-	1,527	-	10,582	279
Wisconsin	35,920	30,374	84.6	10,613	661	2,994	-	14,448	1,658
Wyoming	62,603	32,773	52.4	2,174	247	1,146	27,302	1,004	900
Caribbean	2,307	1,662	72.0	368	-	443	145	640	65

- Represents or rounds to zero. ¹ Conservation Reserve Program (CRP). A federal program established under the Food Security Act of 1985 to assist private landowners to convert highly erodible cropland to vegetative cover for 10 years.

Source: U.S. Department of Agriculture, National Resource and Conservation Service, and Iowa State University, Statistical Laboratory, *Summary Report, 1997 National Resources Inventory*, revised December 2000. See also <<http://www.nhq.nrcs.usda.gov/NRI/1997/summaryreport.pdf>>.

No. 347. Extreme and Mean Elevations by State and Other Area

[One foot=.305 meter]

State and other area	Highest point			Lowest point			Approximate mean elevation	
	Name	Elevation		Name	Elevation		Feet	Meters
		Feet	Meters		Feet	Meters		
U.S. . . .	Mt. McKinley (AK)	20,320	6,198	Death Valley (CA).	-282	-86	2,500	763
AL	Cheaha Mountain	2,405	733	Gulf of Mexico	(¹)	(¹)	500	153
AK	Mount McKinley	20,320	6,198	Pacific Ocean	(¹)	(¹)	1,900	580
AZ	Humphreys Peak	12,633	3,853	Colorado River	70	21	4,100	1,251
AR	Magazine Mountain	2,753	840	Ouachita River	55	17	650	198
CA	Mount Whitney	14,494	4,419	Death Valley	-282	-86	2,900	885
CO	Mt. Elbert	14,433	4,402	Arkansas River	3,350	1,022	6,800	2,074
CT	Mt. Frissell on South slope.	2,380	726	Long Island Sound	(¹)	(¹)	500	153
DE	Ebright Road, ²							
	New Castle County	448	137	Atlantic Ocean	(¹)	(¹)	60	18
DC	Tenleytown at Reno Reservoir	410	125	Potomac River	1	(Z)	150	46
FL	Sec. 30, T6N, R20W, Walton County	345	105	Atlantic Ocean	(¹)	(¹)	100	31
GA	Brasstown Bald	4,784	1,459	Atlantic Ocean	(¹)	(¹)	600	183
HI	Puu Wekiu	13,796	4,208	Pacific Ocean	(¹)	(¹)	3,030	924
ID	Borah Peak	12,662	3,862	Snake River	710	217	5,000	1,525
IL	Charles Mound	1,235	377	Mississippi River	279	85	600	183
IN	Franklin Twp., Wayne Co.	1,257	383	Ohio River	320	98	700	214
IA	Sec. 29, T100N, R41W, Osceola County ³	1,670	509	Mississippi River	480	146	1,100	336
KS	Mount Sunflower	4,039	1,232	Verdigris River	679	207	2,000	610
KY	Black Mountain	4,139	2,162	Mississippi River	257	78	750	229
LA	Driskill Mountain	535	163	New Orleans	-8	-2	100	31
ME	Mount Katahdin	5,267	1,606	Atlantic Ocean	(¹)	(¹)	600	183
MD	Backbone Mountain	3,360	1,025	Atlantic Ocean	(¹)	(¹)	350	107
MA	Mount Greylock	3,487	1,064	Atlantic Ocean	(¹)	(¹)	500	153
MI	Mount Arvon	1,979	604	Lake Erie	571	174	900	275
MN	Eagle Mountain, Cook Co.	2,301	702	Lake Superior	600	183	1,200	366
MS	Woodall Mountain	806	246	Gulf of Mexico	(¹)	(¹)	300	92
MO	Taum Sauk Mountain	1,772	540	St. Francis River	230	70	800	244
MT	Granite Peak	12,799	3,904	Kootenai River	1,800	549	3,400	1,037
NE	Johnson Twp., Kimball Co.	5,424	1,654	Missouri River	840	256	2,600	793
NV	Boundary Peak	13,140	4,007	Colorado River	479	146	5,500	1,678
NH	Mount Washington	6,288	1,918	Atlantic Ocean	(¹)	(¹)	1,000	305
NJ	High Point	1,803	550	Atlantic Ocean	(¹)	(¹)	250	76
NM	Wheeler Peak	13,161	4,014	Red Bluff Reservoir	2,842	867	5,700	1,739
NY	Mount Marcy	5,344	1,630	Atlantic Ocean	(¹)	(¹)	1,000	305
NC	Mount Mitchell	6,684	2,039	Atlantic Ocean	(¹)	(¹)	700	214
ND	White Butte, Slope Co	3,506	1,069	Red River	750	229	1,900	580
OH	Campbell Hill	1,549	472	Ohio River	455	139	850	259
OK	Black Mesa	4,973	1,517	Little River	289	88	1,300	397
OR	Mount Hood	11,239	3,428	Pacific Ocean	(¹)	(¹)	3,300	1,007
PA	Mount Davis	3,213	980	Delaware River	(¹)	(¹)	1,100	336
RI	Jerimoth Hill	812	248	Atlantic Ocean	(¹)	(¹)	200	61
SC	Sassafras Mountain	3,560	1,086	Atlantic Ocean	(¹)	(¹)	350	107
SD	Harney Peak	7,242	2,209	Big Stone Lake	966	295	2,200	671
TN	Clingmans Dome	6,643	2,026	Mississippi River	178	54	900	275
TX	Guadalupe Peak	8,749	2,668	Gulf of Mexico	(¹)	(¹)	1,700	519
UT	Kings Peak	13,528	4,126	Beaverdam Wash	2,000	610	6,100	1,861
VT	Mount Mansfield	4,393	1,340	Lake Champlain	95	29	1,000	305
VA	Mount Rogers	5,729	1,747	Atlantic Ocean	(¹)	(¹)	950	290
WA	Mount Rainier	14,410	4,395	Pacific Ocean	(¹)	(¹)	1,700	519
WV	Spruce Knob	4,861	1,483	Potomac River	240	73	1,500	458
WI	Timms Hill	1,951	595	Lake Michigan	579	177	1,050	320
WY	Gannett Peak	13,804	4,210	Belle Fourche River	3,099	945	6,700	2,044
Other areas:								
Puerto Rico	Cerro de Punta	4,390	1,339	Atlantic Ocean	(¹)	(¹)	1,800	549
American Samoa	Lata Mountain	3,160	964	Pacific Ocean	(¹)	(¹)	1,300	397
Guam	Mount Lamlam	1,332	406	Pacific Ocean	(¹)	(¹)	330	101
Virgin Is.	Crown Mountain	1,556	475	Atlantic Ocean	(¹)	(¹)	750	229

Z Less than 0.5 meter. ¹ Sea level. ² At DE-PA state line. ³ "Sec." denotes section; "T," township; "R," range; "N," north; and "W," west.

Source: U.S. Geological Survey, for highest and lowest points, *Elevations and Distances in the United States, 1990*; for mean elevations, 1983 edition.

No. 348. U.S. Wetland Resources and Deepwater Habitats by Type: 1986 and 1997

[In thousands of acres (144,673.3 represents 144,677,300). Wetlands and deepwater habitats are defined separately because the term wetland does not include permanent water bodies. Deepwater habitats are permanently flooded land lying below the deepwater boundary of wetlands. Deepwater habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live, whether or not they are attached to the substrate. As in wetlands, the dominant plants are hydrophytes; however, the substrates are in general terms. Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water]

Wetland or deepwater category			Change, 1986 to 1997
	1986	1997	
All wetlands and deepwater habitats, total	144,673.3	144,136.8	-536.5
All deepwater habitats, total	38,537.6	38,645.1	107.5
Lacustrine ¹	14,608.9	14,725.3	116.4
Riverine ²	6,291.1	6,255.9	-35.2
Estuarine subtidal ³	17,637.6	17,663.9	26.3
All wetlands, total.	106,135.7	105,491.7	-644
Intertidal wetlands ⁴	5,336.6	5,326.2	-10.4
Marine intertidal	133.1	130.9	-2.2
Estuarine intertidal nonvegetated	580.4	580.1	-0.3
Estuarine intertidal vegetated.	4,623.1	4,615.2	-7.9
Freshwater wetlands	100,799.1	100,165.5	-633.6
Freshwater nonvegetated	5,251.0	5,914.3	663.3
Freshwater vegetated	95,548.1	94,251.2	-1,296.9
Freshwater emergent ⁵	26,383.3	25,157.1	-1,226.2
Freshwater forested ⁶	51,929.6	50,728.5	-1,201.1
Freshwater shrub ⁷	17,235.2	18,365.6	1,130.4

¹ The lacustrine system includes deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses, or lichens with greater than 30 percent coverage; (3) total area exceeds 20 acres. ² The riverine system includes deepwater habitats contained within a channel, with the exception of habitats with water containing ocean derived salts in excess of 0.5 parts per thousand. ³ The estuarine system consists of deepwater tidal habitats and adjacent tidal wetland that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. Subtidal is where the substrate is continuously submerged by marine or estuarine waters.

⁴ Intertidal is where the substrate is exposed and flooded by tides. Intertidal includes the splash zone of coastal waters. ⁵ Emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants. ⁶ Forested wetlands are characterized by woody vegetation that is 20 feet tall or taller. ⁷ Shrub wetlands include areas dominated by woody vegetation less than 20 feet tall. The species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.

Source: U. S. Fish and Wildlife Service, *Status and Trends of Wetlands in the Conterminous United States, 1986 to 1997*, January 2001.

No. 349. Water Areas for Selected Major Bodies of Water: 1990

[Includes only that portion of body of water under the jurisdiction of the United States, excluding Hawaii. One square mile=2.59 square kilometers]

Body of water and state	Area		Body of water and state	Area	
	Sq. mi.	Sq. km.		Sq. mi.	Sq. km.
Atlantic Coast water bodies:			San Francisco Bay (CA)	264	684
Chesapeake Bay (MD-VA)	2,747	7,115	Willapa Bay (WA)	125	325
Pamlico Sound (NC)	1,622	4,200	Hood Canal (WA)	117	303
Long Island Sound (CT-NY)	914	2,368	Interior water bodies:		
Delaware Bay (DE-NJ)	614	1,591	Lake Michigan (IL-IN-MI-WI)	22,342	57,866
Cape Cod Bay (MA)	598	1,548	Lake Superior (MI-MN-WI)	20,557	53,243
Albemarle Sound (NC)	492	1,274	Lake Huron (MI)	8,800	22,792
Biscayne Bay (FL)	218	565	Lake Erie (MI-NY-OH-PA) ¹	5,033	13,036
Buzzards Bay (MA)	215	558	Lake Ontario (NY)	3,446	8,926
Tangier Sound (MD-VA)	172	445	Great Salt Lake (UT)	1,836	4,756
Currituck Sound (NC)	116	301	Green Bay (MI-WI)	1,396	3,617
Pocomoke Sound (MD-VA)	111	286	Lake Okeechobee (FL)	663	1,717
Chincoteague Bay (MD-VA)	105	272	Lake Sakakawea (ND)	563	1,459
Gulf Coast water bodies:			Lake Oahe (ND-SD)	538	1,394
Mississippi Sound (AL-LA-MS)	813	2,105	Lake of the Woods (MN) ¹	462	1,196
Laguna Madre (TX)	733	1,897	Lake Champlain (NY-VT) ¹	414	1,072
Lake Pontchartrain (LA)	631	1,635	Alaska water bodies:		
Florida Bay (FL)	616	1,596	Chatham Strait	1,559	4,039
Bretton Sound (LA)	511	1,323	Prince William Sound	1,382	3,579
Mobile Bay (AL)	310	802	Clarence Strait	1,199	3,107
Lake Borgne (LA-MS)	271	702	Iliamna Lake	1,022	2,646
Matagorda Bay (TX)	253	656	Frederick Sound	792	2,051
Atchafalaya Bay (LA)	245	635	Sumner Strait	791	2,048
Galveston Bay (TX)	236	611	Stephens Passage	702	1,819
Tampa Bay (FL)	212	549	Kvichak Bay	640	1,659
Pacific Coast water bodies:			Montague Strait	463	1,198
Puget Sound (WA)	808	2,092	Becharof Lake	447	1,158
			Icy Strait	436	1,130

¹ Area measurements for Lake Champlain, Lake Erie, Lake Huron, Lake Ontario, Lake St. Clair, Lake Superior, and Lake of the Woods include only those portions under the jurisdiction of the United States.

Source: U. S. Census Bureau, unpublished data from the Census TIGER® database.

No. 350. Flows of Largest U.S. Rivers—Length, Discharge, and Drainage Area

River	Location of mouth	Source stream (name and location)	Average discharge at mouth		Drainage area (1,000 sq. mi.)
			Length (miles) ¹	(1,000 cubic ft. per second)	
Missouri	Missouri	Red Rock Creek, MT	2,540	76.2	2,529
Mississippi	Louisiana	Mississippi River, MN	2,340	593	2,150
Yukon	Alaska	McNeil River, Canada	1,980	225	2,328
St. Lawrence	Canada	North River, MN	1,900	348	2,396
Rio Grande	Mexico-Texas	Rio Grande, CO	1,900	-	336
Arkansas	Arkansas	East Fork Arkansas River, CO	1,460	41	161
Colorado	Mexico	Colorado River, CO	1,450	-	246
Atchafalaya ⁶	Louisiana	Tierra Blanca Creek, NM	1,420	58	95.1
Ohio	Illinois-Kentucky	Allegheny River, PA	1,310	281	203
Red	Louisiana	Tierra Blanca Creek, NM	1,290	56	93.2
Brazos	Texas	Blackwater Draw, NM	1,280	-	45.6
Columbia	Oregon-Washington	Columbia River, Canada	1,240	265	2,258
Snake	Washington	Snake River, WY	1,040	56.9	108
Platte	Nebraska	Grizzly Creek, CO	990	-	84.9
Pecos	Texas	Pecos River, NM	926	-	44.3
Canadian	Oklahoma	Canadian River, CO	906	-	46.9
Tennessee	Kentucky	Courthouse Creek, NC	886	68	40.9
Colorado (of Texas)	Texas	Colorado River, TX	862	-	42.3
North Canadian	Oklahoma	Corrupa Creek, NM	800	-	17.6
Mobile	Alabama	Tickanetley Creek, GA	774	67.2	44.6
Kansas	Kansas	Arikaree River, CO	743	-	59.5
Kuskokwim	Alaska	South Fork Kuskokwim River, AK	724	67	48
Yellowstone	North Dakota	North Fork Yellowstone River, WY	692	-	70
Tanana	Alaska	Nabesna River, AK	659	41	44.5
Gila	Arizona	Middle Fork Gila River, NM	649	-	58.2

- Represents zero. ¹ From source to mouth. ² Drainage area includes both the United States and Canada. ³ The length from the source of the Missouri River to the Mississippi River and thence to the Gulf of Mexico is about 3,710 miles. ⁴ Includes about 167,000 cubic ft. per second diverted from the Mississippi into the Atchafalaya River but excludes the flow of the Red River. ⁵ Excludes the drainage areas of the Red and Atchafalaya Rivers. ⁶ In east-central Louisiana, the Red River flows into the Atchafalaya River, a distributary of the Mississippi River. Data on average discharge, length, and drainage area include the Red River, but exclude all water diverted into the Atchafalaya from the Mississippi River.

Source: U.S. Geological Survey, *Largest Rivers in the United States*, Open File Report 87-242, May 1990.

No. 351. U.S. Water Withdrawals and Consumptive Use Per Day by End Use: 1940 to 1995

[Includes Puerto Rico. Withdrawal signifies water physically withdrawn from a source. Includes fresh and saline water; excludes water used for hydroelectric power]

Year	Public supply ²							Industrial and misc. ⁵ (bil. gal.)	Steam electric utilities (bil. gal.)
	Total (bil. gal.)	Per capita ¹ (gal.)	Irrigation (bil. gal.)	Total (bil. gal.)	Per capita ³ (gal.)	Rural ⁴ (bil. gal.)			
WITHDRAWALS									
1940	140	1,027	71	10	75	3.1	29	23	
1950	180	1,185	89	14	145	3.6	37	40	
1955	240	1,454	110	17	148	3.6	39	72	
1960	270	1,500	110	21	151	3.6	38	100	
1965	310	1,602	120	24	155	4.0	46	130	
1970	370	1,815	130	27	166	4.5	47	170	
1975	420	1,972	140	29	168	4.9	45	200	
1980	440	1,953	150	34	183	5.6	45	210	
1985	399	1,650	137	38	189	7.8	31	187	
1990	408	1,620	137	41	195	7.9	30	195	
1995	402	1,500	134	43	192	8.9	26	190	
CONSUMPTIVE USE									
1960	61	339	52	3.5	25	2.8	3.0	0.2	
1965	77	403	66	5.2	34	3.2	3.4	0.4	
1970	87	427	73	5.9	36	3.4	4.1	0.8	
1975	96	451	80	6.7	38	3.4	4.2	1.9	
1980	100	440	83	7.1	38	3.9	5.0	3.2	
1985	92	380	74	(6)	(6)	9.2	6.1	6.2	
1990	94	370	76	(6)	(6)	8.9	6.7	4.0	
1995	100	374	81	(6)	(6)	9.9	4.8	3.7	

¹ Based on U.S. Census Bureau resident population as of July 1. ² Includes commercial water withdrawals. ³ Based on population served. ⁴ Rural farm and nonfarm household and garden use, and water for farm stock and dairies. ⁵ For 1940 to 1960, includes manufacturing and mineral industries, rural commercial industries, air-conditioning, resorts, hotels, motels, military and other state and federal agencies, and miscellaneous; thereafter, includes manufacturing, mining and mineral processing, ordnance, construction, and miscellaneous. ⁶ Public supply consumptive use included in end-use categories.

Source: 1940-1960, U.S. Bureau of Domestic Business Development, based principally on committee prints, *Water Resources Activities in the United States*, for the Senate Committee on National Water Resources, U.S. Senate, thereafter, U.S. Geological Survey, *Estimated Use of Water in the United States in 1995*, circular 1200, and previous quinquennial issues.

No. 352. Water Withdrawals and Consumptive Use—State and Other Area: 1995

[In millions of gallons per day (401,500 represents 401,500,000,000), except as noted. Figures may not add due to rounding. Withdrawal signifies water physically withdrawn from a source. Includes fresh and saline water]

State or other area	Water withdrawn								Consumptive use, ¹ fresh water
	Total	Per capita (gal. per day) fresh	Source		Selected major uses				
			Ground water	Surface water	Irrigation	Public supply ²	Industrial	Thermoelectric	
U.S.²	401,500	1,280	77,500	324,000	134,000	43,600	26,200	190,000	100,000
Alabama	7,100	1,670	445	6,650	139	875	753	5,200	532
Alaska	329	350	132	196	0.6	90	197	30	25
Arizona	6,830	1,620	2,840	3,990	5,670	846	197	62	3,830
Arkansas	8,800	3,540	5,460	3,340	5,940	419	187	1,780	4,140
California	45,900	1,130	14,700	31,300	28,900	5,740	802	9,630	25,500
Colorado	13,800	3,690	2,270	11,600	12,700	732	191	115	5,230
Connecticut	4,450	389	166	4,290	28	448	11	3,940	97
Delaware	1,500	1,050	110	1,390	48	101	64	1,270	71
District of Columbia	10	18	0.5	9.7	-	-	0.5	9.7	15
Florida	18,200	509	4,340	13,800	3,470	2,360	649	11,600	2,780
Georgia	5,820	799	1,190	4,630	722	1,250	676	3,070	1,170
Hawaii	1,930	853	531	1,400	652	218	20	970	542
Idaho	15,100	13,000	2,830	12,300	13,000	254	76	-	4,360
Illinois	19,900	1,680	953	19,000	180	1,950	527	17,100	857
Indiana	9,140	1,570	709	8,430	116	784	2,410	5,690	505
Iowa	3,030	1,070	528	2,510	39	418	301	2,130	290
Kansas	5,240	2,040	3,510	1,720	3,380	384	77	1,260	3,620
Kentucky	4,420	1,150	226	4,190	12	521	375	3,450	318
Louisiana	9,850	2,270	1,350	8,500	769	677	2,580	5,480	1,930
Maine	326	178	80	246	27	135	16	136	48
Maryland	7,730	289	246	7,480	57	907	331	6,360	150
Massachusetts	5,510	189	351	5,160	82	759	88	4,570	180
Michigan	12,100	1,260	862	11,200	227	1,490	1,910	8,370	667
Minnesota	3,390	736	714	2,680	157	573	438	2,090	417
Mississippi	3,200	1,140	2,590	614	1,740	377	294	375	1,570
Missouri	7,030	1,320	891	6,140	567	757	63	5,550	692
Montana	8,860	10,200	217	8,640	8,550	161	80	22	1,960
Nebraska	10,500	6,440	6,200	4,350	7,550	328	175	2,350	7,020
Nevada	2,300	1,480	896	1,400	1,640	479	95	27	1,340
New Hampshire	1,320	388	81	1,240	6.3	130	50	1,110	35
New Jersey	6,110	269	580	5,530	125	1,120	486	4,360	210
New Mexico	3,510	2,080	1,700	1,800	2,990	337	69	55	1,980
New York	16,800	567	1,010	15,800	30	3,140	321	13,100	469
North Carolina	9,290	1,070	535	8,750	239	939	385	7,420	713
North Dakota	1,120	1,750	122	1,000	117	85	17	819	181
Ohio	10,500	944	905	9,620	27	1,560	650	8,190	791
Oklahoma	2,040	543	1,220	822	864	597	285	124	716
Oregon	7,910	2,520	1,050	6,860	6,170	572	379	9.0	3,210
Pennsylvania	9,680	802	860	8,820	16	1,730	1,930	5,930	565
Rhode Island	411	138	27	383	2.3	121	7.3	275	19
South Carolina	6,200	1,690	322	5,880	53	614	703	4,810	321
South Dakota	460	631	187	273	269	97	32	5.3	249
Tennessee	10,100	1,920	435	9,640	24	831	868	8,300	233
Texas	29,600	1,300	8,780	20,800	9,450	3,420	2,920	13,500	10,500
Utah	4,460	2,200	790	3,670	3,530	506	253	48	2,200
Vermont	565	967	50	515	3.9	66	12	452	24
Virginia	8,260	826	358	7,900	30	911	622	6,620	218
Washington	8,860	1,620	1,760	7,100	6,470	1,300	652	376	3,080
West Virginia	4,620	2,530	146	4,470	-	217	1,330	3,010	352
Wisconsin	7,250	1,420	759	6,490	169	692	453	5,820	443
Wyoming	7,060	14,700	335	6,720	6,590	100	118	220	2,800
Puerto Rico	2,840	154	135	2,680	107	443	15	2,260	187
Virgin Islands	202	113	0.7	201	-	7.8	20	173	1.9

- Represents zero. ¹ Water that has been evaporated, transpired, or incorporated into products, plant or animal tissue; and therefore, is not available for immediate reuse. ² Includes Puerto Rico and Virgin Islands.

Source: U.S. Geological Survey, *Estimated Use of Water in the United States in 1995*, circular 1200. Next update will include data for 2000.

No. 353. U.S. Water Quality Conditions by Type of Waterbody: 1998

[Section 305(b) of the Clean Water Act requires states and other jurisdictions to assess the health of their waters and the extent to which their waters support water quality standards. Section 305(b) requires that states submit reports describing water quality conditions to the Environmental Protection Agency every 2 years. Water quality standards have three elements (designated uses, criteria developed to protect each use, and an antidegradation policy. For information on survey methodology and assessment criteria, see report)]

Item	Rivers and streams (miles)	Lakes, reservoirs, and ponds (acres)	Estuaries (sq. miles)	Great Lakes shoreline (miles)	Ocean shoreline (miles)
Total size	3,662,255	41,593,748	90,465	5,521	66,645
Amount accessed ¹	842,426	17,390,370	28,687	4,950	3,130
Percent of total size	23	42	32	90	5
Amount accessed as—					
Good ²	463,441	7,927,486	13,439	85	2,496
Good but threatened ³	85,544	1,565,175	2,766	103	257
Polluted ⁴	291,264	7,897,110	12,482	4,762	377
Percent of accessed as—					
Good ²	55	46	47	2	80
Good but threatened ³	10	9	10	2	8
Polluted ⁴	35	45	44	96	12
Amount impaired by leading sources of pollution: ⁵					
Agriculture	170,750	2,417,801	1,827	133	48
Atmospheric deposition	(NA)	616,701	2,922	1,017	(NA)
Forestry	20,020	(NA)	(NA)	(NA)	(NA)
Habitat modification	18,451	417,662	(NA)	(NA)	(NA)
Hydromodification	57,763	1,179,344	531	(NA)	(NA)
Industrial discharges/point sources	13,795	502,760	1,926	140	52
Irrigated crop production	31,156	410,204	(NA)	(NA)	(NA)
Land disposal of wastes	19,928	381,073	1,508	(NA)	117
Municipal point sources	29,087	866,116	3,528	120	96
Natural sources	33,004	654,812	5,223	(NA)	(NA)
Nonirrigated crop production	46,484	553,064	(NA)	(NA)	(NA)
Resource extraction	25,231	(NA)	585	(NA)	(NA)
Urban runoff and storm sewers	32,310	931,567	3,482	134	236

NA Not available. ¹ Includes waterbodies accessed as not attainable for one or more uses. Most states do not assess all their waterbodies during the 2-year reporting cycle, but use a "rotating basin approach" whereby all waters are monitored over a set period of time. ² Based on assessment of available data, water quality supports all designated uses. Water quality meets narrative and/or numeric criteria adopted to protect and support a designated use. ³ Although all assessed uses are currently met, data show a declining trend in water quality. Projections based on this trend indicate water quality will be impaired in the future, unless action is taken to prevent further degradation. ⁴ Impaired or not attainable. The reporting state or jurisdiction has performed a "use-attainability analysis" and demonstrated that support of one or more designated beneficial uses is not attainable due to specific biological, chemical, physical, or economic/social conditions. ⁵ Excludes unknown and natural sources.

Source: U.S. Environmental Protection Agency, *National Water Quality Inventory: 1998 Report to Congress*, June 2000.

No. 354. Oil Spills in U.S. Water—Number and Volume: 1996 to 1999

[3,117,831 represents 3,117,831,000. Based on reported discharges into U.S. navigable waters, including territorial waters (extending 3 to 12 miles from the coastline), tributaries, the contiguous zone, onto shoreline, or into other waters that threaten the marine environment. Data found in Marine Safety Management System]

Spill characteristic	Number of spills				Spill volume (gal.)			
	1996	1997	1998	1999	1996	1997	1998	1999
Total	9,335	8,624	8,315	8,539	3,117,831	942,574	885,303	1,172,449
Size of spill (gallons):								
1-100	8,904	8,299	7,962	8,212	43,434	39,082	38,093	39,119
101-1,000	322	243	259	240	114,831	81,895	86,606	86,530
1,001-3,000	57	40	54	42	102,008	78,117	96,743	74,582
3,001-5,000	20	14	15	18	86,389	58,016	64,609	73,798
5,001-10,000	12	15	15	10	92,163	109,288	108,148	66,274
10,001-50,000	15	11	8	12	351,106	282,176	216,335	301,510
50,001-100,000	-	1	-	4	-	84,000	-	245,406
100,000-1,000,000	5	1	2	1	2,327,900	210,000	274,769	285,230
1,000,000 and over	-	-	-	-	-	-	-	-
Waterbody:								
Atlantic ocean	119	87	109	148	27,980	40,857	6,674	29,440
Pacific ocean	491	505	644	758	29,209	32,841	192,775	150,694
Gulf of Mexico	2,403	2,341	2,190	1,756	45,145	105,462	181,372	45,786
Great Lakes	228	156	119	129	3,507	4,311	3,006	906
Lakes	19	29	25	31	52	210,270	63	624
Rivers and canals	1,984	1,821	1,944	1,924	475,550	182,676	280,651	504,264
Bays and sounds	793	811	891	1,299	1,092,207	46,450	24,234	136,650
Harbors	992	858	790	907	288,252	45,932	97,223	105,213
Other	2,306	2,016	1,603	1,587	1,155,929	273,775	99,305	198,872
Source:								
Tankship	122	124	104	92	219,311	22,429	56,673	8,414
Tankbarge	313	252	220	227	1,163,258	165,649	248,089	158,977
All other vessels	5,151	4,971	4,848	5,361	298,451	192,801	316,473	409,084
Facilities	509	838	937	1,019	406,384	204,935	166,269	367,537
Pipelines	17	32	45	25	978,392	224,122	47,863	36,140
All other nonvessels	552	486	571	571	23,527	72,208	32,584	147,704
Unknown	2,671	1,921	1,590	1,244	28,508	60,430	17,352	44,593

- Represents or rounds to zero.

Source: U.S. Coast Guard, <<http://www.uscg.mil/hq/g-m/nmc/response/stats/Summary.htm>> (accessed 05 December 2001).

No. 355. National Ambient Air Pollutant Concentrations: 1990 to 1999

[Data represent annual composite averages of pollutant based on daily 24-hour averages of monitoring stations, except carbon monoxide is based on the second-highest, nonoverlapping, 8-hour average; ozone, average of the second-highest daily maximum 1-hour value; and lead, quarterly average of ambient lead levels. Based on data from the Aerometric Information Retrieval System. $\mu\text{g}/\text{m}^3$ =micrograms of pollutant per cubic meter of air; ppm=parts per million]

Pollutant	Unit	Monitoring stations, number	Air quality standard ¹	1990	1994	1995	1996	1997	1998	1999
				Carbon monoxide	ppm	388	² 9	5.8	5.1	4.6
Ozone	ppm	703	³ 12	0.112	0.107	0.112	0.105	0.105	0.110	0.107
Ozone	ppm	705	⁴ 0.08	0.085	0.084	0.087	0.083	0.082	0.086	0.085
Sulfur dioxide	ppm	480	.03	0.0081	0.0069	0.0056	0.0056	0.0054	0.0053	0.0052
Particulates (PM-10)	$\mu\text{g}/\text{m}^3$	954	⁵ 50	29.2	26.0	24.8	23.9	23.8	23.6	23.9
Nitrogen dioxide	ppm	230	⁶ 53	0.020	0.020	0.019	0.018	0.018	0.018	0.018
Lead	$\mu\text{g}/\text{m}^3$	175	³ 1.5	0.1	0.05	0.05	0.04	0.04	0.04	0.04

¹ Refers to the primary National Ambient Air Quality Standard that protects the public health. ² Based on 8-hour standard of 9 ppm. ³ Based on 1-hour standard of 0.12 ppm. ⁴ Based on 8-hour standard of 0.08 ppm. ⁵ The particulates (PM-10) standard replaced the previous standard for total suspended particulates in 1987. ⁶ Based on 3-month standard of 1.5 $\mu\text{g}/\text{m}^3$. Source: U.S. Environmental Protection Agency, *National Air Quality and Emissions Trends Report*, annual.

No. 356. National Air Pollutant Emissions: 1970 to 1998

[In thousands of tons, except as indicated. PM-10=Particulate matter of less than 10 microns. Methodologies to estimate data for 1970 to 1980 period and 1985 to present emissions differ. Beginning with 1985, the estimates are based on a modified National Acid Precipitation Assessment Program inventory]

Year	PM-10	PM-10, fugitive dust ¹	Sulfur dioxide	Nitrogen dioxides	Volatile organic compounds	Carbon monoxide	Lead (tons)
1970	13,042	(NA)	31,161	20,928	30,982	129,444	220,869
1975	7,671	(NA)	28,011	22,632	26,079	116,757	159,659
1980	7,119	(NA)	25,905	24,384	26,336	117,434	74,153
1985	4,831	40,614	23,658	23,198	24,428	117,013	22,890
1986	4,642	46,298	22,886	22,808	23,617	111,688	14,763
1987	4,758	37,711	22,661	23,068	23,470	110,798	7,681
1988	5,598	55,474	23,135	24,124	24,306	118,729	7,053
1989	4,811	48,253	23,293	23,893	22,513	106,439	5,468
1990	5,057	24,905	23,660	24,049	20,936	98,523	4,975
1991	4,725	24,836	23,041	24,249	21,102	100,872	4,169
1992	4,610	24,862	22,806	24,596	20,659	97,630	3,810
1993	4,528	23,478	22,466	24,961	20,868	98,160	3,916
1994	4,751	26,162	21,870	25,372	21,535	102,643	4,047
1995	4,579	22,491	19,181	24,921	20,817	93,353	3,929
1996	4,732	28,309	19,121	24,676	18,736	95,479	3,899
1997	4,743	29,482	19,622	24,824	18,876	94,410	3,952
1998	4,450	30,292	19,647	24,454	17,917	89,454	3,973

NA Not available. ¹ Sources such as agricultural tilling, construction, mining and quarrying, paved roads, unpaved roads, and wind erosion.

No. 357. Air Pollutant Emissions by Pollutant and Source: 1998

[In thousands of tons, except as indicated. See headnote, Table 356]

Source	Particulates ¹	Sulfur dioxide	Nitrogen oxides	Volatile organic compounds	Carbon monoxide	Lead (tons)
Total emissions	34,741	19,647	24,454	17,917	89,454	3,973
Fuel combustion, stationary sources	1,091	16,721	10,189	893	5,374	503
Electric utilities	302	13,217	6,103	54	417	68
Industrial	245	2,895	2,969	161	1,114	19
Other fuel combustion	544	609	1,117	678	3,843	416
Residential	432	127	742	654	3,699	6
Industrial processes	607	1,458	786	1,417	3,624	2,327
Chemical and allied product manufacturing	65	299	152	396	1,129	175
Metals processing	171	444	88	75	1,495	2,098
Petroleum and related industries	32	345	138	496	368	(NA)
Other	339	370	408	450	632	54
Solvent utilization	6	1	2	5,278	2	(NA)
Storage and transport	94	3	7	1,324	80	(NA)
Waste disposal and recycling	310	42	97	433	1,154	620
Highway vehicles	257	326	7,765	5,325	50,386	19
Light-duty gas vehicles and motorcycles	56	130	2,849	2,832	27,039	12
Light-duty trucks	40	99	1,917	2,015	18,726	7
Heavy-duty gas vehicles	8	11	323	257	3,067	-
Diesels	152	85.3	2,676	222	1,554	(NA)
Off highway ²	461	1,084	5,280	2,461	19,914	503
Miscellaneous ³	31,916	12	328	786	8,920	(NA)

- Represents or rounds to zero. NA Not available. ¹ Represents both PM-10 and PM-10 fugitive dust; see Table 356. ² Includes emissions from farm tractors and other farm machinery, construction equipment, industrial machinery, recreational marine vessels, and small general utility engines such as lawn mowers. ³ Includes emissions such as from forest fires and other kinds of burning, various agricultural activities, fugitive dust from paved and unpaved roads, and other construction and mining activities, and natural sources.

Source of Tables 356 and 357: U.S. Environmental Protection Agency, *National Air Pollutant Emission Trends, 1900-1998*, EPA-454/R-00-002.

No. 358. Emissions of Greenhouse Gases by Type and Source: 1990 to 1999

[Emission estimates were mandated by Congress through Section 1605(a) of the Energy Policy Act of 1992 (Title XVI). Gases that contain carbon can be measured either in terms of the full molecular weight of the gas or just in terms of their carbon content]

Type and source	Unit	1990	1994	1995	1996	1997	1998	1999
Carbon dioxide:								
Carbon content, total ¹	Mil. metric tons	1,350.5	1,422.5	1,434.7	1,484.1	1,505.2	1,507.4	1,526.8
Energy sources	Mil. metric tons	1,325.0	1,393.7	1,404.7	1,453.6	1,474.1	1,476.3	1,495.0
Methane:								
Gas, total ¹	Mil. metric tons	31.74	31.17	31.18	30.16	30.11	29.29	28.77
Energy sources	Mil. metric tons	11.94	11.16	11.38	10.88	11.03	10.70	10.56
Landfills	Mil. metric tons	11.40	10.83	10.63	10.32	9.97	9.45	9.11
Agricultural sources	Mil. metric tons	8.29	9.05	9.03	8.83	8.98	9.00	8.96
Nitrous oxide, total ¹								
Agriculture	1,000 metric tons	1,168	1,310	1,257	1,246	1,226	1,223	1,224
Energy sources	1,000 metric tons	844	927	859	846	865	874	870
Industrial sources	1,000 metric tons	211	255	269	266	269	272	279
	1,000 metric tons	96	110	111	116	74	58	57
Chlorofluorocarbons (CFCs) gases ²								
CFC-11	1,000 metric tons	202	109	102	67	51	49	41
CFC-12	1,000 metric tons	54	37	36	27	25	25	24
CFC-113	1,000 metric tons	113	58	52	36	23	21	14
Other CFCs	1,000 metric tons	26	9	9	(Z)	(Z)	(Z)	(Z)
Halons	1,000 metric tons	9	5	5	4	3	3	3
Hydrofluorocarbons:	1,000 metric tons	2.8	2.7	2.9	3.0	3.0	3.0	3.0
HFC-23	1,000 metric tons	3.0	3.0	2.0	3.0	3.0	3.4	2.6
HFC-125	1,000 metric tons	(Z)	0.3	0.5	0.7	0.9	1.1	1.3
HFC-134a	1,000 metric tons	1.0	6.3	14.3	19.0	23.5	26.9	30.3
HFC-143a	1,000 metric tons	(Z)	0.1	0.1	0.2	0.3	0.5	0.7
Perfluorocarbons:	1,000 metric tons	3	2	2	3	3	3	2
CF-4	1,000 metric tons	3	2	2	2	2	2	2
C-2 F-6	1,000 metric tons	1	-	1	1	1	1	1
C-4 F-10	1,000 metric tons	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Sulfur hexafluoride	1,000 metric tons	1	1	2	2	2	2	1

- Represents or rounds to zero. Z Less than 500 metric tons. ¹ Includes minor sources not shown separately. ² Covers principally CFC-11, CFC-12, and CFC-113.

Source: U.S. Energy Information Administration, *Emissions of Greenhouse Gases in the United States*, annual.

No. 359. Municipal Solid Waste Generation, Recovery, and Disposal: 1980 to 1999

[In millions of tons (151.5 represents 151,500,000), except as indicated. Covers post-consumer residential and commercial solid wastes which comprise the major portion of typical municipal collections. Excludes mining, agricultural and industrial processing, demolition and construction wastes, sewage sludge, and junked autos and obsolete equipment wastes. Based on material-flows estimating procedure and wet weight as generated]

Item and material	1980	1990	1993	1994	1995	1996	1997	1998	1999
Waste generated	151.5	205.2	211.8	214.2	211.4	209.2	216.4	223.0	229.9
Per person per day (lb.)	3.7	4.5	4.5	4.5	4.4	4.3	4.4	4.5	4.6
Materials recovered	14.5	33.6	43.8	50.8	54.9	57.3	59.4	61.6	63.9
Per person per day (lb.)	0.35	0.7	0.9	1.1	1.1	1.2	1.2	1.3	1.3
Combustion for energy recovery	2.7	29.7	30.9	31.2	34.5	36.1	36.7	34.4	34.0
Per person per day (lb.)	0.06	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7
Combustion without energy recovery	11.0	2.2	1.6	1.3	1.0	(¹)	(¹)	(¹)	(¹)
Per person per day (lb.)	0.27	0.05	0.03	0.03	0.02	(¹)	(¹)	(¹)	(¹)
Landfill, other disposal	123.3	139.7	135.5	130.9	120.9	115.8	120.4	127.1	131.9
Per person per day (lb.)	3.0	3.1	2.9	2.8	2.5	2.4	2.5	2.6	2.7
Percent distribution of generation:									
Paper and paperboard	36.1	35.4	36.6	37.7	38.6	38.1	38.5	37.7	38.1
Glass	9.9	6.4	6.4	6.2	6.1	5.9	5.5	5.6	5.5
Metals	9.6	8.1	7.5	7.6	7.5	7.7	7.7	7.6	7.8
Plastics	5.2	8.3	9.0	9.0	8.9	9.4	9.9	10.0	10.5
Rubber and leather	2.8	2.8	2.7	2.9	2.9	3.0	3.0	3.1	2.7
Textiles	1.7	2.8	3.2	3.4	3.5	3.7	3.8	3.9	3.9
Wood	4.4	6.0	5.8	5.3	4.9	5.2	5.3	5.3	5.3
Food wastes	8.7	10.1	10.0	10.0	10.3	10.4	10.1	11.2	10.9
Yard wastes	18.2	17.1	15.7	14.7	14.0	13.3	12.8	12.4	12.1
Other wastes	3.4	3.0	3.0	3.2	3.3	3.3	3.4	3.2	3.2

¹ Combustion without energy recovery is no longer available separately.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1999*. Prepared for the U.S. Environmental Protection Agency.

No. 360. Generation and Recovery of Selected Materials in Municipal Solid Waste: 1980 to 1999

[In millions of tons, except as indicated (151.5 represents 151,500,000). Covers post-consumer residential and commercial solid wastes which comprise the major portion of typical municipal collections. Excludes mining, agricultural and industrial processing, demolition and construction wastes, sewage sludge, and junked autos and obsolete equipment wastes. Based on material-flores estimating procedure and wet weight as generated]

Item and material	1980	1990	1993	1994	1995	1996	1997	1998	1999
Waste generated, total	151.5	205.2	211.8	214.2	211.4	209.2	216.4	223.0	229.9
Paper and paperboard	54.7	72.7	77.4	80.8	81.7	79.7	83.3	84.2	87.5
Ferrous metals	11.6	12.6	11.9	11.8	11.6	11.8	12.3	12.4	13.3
Aluminum	1.8	2.8	2.9	3.0	3.0	3.0	3.0	3.1	3.1
Other nonferrous metals	1.1	1.1	1.1	1.4	1.3	1.3	1.3	1.4	1.4
Glass	15.0	13.1	13.6	13.4	12.8	12.3	12.0	12.5	12.6
Plastics	7.9	17.1	19.0	19.3	18.9	19.8	21.5	22.4	24.2
Yard waste	27.5	35.0	33.3	31.5	29.7	27.9	27.7	27.7	27.7
Other wastes	31.9	50.7	52.5	53.1	52.4	53.5	55.3	59.3	60.1
Materials recovered, total	14.5	33.6	43.8	50.8	54.9	57.3	59.4	61.6	63.9
Paper and paperboard	11.9	20.2	25.5	29.5	32.7	33.2	33.6	34.4	36.7
Ferrous metals	0.4	2.6	3.9	4.0	4.1	4.4	4.7	4.3	4.5
Aluminum	0.3	1.0	1.0	1.2	0.9	0.9	1.0	0.9	0.9
Other nonferrous metals	0.5	0.7	0.7	1.0	0.8	0.8	0.8	0.9	0.9
Glass	0.8	2.6	3.0	3.1	3.1	3.2	2.9	3.2	2.9
Plastics	-	0.4	0.7	0.9	1.0	1.1	1.1	1.2	1.4
Yard waste	-	4.2	6.9	8.0	9.0	10.4	11.5	12.6	12.6
Other wastes	0.6	1.8	2.1	3.1	3.2	3.3	3.8	4.1	4.0
Percent of generation recovered, total	9.6	16.4	20.7	23.7	26.0	27.4	27.4	27.6	27.8
Paper and paperboard	21.8	27.8	32.9	36.5	40.0	41.6	40.3	40.8	41.9
Ferrous metals	3.4	20.4	32.8	33.9	35.5	37.2	38.4	34.9	33.6
Aluminum	16.7	35.9	35.7	37.8	31.4	31.5	31.6	27.9	27.8
Other nonferrous metals	45.5	66.4	63.1	73.3	64.3	66.7	65.4	67.4	66.9
Glass	5.3	20.0	22.1	23.3	24.5	25.8	24.3	25.5	23.4
Plastics	-	2.2	3.5	4.9	5.2	5.4	5.2	5.4	5.6
Yard waste	-	12.0	20.8	25.4	30.3	37.2	41.4	45.3	45.3
Other wastes	1.9	3.6	4.0	5.9	6.1	6.2	6.8	6.9	6.7

- Represents zero.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1999*. Prepared for the U.S. Environmental Protection Agency.

No. 361. Curbside Recycling Programs—Number and Population Served by Region: 1995 to 1999

[For composition of regions, see map, inside front cover. 1998 data are not available]

Region	Number of programs			Population served ¹					
				Total (1,000)			Percent		
	1995	1997	1999	1995	1997	1999	1995	1997	1999
Total	7,375	8,969	9,349	121,335	136,229	139,826	46	51	52
Northeast	2,210	3,406	3,414	37,256	43,200	43,162	72	83	83
South	1,281	1,344	1,581	31,521	36,952	37,914	34	39	39
Midwest	2,985	3,357	3,477	25,487	26,970	30,106	41	43	48
West	899	862	877	27,071	29,107	28,644	49	50	48

¹ Calculated using population of states reporting data.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1999*. Prepared for the U.S. Environmental Protection Agency. Also in *Bicycle Magazine*.

No. 362. Toxic Chemical Releases and Transfers by Media: 1988 to 1999

[In millions of pounds (3,213.1 represents 3,213,100,000), except as indicated. Based on reports filed as required by Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA, or Title III of the Superfund Amendments and Reauthorization Act of 1986), Public Law 99-499. Owners and operators of facilities that are classified within Standard Classification Code groups 20 through 39, have 10 or more full-time employees, and that manufacture, process, or otherwise uses any listed toxic chemical in quantities greater than the established threshold in the course of a calendar year are covered and required to report]

Media	Core chemicals ¹					
	1988	1995	1996	1997	1998	1999
Total facilities reporting	19,829	20,110	19,778	19,443	19,193	18,573
Total releases	3,213.1	1,937.6	1,892.1	1,904.3	1,813.2	1,749.7
On-site releases	2,790.4	1,644.3	1,563.0	1,459.0	1,391.1	1,294.0
Air emissions	2,180.6	1,204.2	1,106.7	989.3	926.7	858.5
Surface water	41.9	17.0	16.2	18.0	17.3	14.3
Underground injection	161.9	154.7	138.7	131.4	114.7	109.3
Releases to land	405.9	-	138.1	131.2	114.6	109.2
Off-site releases	422.7	293.3	329.1	445.3	422.1	455.7
Total transfers off-site for further waste management	(NA)	3,041.3	2,297.9	2,980.3	2,759.9	2,840.6
Transfers to recycling	(NA)	2,202.4	2,145.4	2,144.1	1,963.7	2,030.9
Transfers to energy recovery	(NA)	489.8	448.2	470.0	439.5	469.5
Transfers to treatment	331.8	200.2	183.1	213.7	209.3	200.0
Transfers to POTWs ²	231.6	146.7	150.2	152.4	146.8	140.1
Other off-site transfers	43.0	2.2	1.0	-	0.6	0.2
Total production-related waste managed	(NA)	17,688.6	17,399.7	17,772.6	18,102.1	18,769.0
Recycled on-site	(NA)	5,877.3	5,907.9	6,212.2	6,574.3	6,485.0
Recycled off-site	(NA)	2,285.6	2,185.3	2,156.2	2,028.8	2,099.6
Energy recovery on-site	(NA)	2,591.8	2,562.4	2,543.6	2,594.5	2,572.2
Energy recovery off-site	(NA)	477.6	486.7	484.0	444.6	467.0
Treated on-site	(NA)	4,183.5	4,080.7	4,181.1	4,306.4	5,103.7
Treated off-site	(NA)	394.1	360.7	371.8	384.9	369.6
Quantity released on- and off-site	(NA)	1,878.6	1,816.1	1,823.7	1,768.7	1,671.7

- Represents or rounds to zero. NA Not available. ¹ Chemicals covered for all reporting years. Excludes chemicals removed from the list, those added in 1990, 1991, 1994, and 1995 and aluminum oxide, ammonia, hydrochloric acid, and sulfuric acid. ² POTW (Publicly Owned Treatment Work) is a wastewater treatment facility that is owned by a state or municipality.

No. 363. Toxic Chemical Releases by Industry: 1999

[In millions of pounds (7,754.8 represents 7,754,800,000), except as indicated. "Original Industries" include owners and operators of facilities that are classified within Standard Classification Code groups 20 through 39, have 10 or more full-time employees, and that manufacture, process, or otherwise uses any listed toxic chemical in quantities greater than the established threshold in the course of a calendar year are covered and required to report. Beginning in 1998, additional industries (listed below as "New Industries") were required to report]

Industry	1987 SIC ¹ code	Total facilities (number)	Total on- and off-site releases ²	Air emissions	Surface water discharge	Surface impoundments	Other on-site land disposal	Total on-site releases	Off-site releases/transfers off-site to disposal
Total	(X)	22,639	7,754.8	2,029.4	258.9	1,231.2	3,040.3	7,292.6	462.2
ORIGINAL INDUSTRIES									
Total ³	(X)	20,698	2,309.3	1,175.1	253.6	73.8	142.5	1,951.9	357.4
Food and kindred products	20	1,615	123.2	59.8	50.2	0.3	0.1	116.3	7.0
Tobacco products	21	23	3.7	2.8	0.2	-	-	2.9	0.8
Textile mill products	22	241	9.8	8.5	0.2	0.1	0.1	9.1	0.7
Apparel and other textile products	23	15	0.5	0.4	-	-	-	0.4	0.1
Lumber and wood products	24	830	35.2	34.1	0.1	-	-	34.4	0.8
Furniture and fixtures	25	352	15.3	15.2	-	-	-	15.2	0.1
Paper and allied products	26	438	225.6	186.0	19.1	3.2	0.3	220.4	5.2
Printing and publishing	27	213	20.7	20.5	-	-	-	20.6	0.1
Chemical and allied products	28	3,759	663.4	288.2	77.1	29.1	4.2	609.3	54.2
Petroleum and coal products	29	410	69.9	48.0	15.7	0.3	0.1	67.0	2.9
Rubber and misc. plastic products	30	1,831	103.5	91.6	-	-	-	92.2	11.3
Leather and leather products	31	72	4.4	2.2	0.1	-	-	2.3	2.1
Stone, clay, glass products	32	668	42.1	32.9	0.1	0.1	0.1	36.7	5.4
Primary metal industries	33	1,912	591.1	106.6	62.5	35.9	130.4	399.9	191.2
Fabricated metals products	34	2,846	80.4	57.3	2.4	-	0.3	60.5	19.9
Industrial machinery and equipment	35	1,100	15.4	10.8	0.1	-	0.2	11.4	4.0
Electronic, electric equipment	36	1,167	39.4	16.9	4.4	-	-	22.3	17.1
Transportation equipment	37	1,295	104.0	91.7	0.2	-	0.3	92.6	11.4
Instruments and related products	38	240	10.6	8.5	1.3	-	-	9.8	0.7
Miscellaneous	39	307	10.2	8.8	-	-	-	8.9	1.3
NEW INDUSTRIES									
Total	(X)	1,941	5,445.5	854.3	5.3	1,157.4	2,897.8	5,340.8	104.8
Metal mining	10	108	3,977.0	4.5	0.4	1,027.3	2,892.9	3,974.8	2.2
Coal mining	12	50	11.8	1.8	0.2	2.5	0.3	11.8	-
Electric utilities	49	625	1,162.5	841.9	4.5	125.4	4.6	1,104.6	58.0
Chemical wholesalers	5169	428	2.0	1.3	-	-	-	1.3	0.6
Petroleum bulk terminals	5171	532	4.3	4.0	-	-	-	4.1	0.2
RCRA/solvent recovery	4953/7369	198	288.0	0.8	0.1	2.2	-	244.2	43.8

- Represents or rounds to zero. X Not applicable. ¹ Standard Industrial Classification, see text, Section 12, Labor Force, Employment, and Earnings. ² Includes media of release (injection, landfills, etc), not shown separately. ³ Includes industries with no specific industry identified, not shown separately.

Source of Tables 362 and 363: U.S. Environmental Protection Agency, 1999 Toxics Release Inventory. See also <<http://www.epa.gov/tri/tri99pdr/1999pdr.pdf>> (released April 2001).

No. 364. Toxic Releases by State: 1988 to 1999

[In millions of pounds (3,213.1 represents 3,213,100,000). Excludes delisted chemicals, chemicals added in 1990, 1991, 1994, and 1995 and aluminum oxide, ammonia, hydrochloric acid, and sulfuric acid. See headnote, Table 362]

State and outlying area	Core chemicals					State and outlying area	Core chemicals				
	1988	1996	1997	1998	1999		1988	1996	1997	1998	1999
Total	3,213.1	1,892.1	1,904.3	1,813.2	1,732.5	MT.	35.6	47.2	42.6	50.4	48.8
U.S. total	3,197.6	1,882.9	1,895.9	1,805.7	1,726.2	NE.	17.1	8.8	13.9	10.2	8.9
AL.	111.0	90.0	80.1	67.0	63.1	NV.	2.4	3.3	4.0	3.7	4.0
AK.	3.7	1.7	0.8	0.3	0.2	NH.	14.0	2.3	2.4	2.3	2.4
AZ.	66.3	45.9	30.6	53.5	50.2	NJ.	48.4	12.3	13.5	11.8	13.1
AR.	41.0	31.5	50.2	40.3	40.4	NM.	30.4	42.8	40.1	23.8	20.0
CA.	110.3	35.5	27.9	27.3	28.1	NY.	100.9	28.2	29.1	22.7	22.9
CO.	15.7	3.0	2.8	3.3	3.1	NC.	124.3	63.4	55.3	49.0	45.9
CT.	38.5	7.3	8.4	6.1	4.4	ND.	1.2	0.8	0.8	1.1	1.0
DE.	8.7	4.9	5.9	5.9	5.3	OH.	205.8	128.6	132.0	128.4	118.3
DC.	-	-	-	-	-	OK.	30.5	15.3	15.4	14.1	13.5
FL.	33.1	34.2	31.7	30.9	31.7	OR.	21.6	23.5	23.8	28.1	25.5
GA.	85.8	43.0	53.2	46.9	44.7	PA.	136.2	87.0	96.0	90.3	87.3
HI.	0.8	0.4	0.3	0.3	0.3	RI.	7.8	2.3	2.1	1.6	1.2
ID.	7.3	13.8	12.9	12.8	14.8	SC.	66.0	48.6	52.1	49.8	57.1
IL.	140.7	82.2	91.8	83.7	81.0	SD.	2.4	1.4	1.3	1.4	1.1
IN.	184.5	101.1	111.8	107.1	114.6	TN.	126.8	100.0	89.9	78.1	76.6
IA.	43.0	19.4	20.2	25.1	25.7	TX.	322.1	186.2	179.3	172.6	168.2
KS.	30.4	17.5	18.9	17.4	19.8	UT.	123.8	77.7	96.5	99.6	82.7
KY.	65.7	33.3	35.1	30.7	35.9	VT.	1.7	0.4	0.3	0.2	0.3
LA.	129.6	105.8	93.8	92.2	77.4	VA.	112.4	39.9	41.4	39.9	39.1
ME.	15.5	5.6	6.3	6.6	4.8	WA.	30.6	22.1	24.6	24.3	17.0
MD.	20.2	9.3	9.8	8.8	9.1	WV.	39.7	17.6	15.3	16.3	12.0
MA.	32.2	7.0	6.3	6.5	5.0	WI.	62.3	33.1	33.9	33.9	31.9
MI.	141.1	81.9	75.1	73.6	63.8	WY.	2.0	1.2	1.3	1.3	1.6
MN.	55.9	17.2	15.6	15.0	14.5	Guam	-	-	-	-	-
MS.	59.7	47.1	46.4	40.8	39.8	Puerto Rico	12.9	7.9	7.2	6.6	5.7
MO.	91.1	50.2	53.1	48.7	47.9	Virgin Islands	2.6	1.2	1.2	0.9	0.5

- Represents zero.

Source: U.S. Environmental Protection Agency, 1999 Toxics Release Inventory. See also <<http://www.epa.gov/tri/tri99/pdr/1999pdr.pdf>> (released April 2001).

No. 365. Hazardous Waste Sites on the National Priority List by State: 2000

[As of December 31. Includes both proposed and final sites listed on the National Priorities List for the Superfund program as authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986]

State and outlying area	Total sites		Percent distribution	Federal	Non-federal	State and outlying area	Total sites		Percent distribution	Federal	Non-federal
	Total sites	Rank					Total sites	Rank			
Total	1,292	(X)	(X)	166	1,126	Montana	14	30	1.1	-	14
United States	1,279	(X)	100.0	165	1,114	Nebraska	10	39	0.8	1	9
Alabama	15	27	1.2	3	12	Nevada	1	49	0.1	-	1
Alaska	7	44	0.5	6	1	New Hampshire	19	20	1.5	1	18
Arizona	10	39	0.8	3	7	New Jersey	113	1	8.8	8	105
Arkansas	12	32	0.9	-	12	New Mexico	12	32	0.9	1	11
California	99	2	7.7	24	75	New York	88	4	6.9	4	84
Colorado	17	22	1.3	3	14	North Carolina	25	15	2.0	2	23
Connecticut	16	24	1.3	1	15	North Dakota	-	50	-	-	-
Delaware	17	22	1.3	1	16	Ohio	35	11	2.7	5	30
District of Columbia	1	(X)	0.1	1	-	Oklahoma	12	32	0.9	1	11
Florida	53	6	4.1	6	47	Oregon	12	32	0.9	2	10
Georgia	15	27	1.2	2	13	Pennsylvania	97	3	7.6	6	91
Hawaii	3	45	0.2	2	1	Rhode Island	12	32	0.9	2	10
Idaho	9	41	0.7	2	7	South Carolina	25	15	2.0	2	23
Illinois	44	8	3.4	5	39	South Dakota	2	47	0.2	1	1
Indiana	29	14	2.3	-	29	Tennessee	14	30	1.1	4	10
Iowa	16	24	1.3	1	15	Texas	38	10	3.0	4	34
Kansas	12	32	0.9	2	10	Utah	20	19	1.6	4	16
Kentucky	15	27	1.2	1	14	Vermont	8	43	0.6	-	8
Louisiana	16	24	1.3	1	15	Virginia	31	13	2.4	11	20
Maine	12	32	0.9	3	9	Washington	48	7	3.8	14	34
Maryland	18	21	1.4	8	10	West Virginia	9	41	0.7	2	7
Massachusetts	33	12	2.6	8	25	Wisconsin	41	9	3.2	-	41
Michigan	69	5	5.4	1	68	Wyoming	2	48	0.2	1	1
Minnesota	25	15	2.0	2	23	Guam	2	(X)	(X)	1	1
Mississippi	3	45	0.2	-	3	Puerto Rico	9	(X)	(X)	-	9
Missouri	25	15	2.0	3	22	Virgin Islands	2	(X)	(X)	-	2

- Represents zero. X Not applicable.

Source: U.S. Environmental Protection Agency, *Supplementary Materials: National Priorities List, Proposed Rule*, December 2000.

No. 366. Environmental Industry—Revenues and Employment by Industry Segment: 1990 to 2000

[148.2 represents \$148,200,000,000. Covers approximately 59,000 private and public companies engaged in environmental activities]

Industry segment	Revenue (bil. dol.)					Employment (1,000)				
	1990	1995	1998	1999	2000	1990	1995	1998	1999	2000
Industry total	148.2	179.2	189.8	196.5	201.7	1,174.3	1,327.0	1,357.6	1,389.7	1,425.2
Analytical services ¹	1.5	1.2	1.1	1.2	1.2	20.2	14.1	13.6	13.9	13.8
Wastewater treatment works ²	18.3	23.1	25.6	26.7	27.3	95.0	101.5	107.5	111.3	113.5
Solid waste management ³	26.1	32.5	36.1	37.2	38.2	209.5	243.4	250.7	254.8	261.7
Hazardous waste management ⁴	6.3	6.2	5.7	5.3	5.2	56.9	52.5	46.1	43.8	42.6
Remediation/industrial services ⁵	11.1	11.1	11.0	11.2	11.7	107.2	98.1	113.5	115.5	120.3
Consulting & engineering ⁶	12.5	15.5	15.8	16.4	16.0	144.2	180.2	171.5	177.2	173.2
Water equipment & chemicals	13.5	16.5	19.1	20.0	21.2	97.9	110.2	128.3	133.4	141.5
Instrument manufacturing ⁷	2.0	3.0	3.3	3.2	3.3	18.8	26.2	27.7	26.2	27.2
Air pollution control equipment ⁸	13.1	14.8	16.5	17.1	17.7	82.7	107.2	113.2	117.3	121.0
Waste management equipment ⁹	8.7	9.9	9.5	9.7	9.9	88.8	93.8	75.7	74.6	76.2
Process & prevention technology ⁹	0.4	0.8	1.0	1.0	1.1	6.9	19.5	26.7	28.9	31.5
Water utilities ⁷	19.8	25.3	28.8	29.4	30.3	104.7	118.2	126.4	128.9	132.9
Resource recovery ⁸	13.1	16.9	13.3	14.4	14.9	118.4	136.0	125.0	128.8	132.6
Environmental energy sources ⁹	1.8	2.4	3.0	3.6	3.8	21.1	26.1	31.7	35.1	37.2

¹ Covers environmental laboratory testing and services. ² Mostly revenues collected by municipal entities. ³ Covers such activities as collection, transportation, transfer stations, disposal, landfill ownership and management for solid waste. ⁴ Transportation and disposal of hazardous, medical and nuclear waste. ⁵ Includes stationary and mobile sources. ⁶ Includes vehicles, containers, liners, processing, and remediation equipment. ⁷ Revenues generated from the sale of water. ⁸ Revenues generated from the sale of recovered metals, paper, plastic, etc. ⁹ Includes solar, wind, geothermal, and conservation devices.

Source: Environmental Business International, Inc., San Diego, CA, *Environmental Business Journal*, monthly (copyright).

No. 367. Threatened and Endangered Wildlife and Plant Species—Number: 2001

[As of April. Endangered species: One in danger of becoming extinct throughout all or a significant part of its natural range. Threatened species: One likely to become endangered in the foreseeable future]

Item	Mam- mals	Birds	Rep- tiles	Amphib- ians	Fishes	Snails	Clams	Crusta- ceans	Insects	Arach- nids	Plants
Total listings	340	273	115	27	125	32	71	21	46	12	739
Endangered species, total	314	253	78	18	81	21	63	18	37	12	593
United States	63	78	14	10	70	20	61	18	33	12	592
Foreign	251	175	64	8	11	1	2	-	4	-	1
Threatened species, total	26	20	37	9	44	11	8	3	9	-	146
United States	9	14	22	8	44	11	8	3	9	-	144
Foreign	17	6	15	1	-	-	-	-	-	-	2

- Represents zero.

Source: U.S. Fish and Wildlife Service, *Endangered Species Bulletin*, bimonthly; and <http://ecos.fws.gov/tess/html/boxscore.html> (accessed 22 May 2001).

No. 368. Tornadoes, Floods, Tropical Storms, and Lightning: 1990 to 2000

Weather type	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Tornadoes, number ¹	1,133	1,132	1,298	1,176	1,082	1,235	1,170	1,148	(NA)	(NA)	(NA)
Lives lost, total	53	39	39	33	69	30	25	67	130	(NA)	(NA)
Most in a single tornado	29	17	12	7	22	6	5	27	34	(NA)	(NA)
Floods and flash floods: Lives lost	142	61	62	103	91	80	131	117	136	(NA)	(NA)
North Atlantic tropical storms and hurricanes ²	14	8	7	8	7	19	13	7	14	12	15
Number of hurricanes reaching U.S. mainland	-	1	1	1	-	2	2	1	3	3	-
Total direct deaths from tropical storms and hurricanes	123	17	28	273	1,175	121	138	4	(NA)	(NA)	(NA)
Direct deaths on U.S. mainland	10	17	26	9	38	29	33	4	23	70	5
Property loss in U.S. (mil. dol.)	57	1,500	26,500	57	973	3,729	3,600	100	7,299	5,862	27
Lightning: Deaths	74	73	41	43	74	85	52	42	(NA)	(NA)	(NA)
Injuries	252	432	292	295	577	510	309	306	(NA)	(NA)	(NA)

- Represents zero. NA Not available. ¹ A violent, rotating column of air descending from a cumulonimbus cloud in the form of a tubular- or funnel-shaped cloud, usually characterized by movements along a narrow path and wind speeds from 100 to over 300 miles per hour. Also known as a "twister" or "waterspout." ² Source: National Hurricane Center, Coral Gables, FL, unpublished data. Tropical storms have maximum winds of 39 to 73 miles per hour; hurricanes have maximum winds of 74 miles per hour or higher.

Source: Except as noted, U.S. National Oceanic and Atmospheric Administration, *Storm Data*, monthly.

No. 369. Major U.S. Weather Disasters: 1980 to 2000

[4.0 represents \$4,000,000,000. Covers only weather related disasters costing \$1 billion or more]

Event	Description	Time period	Estimated cost	Deaths
			(bil. dol.)	
Southern drought/heat wave	Severe drought and heat over south-central and south-eastern states cause significant agricultural losses	Spring-summer 2000	over 4.0	140
Western fire season	Severe fire season in western states due to drought and frequent winds	Spring-summer 2000	over 2.0	5
Hurricane Floyd	Category 2 hurricane in NC, causing severe flooding in NC and some flooding in SC, VA, MD, PA, NY, DE, RI, CT, MA, and VT	Sept. 1999	6.0	75
Drought/heat wave	Drought/heatwave over eastern U.S.	Summer 1999	1.0	256
Oklahoma-Kansas tornadoes	Category F4-F5 tornadoes hit OK, KS, TX, and TN	May 1999	1.0	55
Arkansas-Tennessee tornadoes	Two outbreaks of tornadoes in 6-day period	January 1999	1.3	31
Texas flooding	Severe flooding in southeast Texas from 2 heavy rain events with 10-20 in. totals	Oct.-Nov. 1998	1.0	31
Hurricane Georges	Category 2 hurricane in Puerto Rico, Florida Keys, and Gulf coasts of LA, MS, AL, and FL	Sept. 1998	3-4	16
Hurricane Bonnie	Category 3 hurricane in eastern NC and VA	August 1998	1.0	2
Southern drought/heat wave	Severe drought and heat wave from TX/OK eastward to the Carolinas	Summer 1998	6.0	200
Minnesota severe storms/hail	Very damaging severe thunderstorms with large hail over wide areas of Minnesota	May 1998	1.5	1
Southeast severe weather	Tornadoes and flooding related to strong El Nino in the southeast	Winter/spring 1998	1.0	Over 130
Northeast ice storm	Intense ice storm hits ME, NH, VT, and NY	January 1998	1.4	16
Northern plains flooding	Severe flooding in Dakotas and Minnesota due to heavy spring snowmelt	April-May 1997	2.0	11
MS and OH valleys flooding and tornadoes	Tornadoes and severe flooding hit the states of AR, MO, MS, TN, IL, IN, KY, OH, and WV	March 1997	1.0	67
West Coast flooding	Flooding from rains and snowmelt in CA, WA, OR, ID, NV, & MT	Dec. 1996-Jan. 1999	2-3	36
Hurricane Fran	Category 3 hurricane in NC and VA	Sept. 1996	5.0	37
Southern Plains severe drought	Drought in agricultural areas of TX & OK	Fall 1995-summer 1996	Over 4	(NA)
Pacific Northwest severe flooding	Flooding from heavy rain & snowmelt in OR, WA, ID, and MT	Feb. 1996	1.0	9
Blizzard of '96 followed by flooding	Heavy snowstorm followed by severe flooding in Appalachians, Mid-Atlantic, and Northeast	Jan. 1996	3.0	187
Hurricane Opal	Category 3 hurricane in FL, AL, parts of GA, TN, & Carolinas	Oct. 1995	Over 3	27
Hurricane Marilyn	Category 2 hurricane in Virgin Islands	Sept. 1995	2.1	13
TX/OK/LA/MS severe weather and flooding	Flooding, hail, & tornadoes across TX, OK, parts of LA, MS, Dallas & New Orleans hardest hit	May 1995	5-6	32
California flooding	Flooding from frequent winter storms across much of CA	Jan.-Mar. 1995	3.0	27
Western Fire Season	Severe fire season in western states due to dry weather	Summer-fall 1994	1.0	(NA)
Texas flooding	Flooding from torrential rain & thunderstorms across south-east TX	Oct. 1994	1.0	19
Tropical Storm Alberto	Flooding due to 10 to 25 inch rain across GA, AL, part of FL	July 1994	1.0	32
Southeast ice storm	Intense ice storm in pts of TX, OK, AR, LA, MS, AL, TN, GA, SC, NC, & VA	Feb. 1994	3.0	9
California wildfires	Out-of-control wildfires over southern CA	Fall 1993	1.0	4
Midwest flooding	Extreme flooding across central U.S.	Summer 1993	15-20	48
Drought/heat wave	Extreme drought/heatwave across southeastern U.S.	Summer 1993	1.0	(NA)
Storm/blizzard	"Storm of the Century" hits entire eastern seaboard	Mar. 1993	3-6	270
Nor'easter of 1992	Slow-moving storm batters northeast U.S. coast, New England hardest hit	Dec. 1992	1-2	19
Hurricane Iniki	Category 4 hurricane hit Hawaiian island of Kauai	Sept. 1992	1.8	7
Hurricane Andrew	Category 4 hurricane hit FL & LA	Aug. 1992	27.0	58
Oakland Firestorm	Oakland, CA firestorm due to low humidity & high winds	Oct. 1991	1.5	25
Hurricane Bob	Category 2 hurricane—mainly coastal NC, Long Island, & New England	Aug. 1991	1.5	18
TX/OK/LA/AR Flooding	Torrential rains cause flooding along Trinity, Red, and Arkansas rivers	May 1990	1.0	13
Hurricane Hugo	Category 4 hurricane hit Puerto Rico & Virgin Islands, devastated NC & SC	Sept. 1989	Over 9	86
Drought/Heat Wave	Drought/heatwave over central & eastern U.S.	Summer 1988	40.0	5,000-10,000
Hurricane Juan	Category 1 hurricane, flooding most severe problem, hit LA and southeast U.S.	Oct.-Nov. 1985	1.5	63
Hurricane Elena	Category 3 hurricane across FL to LA	Aug.-Sept. 1985	1.3	4
Florida Freeze	Severe freeze central/northern FL, damage to citrus industry	Jan. 1985	1.2	-
Florida Freeze	Severe freeze central/northern FL, damage to citrus industry	Dec. 1983	2.0	-
Hurricane Alicia	Category 3 hurricane across TX	Aug. 1983	3.0	21
Drought/heat wave	Drought/heatwave over central & eastern U.S.	June-Sept. 1980	20.0	10,000

- Represents zero. NA Not available or not reported.

Source: U.S. National Oceanic and Atmospheric Administration, National Climatic Data Center. "Billion Dollar U.S. Weather Disasters, 1980-2000" (release date: May 14, 2001) <<http://www.ncdc.noaa.gov/ol/reports/billionz.html>>.

No. 370. Highest and Lowest Temperatures by State Through 1999

State	Highest temperatures			Lowest temperatures		
	Station	Temperature (F)	Date	Station	Temperature (F)	Date
U.S.	Greenland Ranch, CA. .	134	Jul. 10, 1913	Prospect Creek, AK . . .	-80	Jan. 23, 1971
AL.	Centerville	112	Sep. 5, 1925	New Market	-27	Jan. 30, 1966
AK.	Fort Yukon	100	¹ Jun. 27, 1915	Prospect Creek Camp . .	-80	Jan. 23, 1971
AZ.	Lake Havasu City	128	Jun. 29, 1994	Hawley Lake	-40	Jan. 7, 1971
AR.	Ozark	120	Aug. 10, 1936	Pond.	-29	Feb. 13, 1905
CA.	Greenland Ranch	134	Jul. 10, 1913	Boca.	-45	Jan. 20, 1937
CO.	Bennett	118	Jul. 11, 1888	Maybell	-61	Feb. 1, 1985
CT.	Danbury	106	Jul. 15, 1995	Falls Village	-32	Feb. 16, 1943
DE.	Millsboro	110	Jul. 21, 1930	Millsboro	-17	Jan. 17, 1893
FL.	Monticello	109	Jun. 29, 1931	Tallahassee	-2	Feb. 13, 1899
GA.	Greenville	112	Aug. 20, 1983	CCC Camp F-16.	-17	¹ Jan. 27, 1940
HI.	Pahala	100	Apr. 27, 1931	Mauna Kea Obs. 111.2. .	12	May 17, 1979
ID.	Orofino	118	Jul. 28, 1934	Island Park Dam	-60	Jan. 18, 1943
IL.	East St. Louis.	117	Jul. 14, 1954	Congerville.	-36	Jan. 5, 1999
IN.	Collegeville	116	Jul. 14, 1936	New Whiteland	-36	Jan. 19, 1994
IA.	Keokuk	118	Jul. 20, 1934	Elkader	-47	² Feb. 3, 1996
KS.	Alton (near)	121	² Jul. 24, 1936	Lebanon	-40	Feb. 13, 1905
KY.	Greensburg	114	Jul. 28, 1930	Shelbyville	-37	Jan. 19, 1994
LA.	Plain Dealing	114	Aug. 10, 1936	Minden	-16	Feb. 13, 1899
ME.	North Bridgton	105	² Jul. 10, 1911	Van Buren	-48	Jan. 19, 1925
MD.	Cumberland & Frederick.	109	² Jul. 10, 1936	Oakland	-40	Jan. 13, 1912
MA.	New Bedford & Chester .	107	Aug. 2, 1975	Chester	-35	Jan. 12, 1981
MI.	Mio.	112	Jul. 13, 1936	Vanderbilt	-51	Feb. 9, 1934
MN.	Moorhead	114	² Jul. 6, 1936	Tower	-60	Feb. 2, 1996
MS.	Holly Springs	115	Jul. 29, 1930	Corinth	-19	Jan. 30, 1966
MO.	Warsaw & Union	118	² Jul. 14, 1954	Warsaw	-40	Feb. 13, 1905
MT.	Medicine Lake	117	Jul. 5, 1937	Rogers Pass	-70	Jan. 20, 1954
NE.	Minden	118	² Jul. 24, 1936	Camp Clarke	-47	Feb. 12, 1899
NV.	Laughlin	125	Jun. 29, 1994	San Jacinto	-50	Jan. 8, 1937
NH.	Nashua	106	Jul. 4, 1911	Mt. Washington.	-47	Jan. 29, 1934
NJ.	Runyon	110	Jul. 10, 1936	River Vale	-34	Jan. 5, 1904
NM.	Waste Isolat Pilot Plt . .	122	Jun. 27, 1994	Gavilan	-50	Feb. 1, 1951
NY.	Troy	108	Jul. 22, 1926	Old Forge	-52	² Feb. 18, 1979
NC.	Fayetteville	110	Aug. 21, 1983	Mt. Mitchell	-34	Jan. 21, 1985
ND.	Steele	121	Jul. 6, 1936	Parshall	-60	Feb. 15, 1936
OH.	Gallipolis (near).	113	² Jul. 21, 1934	Milligan	-39	Feb. 10, 1899
OK.	Tipton	120	² Jun. 27, 1994	Watts	-27	Jan. 18, 1930
OR.	Pendleton	119	Aug. 10, 1898	Seneca	-54	² Feb. 10, 1933
PA.	Phoenixville	111	² Jul. 10, 1936	Smethport	-42	¹ Jan. 5, 1904
RI.	Providence	104	Aug. 2, 1975	Kingston	-23	Jan. 11, 1942
SC.	Camden	111	² Jun. 28, 1954	Caesars Head	-19	Jan. 21, 1985
SD.	Gannvalley	120	Jul. 5, 1936	McIntosh	-58	Feb. 17, 1936
TN.	Perryville	113	² Aug. 9, 1930	Mountain City	-32	Dec. 30, 1917
TX.	Seymour	120	Aug. 12, 1936	Seminole	-23	² Feb. 8, 1933
UT.	Saint George	117	Jul. 5, 1985	Peter's Sink	-69	Feb. 1, 1985
VT.	Vernon	105	Jul. 4, 1911	Bloomfield	-50	Dec. 30, 1933
VA.	Balcony Falls	110	Jul. 15, 1954	Mtn. Lake Bio. Stn. . . .	-30	Jan. 22, 1985
WA.	Ice Harbor Dam	118	² Aug. 5, 1961	Mazama & Winthrop . . .	-48	Dec. 30, 1968
WV.	Martinsburg	112	² Jul. 10, 1936	Lewisburg	-37	Dec. 30, 1917
WI.	Wisconsin Dells	114	Jul. 13, 1936	Coudery.	-55	Feb. 4, 1996
WY.	Basin	114	Jul. 12, 1900	Riverside R.S.	-66	Feb. 9, 1933

¹ Estimated. ² Also on earlier dates at the same or other places.

Source: U.S. National Oceanic and Atmospheric Administration, <<http://www.ncdc.noaa.gov/ol/climate/severeweather/temperatures.html>> (released 03 March 2000).

No. 371. Normal Daily Mean, Maximum, and Minimum Temperatures— Selected Cities

[In Fahrenheit degrees. Airport data except as noted. Based on standard 30-year period, 1961 through 1990]

State	Station	Daily mean temperature			Daily maximum temperature			Daily minimum temperature		
		Jan.	July	Annual average	Jan.	July	Annual average	Jan.	July	Annual average
AL	Mobile	49.9	82.3	67.5	59.7	91.3	77.4	40.0	73.2	57.4
AK	Juneau	24.2	56.0	40.6	29.4	63.9	46.9	19.0	48.1	34.1
AZ	Phoenix	53.6	93.5	72.6	65.9	105.9	85.9	41.2	81.0	59.3
AR	Little Rock	39.1	81.9	61.8	49.0	92.4	72.5	29.1	71.5	51.0
CA	Los Angeles	56.8	69.1	63.0	65.7	75.3	70.4	47.8	62.8	55.5
	Sacramento	45.2	75.7	60.8	52.7	93.2	73.5	37.7	58.1	48.1
	San Diego	57.4	71.0	64.2	65.9	76.2	70.8	48.9	65.7	57.6
	San Francisco	48.7	72.7	57.1	55.6	71.6	65.2	41.8	53.9	49.0
CO	Denver	29.7	73.5	50.3	43.2	88.2	64.2	16.1	58.6	36.2
CT	Hartford	24.6	73.7	49.9	33.2	85.0	60.2	15.8	62.2	39.5
DE	Wilmington	30.6	76.4	54.2	38.7	85.6	63.6	22.4	67.1	44.8
DC	Washington	34.6	80.0	58.0	42.3	88.5	66.9	26.8	71.4	49.2
FL	Jacksonville	52.4	81.6	68.0	64.2	91.4	78.9	40.5	71.9	57.1
	Miami	67.2	82.6	75.9	75.2	89.0	82.8	59.2	76.2	69.0
GA	Atlanta	41.0	78.8	61.3	50.4	88.0	71.2	31.5	69.5	51.3
HI	Honolulu	72.9	80.5	77.2	80.1	87.5	84.4	65.6	73.5	70.0
ID	Boise	29.0	74.0	50.9	36.4	90.2	62.8	21.6	57.7	39.1
IL	Chicago	21.0	73.2	49.0	29.0	83.7	58.6	12.9	62.6	39.5
	Peoria	21.6	75.5	50.7	29.9	85.7	60.4	13.2	65.4	41.0
IA	Indianapolis	25.5	75.4	52.3	33.7	85.5	62.1	17.2	65.2	42.4
IN	Des Moines	19.4	76.6	49.9	28.1	86.7	59.8	10.7	66.5	40.0
KS	Wichita	29.5	81.4	56.2	39.8	92.8	67.4	19.2	69.9	45.0
KY	Louisville	31.7	77.2	56.1	40.3	87.0	66.0	23.2	67.3	46.0
LA	New Orleans	51.3	81.9	68.1	60.8	90.6	77.6	41.8	73.1	58.5
ME	Portland	20.8	68.6	45.4	30.3	78.8	54.9	11.4	58.3	35.8
MD	Baltimore	31.8	77.0	55.1	40.2	87.2	65.0	23.4	66.8	45.2
MA	Boston	28.6	73.5	51.3	35.7	81.8	59.0	21.6	65.1	43.6
MI	Detroit	22.9	72.3	48.6	30.3	83.3	58.1	15.6	61.3	39.0
	Sault Ste. Marie	12.9	63.8	39.7	21.1	76.3	49.6	4.6	51.3	29.8
MN	Duluth	7.0	66.1	38.5	16.2	77.1	47.9	-2.2	55.1	29.0
	Minneapolis-St. Paul	11.8	73.6	44.9	20.7	84.0	54.3	2.8	63.1	35.3
MS	Jackson	44.1	81.5	64.2	55.6	92.4	76.4	32.7	70.5	52.0
MO	Kansas City	25.7	78.5	53.6	34.7	89.7	63.6	16.7	68.2	43.7
	St. Louis	39.3	79.8	56.1	37.7	89.3	65.4	20.8	70.4	46.7
MT	Great Falls	21.2	68.2	44.8	30.6	83.3	56.4	11.6	53.2	33.1
NE	Omaha	21.1	76.9	50.6	31.3	87.9	61.5	10.9	65.9	39.5
NV	Reno	32.9	71.6	50.8	45.1	91.9	66.8	20.7	51.3	34.7
NH	Concord	18.6	69.5	45.1	29.8	82.4	57.0	7.4	56.5	33.1
NJ	Atlantic City	30.9	74.7	53.0	40.4	84.5	63.2	21.4	64.8	42.8
NM	Albuquerque	34.2	78.5	56.2	46.8	92.5	70.1	21.7	64.4	42.2
NY	Albany	20.6	71.8	47.4	30.2	84.0	58.1	11.0	59.6	36.6
	Buffalo	23.6	71.1	47.7	30.2	80.2	55.8	17.0	61.9	39.5
	New York ¹	31.5	76.8	54.7	37.6	85.2	62.3	25.3	68.4	47.1
NC	Charlotte	39.3	79.3	60.1	49.0	88.9	70.4	29.6	69.6	49.7
	Raleigh	38.9	78.1	59.3	48.9	88.0	70.1	28.8	68.1	48.4
ND	Bismarck	9.2	70.4	41.6	20.2	84.4	53.8	-1.7	56.4	29.4
OH	Cincinnati	28.1	75.1	53.2	36.6	85.5	63.2	19.5	64.8	43.2
	Cleveland	24.8	71.9	49.6	31.9	82.4	58.7	17.6	61.4	40.5
	Columbus	26.4	73.2	51.4	34.1	83.7	61.2	18.5	62.7	41.6
OK	Oklahoma City	35.9	82.0	60.0	46.7	93.4	71.1	25.2	70.6	48.8
OR	Portland	39.6	68.2	53.6	45.4	79.9	62.6	33.7	56.5	44.5
PA	Philadelphia	30.4	76.7	54.3	37.9	86.1	63.4	22.8	67.2	45.1
	Pittsburgh	26.1	72.1	50.3	33.7	82.6	59.9	18.5	61.6	40.7
RI	Providence	27.9	72.7	50.4	36.6	82.1	59.8	19.1	63.2	41.0
SC	Columbia	43.8	80.8	63.1	55.3	91.6	75.1	32.1	70.0	50.9
SD	Sioux Falls	13.8	74.3	45.5	24.3	86.3	56.8	-3.3	62.3	34.2
TN	Memphis	39.7	82.6	62.3	48.5	92.3	72.1	30.9	72.9	52.4
	Nashville	36.2	79.3	59.1	45.9	89.5	69.8	26.5	68.9	48.4
TX	Dallas-Fort Worth	43.4	85.3	65.4	54.1	96.5	76.3	32.7	74.1	54.6
	El Paso	42.8	82.3	63.2	56.1	96.1	77.5	29.4	68.4	49.0
	Houston	50.4	82.6	67.9	61.0	92.7	78.6	39.7	72.4	57.3
UT	Salt Lake City	27.9	77.9	52.0	36.4	92.2	63.6	19.3	63.7	40.3
VT	Burlington	16.3	70.5	44.6	25.1	81.2	54.0	7.5	59.7	35.2
VA	Norfolk	39.1	78.2	59.2	47.3	86.4	67.8	30.9	70.0	50.6
	Richmond	35.7	78.0	57.7	45.7	88.4	68.8	25.7	67.5	46.6
WA	Seattle-Tacoma	40.1	65.2	52.0	45.0	75.2	59.4	35.2	55.2	44.6
	Spokane	27.1	68.8	47.3	33.2	83.1	57.5	20.8	54.4	36.9
WV	Charleston	32.1	75.1	55.0	41.2	85.7	65.8	23.0	64.4	44.2
WI	Milwaukee	18.9	70.9	46.1	26.1	79.9	54.3	11.6	62.0	37.9
WY	Cheyenne	26.5	68.4	45.6	37.7	82.2	58.0	15.2	54.6	33.2
PR	San Juan	77.0	82.6	80.2	83.2	88.5	86.4	70.8	76.8	74.0

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Climatology of the United States*, No. 81.

No. 372. Highest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 1999]

State	Station	Length of record (yr.)	Month												Annual
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
AL	Mobile	58	84	82	90	94	100	102	104	102	99	93	87	81	104
AK	Juneau	55	57	61	72	82	86	90	83	73	61	56	54	90	
AZ	Phoenix	62	88	92	100	105	113	122	121	116	118	107	93	88	122
AR	Little Rock	58	83	85	91	95	98	105	112	108	106	97	86	80	112
CA	Los Angeles	64	88	92	95	102	97	104	97	98	110	106	101	94	110
	Sacramento	49	70	76	88	95	105	115	114	110	108	101	87	72	115
	San Diego	59	88	90	93	98	96	101	95	98	111	107	97	88	111
	San Francisco	72	72	78	85	92	97	106	105	100	103	99	85	75	106
CO	Denver	61	73	76	84	90	96	104	104	101	97	89	79	75	104
CT	Hartford	45	65	73	89	96	99	100	102	101	99	91	81	76	102
DE	Wilmington	52	75	78	86	94	96	100	102	101	100	91	85	75	102
DC	Washington	58	79	82	89	95	99	101	104	105	101	94	86	79	105
FL	Jacksonville	58	85	88	91	95	100	103	105	102	100	96	88	84	105
	Miami	57	88	89	92	96	96	98	98	98	97	95	89	87	98
GA	Atlanta	51	79	80	89	93	95	101	105	102	98	95	84	79	105
HI	Honolulu	30	88	88	88	91	93	92	94	93	95	94	93	89	95
ID	Boise	60	63	71	81	92	98	109	111	110	102	94	78	65	111
IL	Chicago	41	65	71	88	91	93	104	104	101	99	91	78	71	104
	Peoria	60	70	72	86	92	93	105	103	103	100	90	81	71	105
IN	Indianapolis	60	71	75	85	89	93	102	104	102	100	90	81	74	104
IA	Des Moines	60	65	73	91	93	98	103	105	108	101	95	81	69	108
KS	Wichita	47	75	87	89	96	100	110	113	110	107	95	85	83	113
KY	Louisville	52	77	77	86	91	95	102	106	101	104	92	84	76	106
LA	New Orleans	53	83	85	89	92	96	100	101	102	101	94	87	84	102
ME	Portland	59	64	64	88	85	94	98	99	103	95	88	74	71	103
MD	Baltimore	49	75	79	89	94	98	101	104	105	100	92	83	77	105
MA	Boston	48	66	70	89	94	95	100	102	102	100	90	79	76	102
MI	Detroit	41	62	70	81	89	93	104	102	100	98	91	77	69	104
	Sault Ste. Marie	59	45	49	75	85	89	93	97	98	95	80	67	60	98
MN	Duluth	58	52	55	78	88	90	94	97	97	95	86	71	55	97
	Minneapolis-St. Paul	61	58	60	83	95	96	102	105	102	98	90	77	68	105
MS	Jackson	36	82	85	89	94	99	105	106	104	104	95	88	84	106
MO	Kansas City	27	69	77	86	93	95	105	107	109	102	92	82	70	109
	St. Louis	42	76	85	89	93	94	102	107	107	104	94	85	76	107
MT	Great Falls	62	67	70	78	89	93	101	105	106	98	91	76	69	106
NE	Omaha	63	69	78	89	97	99	105	114	110	104	96	83	72	114
NV	Reno	58	70	75	83	89	96	103	104	105	101	91	77	70	105
NH	Concord	58	68	67	89	95	97	98	102	101	98	90	80	73	102
NJ	Atlantic City	56	78	75	87	94	99	106	104	102	99	90	84	77	106
NM	Albuquerque	60	69	76	85	89	98	107	105	101	100	91	77	72	107
NY	Albany	53	65	68	89	92	94	99	100	99	100	89	82	71	100
	Buffalo	56	72	70	81	94	90	96	97	99	98	87	80	74	99
	New York	131	72	75	86	96	99	101	106	104	102	94	84	75	106
NC	Charlotte	60	78	81	90	93	100	103	103	103	104	98	85	78	104
	Raleigh	55	79	84	92	95	97	104	105	105	104	98	88	80	105
ND	Bismarck	60	62	69	81	93	98	107	109	109	105	95	79	65	109
OH	Cincinnati	38	69	74	84	89	93	102	103	102	98	88	81	75	103
	Cleveland	58	73	71	83	88	92	104	103	102	101	90	82	77	104
	Columbus	60	74	74	85	89	94	102	100	101	100	90	80	76	102
OK	Oklahoma City	46	80	92	93	100	104	105	110	110	107	96	87	86	110
OR	Portland	59	63	71	80	90	100	100	107	107	105	92	73	65	107
PA	Philadelphia	58	74	74	87	94	97	100	104	101	100	96	81	73	104
	Pittsburgh	47	69	73	82	89	91	98	103	100	97	87	82	74	103
RI	Providence	46	69	72	85	98	95	97	102	104	100	86	78	77	104
SC	Columbia	52	84	84	91	94	101	107	107	107	101	101	90	83	107
SD	Sioux Falls	54	66	70	87	94	100	110	108	108	104	94	81	63	110
TN	Memphis	58	78	81	85	94	99	104	108	105	103	95	85	81	108
	Nashville	60	78	84	86	91	97	106	107	104	105	94	84	79	107
TX	Dallas-Fort Worth	46	88	95	96	95	103	113	110	108	108	102	89	88	113
	El Paso	60	80	83	89	98	104	114	112	108	104	96	87	80	114
	Houston	30	84	91	91	95	99	103	104	107	102	96	89	85	107
UT	Salt Lake City	71	62	69	78	86	95	104	107	106	100	89	75	69	107
VT	Burlington	56	66	62	84	91	93	100	100	101	94	85	75	67	101
VA	Norfolk	51	78	82	88	97	100	101	103	104	99	95	86	80	104
	Richmond	70	80	83	93	96	100	104	105	102	103	99	86	81	105
WA	Seattle-Tacoma	55	64	70	75	85	93	96	100	99	98	89	74	64	100
	Spokane	52	59	63	71	90	96	101	103	108	98	86	67	56	108
WV	Charleston	52	79	78	89	94	93	98	104	101	102	92	85	80	104
WI	Milwaukee	59	62	68	82	91	93	101	103	103	98	89	77	64	103
WY	Cheyenne	64	66	71	74	83	90	100	100	96	95	83	75	69	100
PR	San Juan	45	92	96	96	97	96	97	95	97	97	98	96	94	98

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.

No. 373. Lowest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 1998]

State	Station	Length of record (yr.)	Month												Annual
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
AL	Mobile	58	3	11	21	32	43	49	60	59	42	30	22	8	3
AK	Juneau	55	-22	-22	-15	6	25	31	36	27	23	11	-5	-21	-22
AZ	Phoenix	62	17	22	25	32	40	50	61	60	47	34	25	22	17
AR	Little Rock	58	-4	-5	11	28	40	46	54	52	37	29	17	-1	-5
CA	Los Angeles	64	23	32	34	39	43	48	49	51	47	41	34	32	23
	Sacramento	49	23	23	26	31	36	41	48	49	43	36	26	18	18
	San Diego	59	29	36	39	41	48	51	55	57	51	43	38	34	29
	San Francisco	72	24	25	30	31	36	41	43	42	38	34	25	20	20
CO	Denver	61	-25	-30	-11	-2	22	30	43	41	17	3	-8	-25	-30
CT	Hartford	45	-26	-21	-6	9	28	37	44	36	30	17	1	-14	-26
DE	Wilmington	52	-14	-6	2	18	30	41	48	43	36	24	14	-7	-14
DC	Washington	58	-5	4	11	24	34	47	54	49	39	29	16	1	-5
FL	Jacksonville	58	7	19	23	34	45	47	61	63	48	36	21	11	7
	Miami	57	30	32	32	46	53	60	69	68	51	39	30	30	30
GA	Atlanta	51	-8	5	10	26	37	46	53	55	36	28	3	-	-8
HI	Honolulu	30	53	53	55	57	60	65	66	67	66	61	57	54	53
ID	Boise	60	-17	-15	6	19	22	31	35	34	23	11	-3	-25	-25
IL	Chicago	41	-27	-19	-8	7	24	36	40	41	28	17	1	-25	-27
	Peoria	60	-25	-19	-10	14	25	39	47	41	26	19	-2	-23	-25
IN	Indianapolis	60	-27	-21	-7	16	28	37	44	41	28	17	-2	-23	-27
IA	Des Moines	60	-24	-26	-22	9	30	38	47	40	26	14	-4	-22	-26
KS	Wichita	47	-12	-21	-2	15	31	43	51	48	31	18	1	-16	-21
KY	Louisville	52	-22	-19	-1	22	31	42	50	46	33	23	-1	-15	-22
LA	New Orleans	53	14	16	25	32	41	50	60	60	42	35	24	11	11
ME	Portland	59	-26	-39	-21	8	23	33	40	33	23	15	3	-21	-39
MD	Baltimore	49	-7	-3	6	20	32	40	50	45	35	25	13	-	-7
MA	Boston	48	-12	-4	6	16	34	45	50	47	38	28	15	-7	-12
MI	Detroit	41	-21	-15	-4	10	25	36	41	38	29	17	9	-10	-21
	Sault Ste. Marie	59	-36	-35	-24	-2	18	26	36	29	25	16	-10	-31	-36
MN	Duluth	58	-39	-39	-29	-5	17	27	35	32	22	8	-23	-34	-39
	Minneapolis-St. Paul	61	-34	-32	-32	2	18	34	43	39	26	13	-17	-29	-34
MS	Jackson	36	2	10	15	27	38	47	51	55	35	26	17	4	2
MO	Kansas City	27	-17	-19	-10	12	30	42	51	43	31	17	1	-23	-23
	St. Louis	42	-18	-12	-5	22	31	43	51	47	36	23	1	-16	-18
MT	Great Falls	62	-37	-35	-29	-6	15	31	36	30	20	-11	-25	-43	-43
NE	Omaha	63	-23	-21	-16	5	27	38	44	43	25	13	-9	-23	-23
NV	Reno	58	-16	-16	-2	13	18	25	33	24	20	8	1	-16	-16
NH	Concord	58	-33	-37	-16	8	21	30	35	29	21	10	-5	-22	-37
NJ	Atlantic City	56	-10	-11	5	12	25	37	42	40	32	20	10	-7	-11
NM	Albuquerque	60	-17	-5	8	19	28	40	52	50	37	21	-7	-7	-17
NY	Albany	53	-28	-21	-21	10	26	36	40	34	24	16	5	-22	-28
	Buffalo	56	-16	-20	-7	12	26	35	43	38	32	20	9	-10	-20
	New York	131	-6	-15	3	12	32	44	52	50	39	28	5	-13	-15
NC	Charlotte	60	-5	5	4	24	32	45	53	53	39	24	11	2	-5
	Raleigh	55	-9	-	11	23	31	38	48	46	37	19	11	4	-9
ND	Bismarck	60	-44	-43	-31	-12	15	30	35	33	11	-10	-30	-43	-44
OH	Cincinnati	38	-25	-11	-11	15	27	39	47	43	31	16	1	-20	-25
	Cleveland	58	-20	-15	-5	10	25	31	41	38	32	19	3	-15	-20
	Columbus	60	-22	-13	-6	14	25	35	43	39	31	20	5	-17	-22
OK	Oklahoma City	46	-4	-3	3	20	37	47	53	51	36	16	11	-8	-8
OR	Portland	59	-2	-3	19	29	29	39	43	44	34	26	13	6	-3
PA	Philadelphia	58	-7	-4	7	19	28	44	51	44	35	25	15	1	-7
	Pittsburgh	47	-22	-12	-1	14	26	34	42	39	31	16	-1	-12	-22
RI	Providence	46	-13	-7	1	14	29	41	48	40	33	20	6	-10	-13
SC	Columbia	52	-1	5	4	26	34	44	54	53	40	23	12	4	-1
SD	Sioux Falls	54	-36	-31	-23	5	17	33	38	34	22	9	-17	-28	-36
TN	Memphis	58	-4	-11	12	29	38	48	52	48	36	25	9	-13	-13
	Nashville	60	-17	-13	2	23	34	42	51	47	36	26	-1	-10	-17
TX	Dallas-Fort Worth	46	4	7	15	29	41	51	59	56	43	29	20	-1	-1
	El Paso	60	-8	8	14	23	31	46	57	56	41	25	1	5	-8
	Houston	30	12	20	22	31	44	52	62	60	48	29	19	7	7
UT	Salt Lake City	71	-22	-30	2	14	25	35	40	37	27	16	-14	-21	-30
VT	Burlington	56	-30	-30	-20	2	24	33	39	35	25	15	-2	-26	-30
VA	Norfolk	51	-3	8	18	28	36	45	54	49	45	27	20	7	-3
	Richmond	70	-12	-10	11	23	31	40	51	46	35	21	10	-1	-12
WA	Seattle-Tacoma	55	-	1	11	29	28	38	43	44	35	28	6	6	-
	Spokane	52	-22	-24	-7	17	24	33	37	35	24	10	-21	-25	-25
WV	Charleston	52	-16	-12	-	19	26	33	46	41	34	17	6	-12	-16
WI	Milwaukee	59	-26	-26	-10	12	21	33	40	44	28	18	-5	-20	-26
WY	Cheyenne	64	-29	-34	-21	-8	16	25	38	36	8	-1	-16	-28	-34
PR	San Juan	45	61	62	60	64	66	69	69	70	69	67	66	63	60

- Represents zero. ¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.

No. 374. Normal Monthly and Annual Precipitation—Selected Cities

[In inches. Airport data, except as noted. Based on standard 30-year period, 1961 through 1990]

State	Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	4.76	5.46	6.41	4.48	5.74	5.04	6.85	6.96	5.91	2.94	4.10	5.31	63.96
AK	Juneau	4.54	3.75	3.28	2.77	3.42	3.15	4.16	5.32	6.73	7.84	4.91	4.44	54.31
AZ	Phoenix	0.67	0.68	0.88	0.22	0.12	0.13	0.83	0.96	0.86	0.65	0.66	1.00	7.66
AR	Little Rock	3.42	3.61	4.91	5.49	5.17	3.57	3.60	3.26	4.05	3.75	5.20	4.83	50.86
CA	Los Angeles	2.40	2.51	1.98	0.72	0.14	0.03	0.01	0.15	0.31	0.34	1.76	1.66	12.01
	Sacramento	3.73	2.87	2.57	1.16	0.27	0.12	0.05	0.07	0.37	1.08	2.72	2.51	17.52
	San Diego	1.80	1.53	1.77	0.79	0.19	0.07	0.02	0.10	0.24	0.37	1.45	1.57	9.90
	San Francisco	4.35	3.17	3.06	1.37	0.19	0.11	0.03	0.05	0.20	1.22	2.86	3.09	19.70
CO	Denver	0.50	0.57	1.28	1.71	2.40	1.79	1.91	1.51	1.24	0.98	0.87	0.64	15.40
CT	Hartford	3.41	3.23	3.63	3.85	4.12	3.75	3.19	3.65	3.79	3.57	4.04	3.91	44.14
DE	Wilmington	3.03	2.91	3.43	3.39	3.84	3.55	4.23	3.40	3.43	2.88	3.27	3.48	40.84
DC	Washington	2.72	2.71	3.17	2.71	3.66	3.38	3.80	3.91	3.31	3.02	3.12	3.12	38.63
FL	Jacksonville	3.31	3.93	3.68	2.77	3.55	5.69	5.60	7.93	7.05	2.90	2.19	2.72	51.32
	Miami	2.01	2.08	2.39	2.85	6.21	9.33	5.70	7.58	7.63	5.64	2.66	1.83	55.91
GA	Atlanta	4.75	4.81	5.77	4.26	4.29	3.56	5.01	3.66	3.42	3.05	3.86	4.33	50.77
HI	Honolulu	3.55	2.21	2.20	1.54	1.13	0.50	0.59	0.44	0.78	2.28	3.00	3.80	22.02
ID	Boise	1.45	1.07	1.29	1.24	1.08	0.81	0.35	0.43	0.80	0.75	1.48	1.36	12.11
IL	Chicago	1.53	1.36	2.69	3.64	3.32	3.78	3.66	4.22	3.82	2.41	2.92	2.47	35.82
	Peoria	1.51	1.42	2.91	3.77	3.70	3.99	4.20	3.10	3.87	2.65	2.69	2.44	36.25
IN	Indianapolis	2.32	2.46	3.79	3.70	4.00	3.49	4.47	3.64	2.87	2.63	3.23	3.34	39.94
IA	Des Moines	0.96	1.11	2.33	3.36	3.66	4.46	3.78	4.20	3.53	2.62	1.79	1.32	33.12
KS	Wichita	0.79	0.96	2.43	2.38	3.81	4.31	3.13	3.02	4.49	2.22	1.59	1.20	29.33
KY	Louisville	2.86	3.30	4.66	4.23	4.62	3.46	4.51	3.54	3.16	2.71	3.70	3.64	44.39
LA	New Orleans	5.05	6.01	4.90	4.50	4.56	5.84	6.12	6.17	5.51	3.05	4.42	5.75	61.88
ME	Portland	3.53	3.33	3.67	4.08	3.62	3.44	3.09	2.87	3.09	3.90	5.17	4.55	44.34
MD	Baltimore	3.05	3.12	3.38	3.09	3.72	3.67	3.69	3.92	3.41	2.98	3.32	3.41	40.76
MA	Boston	3.59	3.62	3.69	3.60	3.25	3.09	2.84	3.24	3.06	3.30	4.22	4.01	41.51
MI	Detroit	1.76	1.74	2.55	2.95	2.92	3.61	3.18	3.43	2.89	2.10	2.67	2.82	32.62
	Sault Ste. Marie	2.42	1.74	2.30	2.35	2.71	3.14	2.71	3.61	3.69	3.23	3.45	2.88	34.23
MN	Duluth	1.22	0.80	1.91	2.25	3.03	3.82	3.61	3.99	3.84	2.49	1.80	1.24	30.00
	Minneapolis-St. Paul	0.95	0.88	1.94	2.42	3.39	4.05	3.53	3.62	2.72	2.19	1.55	1.08	28.32
MS	Jackson	5.24	4.70	5.82	5.57	5.05	3.18	4.51	3.77	3.55	3.26	4.81	5.91	55.37
MO	Kansas City	1.09	1.10	2.51	3.12	5.04	4.72	4.38	4.01	4.86	3.29	1.92	1.58	37.62
	St. Louis	1.81	2.12	3.58	3.50	3.97	3.72	3.85	2.85	3.12	2.68	3.28	3.03	37.51
MT	Great Falls	0.91	0.57	1.10	1.41	2.52	2.39	1.24	1.54	1.24	0.78	0.66	0.85	15.21
NE	Omaha	0.74	0.77	2.04	2.66	4.52	3.87	3.51	3.24	3.72	2.28	1.49	1.02	29.86
NV	Reno	1.07	0.99	0.71	0.38	0.69	0.46	0.28	0.32	0.39	0.38	0.87	0.99	7.53
NH	Concord	2.51	2.53	2.72	2.91	3.14	3.15	3.23	3.32	2.81	3.23	3.66	3.16	36.37
NJ	Atlantic City	3.46	3.06	3.62	3.56	3.33	2.64	3.83	4.14	2.93	2.82	3.58	3.32	40.29
NM	Albuquerque	0.44	0.46	0.54	0.52	0.50	0.59	1.37	1.64	1.00	0.89	0.43	0.50	8.88
NY	Albany	2.36	2.27	2.93	2.99	3.41	3.62	3.18	3.47	2.95	2.83	3.23	2.93	36.17
	Buffalo	2.70	2.31	2.68	2.87	3.14	3.55	3.08	4.17	3.49	3.09	3.83	3.67	38.58
	New York ¹	3.42	3.27	4.08	4.20	4.42	3.67	4.35	4.01	3.89	3.56	4.47	3.91	47.25
NC	Charlotte	3.71	3.84	4.43	2.68	3.82	3.39	3.92	3.73	3.50	3.36	3.23	3.48	43.09
	Raleigh	3.48	3.69	3.77	2.59	3.92	3.68	4.01	4.02	3.19	2.86	2.98	3.24	41.43
ND	Bismarck	0.45	0.43	0.77	1.67	2.18	2.72	2.14	1.72	1.49	0.90	0.49	0.51	15.47
OH	Cincinnati	2.59	2.69	4.24	3.75	4.28	3.84	4.24	3.35	2.88	2.86	3.46	3.15	41.33
	Cleveland	2.04	2.19	2.91	3.14	3.49	3.70	3.52	3.40	3.44	2.54	3.17	3.09	36.63
	Columbus	2.18	2.24	3.27	3.21	3.93	4.04	4.31	3.72	2.96	2.15	3.22	2.86	38.09
OK	Oklahoma City	1.13	1.56	2.71	2.77	5.22	4.31	2.61	2.60	3.84	3.23	1.98	1.40	33.36
OR	Portland	5.35	3.85	3.56	2.39	2.06	1.48	0.63	1.09	1.75	2.67	5.34	6.13	36.30
PA	Philadelphia	3.21	2.79	3.46	3.62	3.75	3.74	4.28	3.80	3.42	2.62	3.34	3.38	41.41
	Pittsburgh	2.54	2.39	3.41	3.15	3.59	3.71	3.75	3.21	2.97	2.36	2.85	2.92	36.85
RI	Providence	3.88	3.61	4.05	4.11	3.76	3.33	3.18	3.63	3.48	3.69	4.43	4.38	45.53
SC	Columbia	4.42	4.12	4.82	3.28	3.68	4.80	5.50	6.09	3.67	3.04	2.90	3.59	49.91
SD	Sioux Falls	0.51	0.64	1.64	2.52	3.03	3.40	2.68	2.85	3.02	1.78	1.09	0.70	23.86
TN	Memphis	3.73	4.35	5.41	5.46	4.98	3.57	3.79	3.43	3.53	3.01	5.10	5.74	52.10
	Nashville	3.58	3.81	4.85	4.37	4.88	3.57	3.97	3.46	3.46	2.62	4.12	4.61	47.30
TX	Dallas-Fort Worth	1.83	2.18	2.77	3.50	4.88	2.98	2.31	2.21	3.39	3.52	2.29	1.84	33.70
	El Paso	0.40	0.41	0.29	0.20	0.25	0.67	1.54	1.58	1.70	0.76	0.44	0.57	8.81
	Houston	3.29	2.96	2.92	3.21	5.24	4.96	3.60	3.49	4.89	4.27	3.79	3.45	46.07
UT	Salt Lake City	1.11	1.23	1.91	2.12	1.80	0.93	0.81	0.86	1.28	1.44	1.29	1.40	16.18
VT	Burlington	1.82	1.63	2.23	2.76	3.12	3.47	3.65	4.06	3.30	2.88	3.13	2.42	34.47
VA	Norfolk	3.78	3.47	3.70	3.06	3.81	3.82	5.06	4.81	3.90	3.15	2.85	3.23	44.64
	Richmond	3.24	3.16	3.61	2.96	3.84	3.62	5.03	4.40	3.34	3.53	3.17	3.26	43.16
WA	Seattle-Tacoma	5.38	3.99	3.54	2.33	1.70	1.50	0.76	1.14	1.88	3.23	5.83	5.91	37.19
	Spokane	1.98	1.49	1.49	1.18	1.41	1.26	0.67	0.72	0.73	0.99	2.15	2.42	16.49
WV	Charleston	2.91	3.04	3.63	3.31	3.94	3.59	4.99	4.01	3.24	2.89	3.59	3.39	42.53
WI	Milwaukee	1.60	1.45	2.67	3.50	2.84	3.24	3.47	3.53	3.38	2.41	2.51	2.33	32.93
WY	Cheyenne	0.40	0.39	1.03	1.37	2.39	2.08	2.09	1.69	1.27	0.74	0.53	0.42	14.40
PR	San Juan	2.81	2.15	2.35	3.76	5.93	4.00	4.37	5.32	5.28	5.71	5.94	4.72	52.34

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Climatology of the United States*, No. 81.

No. 375. Average Number of Days With Precipitation of 0.01 Inch or More— Selected Cities

[Airport data, except as noted. For period of record through 1999]

State	Station	Length of record (yr.)	Month												Annual
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
AL	Mobile	58	11	10	10	8	9	11	16	14	10	6	8	10	122
AK	Juneau	55	18	17	18	17	17	15	17	18	21	24	20	21	223
AZ	Phoenix	60	4	4	4	2	1	1	4	5	3	3	3	4	36
AR	Little Rock	57	10	9	10	10	10	8	8	7	7	7	8	9	104
CA	Los Angeles	64	6	6	6	3	1	1	1	(Z)	1	2	3	5	35
	Sacramento	60	10	9	9	5	3	1	(Z)	(Z)	1	3	7	9	58
	San Diego	59	7	6	7	4	2	1	(Z)	(Z)	1	2	4	6	42
	San Francisco	72	11	10	10	6	3	1	(Z)	(Z)	1	4	7	10	63
	Denver	61	6	6	9	9	11	9	9	9	6	5	6	5	89
CO	Denver	61	6	6	9	9	11	9	9	9	6	5	6	5	89
CT	Hartford	45	11	10	12	11	12	11	10	10	10	9	11	12	127
DE	Wilmington	52	11	10	11	11	11	10	9	9	8	8	9	10	116
DC	Washington	58	10	9	11	10	11	9	10	9	8	7	8	9	113
FL	Jacksonville	58	8	8	8	6	8	13	14	15	13	9	7	8	116
	Miami	57	7	6	6	6	10	15	16	18	17	14	8	7	131
GA	Atlanta	65	12	10	11	9	9	10	12	9	8	7	8	10	115
HI	Honolulu	50	9	9	9	9	7	6	7	6	7	9	9	10	97
ID	Boise	60	12	10	10	8	8	6	2	3	4	6	10	11	90
IL	Chicago	41	11	9	12	13	11	10	10	9	9	9	11	11	125
	Peoria	60	9	8	11	12	12	10	9	8	9	8	9	10	114
IN	Indianapolis	60	12	10	13	12	12	10	9	9	8	8	10	12	126
IA	Des Moines	60	8	7	10	11	11	11	9	9	9	7	7	8	108
KS	Wichita	46	5	5	8	8	11	9	8	8	8	6	5	6	86
KY	Louisville	52	11	11	13	12	12	10	10	8	8	7	10	11	124
LA	New Orleans	51	10	9	9	7	8	11	14	13	10	6	7	10	114
ME	Portland	59	11	10	11	12	12	11	10	9	9	9	12	11	129
MD	Baltimore	49	11	9	11	11	11	9	9	9	8	8	9	10	114
MA	Boston	48	12	10	12	11	12	10	9	10	9	9	11	12	127
MI	Detroit	41	13	11	13	13	11	10	10	9	10	9	12	13	135
	Sault Ste. Marie	58	19	14	13	11	11	11	11	11	13	14	17	19	165
MN	Duluth	58	12	9	11	10	12	13	12	11	12	10	11	11	134
	Minneapolis-St. Paul	61	9	7	10	10	11	12	10	10	10	8	8	9	115
MS	Jackson	36	11	9	10	8	9	8	11	10	8	6	8	10	109
MO	Kansas City	27	7	7	10	11	12	10	8	9	8	7	8	7	105
	St. Louis	42	9	8	11	11	11	9	9	8	8	8	9	9	111
MT	Great Falls	62	9	8	9	9	12	12	8	8	7	6	7	8	101
NE	Omaha	63	6	7	9	10	12	11	9	9	8	6	6	6	100
NV	Reno	57	6	6	6	4	4	3	2	2	3	3	5	6	51
NH	Concord	58	11	9	11	11	12	11	10	10	9	9	11	11	126
NJ	Atlantic City	56	11	10	11	11	10	9	9	9	8	7	9	10	113
NM	Albuquerque	60	4	4	5	3	4	4	9	10	6	5	3	4	61
NY	Albany	53	13	11	12	12	13	11	10	10	10	9	12	12	135
	Buffalo	56	20	17	16	14	13	11	10	10	11	12	16	19	168
	New York	130	11	10	11	11	11	10	11	10	8	8	9	10	121
NC	Charlotte	60	10	10	11	9	9	10	11	10	7	7	8	10	111
	Raleigh	55	10	10	10	9	10	10	11	10	8	7	8	9	113
ND	Bismarck	60	8	7	8	8	10	11	9	8	7	6	6	8	96
OH	Cincinnati	52	12	11	13	13	12	11	10	9	8	8	11	12	130
	Cleveland	58	16	14	15	15	13	11	10	10	10	11	14	16	155
	Columbus	60	13	12	14	13	13	11	11	9	8	9	11	13	137
OK	Oklahoma City	60	5	6	7	8	10	9	6	6	7	7	5	6	83
OR	Portland	59	18	16	17	15	12	9	4	5	7	12	18	19	153
PA	Philadelphia	59	11	9	11	11	11	10	9	9	8	8	9	10	117
	Pittsburgh	47	16	14	15	14	13	12	11	10	10	10	13	16	152
RI	Providence	46	11	10	12	11	11	11	9	9	9	6	7	9	124
SC	Columbia	52	10	10	10	8	9	10	12	11	8	6	6	9	110
SD	Sioux Falls	54	6	7	9	10	11	11	10	9	8	6	6	6	99
TN	Memphis	49	10	9	11	10	9	9	9	7	7	6	9	10	106
	Nashville	58	11	11	12	11	11	10	10	9	8	7	9	11	119
TX	Dallas-Fort Worth	46	7	7	7	8	9	7	5	5	7	6	6	6	79
	El Paso	60	4	3	2	2	2	3	8	8	6	4	3	4	49
	Houston	30	11	9	9	7	8	9	9	9	9	7	8	9	105
UT	Salt Lake City	71	10	9	10	10	8	5	5	6	5	6	8	9	91
VT	Burlington	56	15	11	13	12	14	12	12	13	12	12	14	15	154
VA	Norfolk	51	11	10	11	10	10	9	11	10	8	7	8	9	116
	Richmond	62	10	9	11	9	11	9	11	9	8	7	8	9	114
WA	Seattle-Tacoma	55	19	16	17	14	11	9	5	6	9	13	18	19	155
WV	Spokane	52	14	11	11	9	10	8	5	5	6	8	13	15	113
	Charleston	52	15	14	15	14	13	12	13	11	9	9	12	14	151
WI	Milwaukee	59	12	10	12	12	12	11	10	9	9	9	10	11	125
WY	Cheyenne	64	6	6	9	10	12	11	11	10	8	6	6	6	101
PR	San Juan	44	17	13	12	13	16	15	19	18	18	17	19	19	197

- Represents zero. Z Less than 1/2 day. ¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.

No. 376. Snow and Ice Pellets—Selected Cities

[In inches. Airport data, except as noted. For period of record through 1999. T denotes trace]

State	Station	Length of record (yr)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	57	0.1	0.1	0.1	T	T	-	T	-	-	-	T	0.1	0.4
AK	Juneau	55	26.2	19.3	15.1	3.3	T	T	-	-	-	1	12.4	22.3	99.6
AZ	Phoenix	62	T	-	T	T	T	-	-	-	T	T	-	T	T
AR	Little Rock	56	2.4	1.5	0.5	T	T	T	-	-	-	-	-	-	T
CA	Los Angeles	62	T	T	-	-	-	-	-	-	-	-	0.2	0.6	5.2
	Sacramento	50	T	T	T	-	T	-	-	-	-	-	-	T	T
	San Diego	59	T	-	T	T	-	-	-	-	-	-	-	T	T
	San Francisco	69	-	T	T	-	-	-	-	-	-	-	-	-	T
CO	Denver	61	8.1	7.5	12.5	8.9	1.6	-	T	T	1.6	3.7	9.1	7.3	60.3
CT	Hartford	42	13.0	12.0	10.0	1.5	-	T	-	-	-	0.1	2.1	10.3	49.0
DE	Wilmington	49	6.8	6.1	3.3	0.2	T	T	T	T	-	0.1	0.9	3.3	20.7
DC	Washington	56	5.4	5.3	2.3	T	T	T	T	T	-	-	0.8	2.8	16.6
FL	Jacksonville	58	T	-	-	T	-	T	T	-	-	-	-	-	T
	Miami	57	-	-	-	-	T	-	-	-	-	-	-	-	T
GA	Atlanta	62	0.9	0.5	0.4	T	-	-	-	-	-	T	-	0.2	2.0
HI	Honolulu	52	-	-	-	-	-	-	-	-	-	-	-	-	-
ID	Boise	60	6.4	3.7	1.7	0.6	0.1	T	T	T	T	0.1	2.3	5.8	20.7
IL	Chicago	40	11.2	8.0	6.9	1.6	0.1	T	T	T	T	0.4	1.9	8	38.1
	Peoria	56	6.8	5.3	4.1	0.8	T	-	T	-	T	0.1	2.0	5.9	25.0
IN	Indianapolis	68	6.8	5.6	3.4	0.5	-	T	-	T	-	0.2	1.9	5.1	23.5
IA	Des Moines	57	8.3	7.2	6.0	1.8	-	T	-	T	-	0.3	3.1	6.7	33.4
KS	Wichita	46	4.2	4.1	2.8	0.2	T	T	T	T	T	-	1.3	3.2	15.8
KY	Louisville	52	5.4	4.6	3.3	0.1	T	T	T	T	-	0.1	1.0	2.2	16.7
LA	New Orleans	50	-	0.1	T	-	T	-	-	-	-	-	T	0.1	0.2
ME	Portland	59	19.6	16.7	13.0	2.9	0.2	-	-	-	T	0.2	3.3	14.6	70.5
MD	Baltimore	49	6.2	6.7	3.9	0.1	T	-	T	-	-	-	1	3.1	21.0
MA	Boston	62	12.9	11.7	8.1	0.9	-	-	-	-	T	-	1.3	7.5	42.4
MI	Detroit	41	10.7	9.2	7.0	1.7	T	-	-	-	-	0.2	2.8	9.6	41.2
	Sault Ste. Marie	56	29.0	18.4	14.7	5.8	0.5	T	T	T	0.1	2.4	15.6	31.0	117.5
MN	Duluth	56	17.9	11.5	13.7	6.7	0.7	T	T	T	0.1	1.5	12.9	15.4	80.4
	Minneapolis-St. Paul	61	10.6	8.1	10.7	2.8	0.1	T	T	T	T	0.5	7.8	9.4	50.0
MS	Jackson	36	0.5	0.2	0.2	-	-	-	-	-	-	-	-	0.1	1.0
MO	Kansas City	65	5.7	4.4	3.4	0.8	T	T	T	-	T	0.1	1.2	4.4	20.0
	St. Louis	63	5.5	4.4	3.9	0.5	-	T	T	-	-	T	1.4	3.7	19.4
MT	Great Falls	62	9.6	8.3	10.6	7.2	1.7	0.3	T	0.1	1.5	3.4	7.4	8.1	58.2
NE	Omaha	64	7.3	6.7	6.3	1.0	0.1	T	T	-	T	0.3	2.6	5.6	29.9
NV	Reno	54	5.8	5.2	4.3	1.2	0.8	-	-	-	-	0.3	2.4	4.3	24.3
NH	Concord	58	18.0	14.2	11.2	2.5	0.1	T	-	-	T	0.1	4.0	13.7	63.8
NJ	Atlantic City	51	5.0	5.3	2.5	0.3	T	T	T	-	-	T	0.4	2.2	15.7
NM	Albuquerque	60	2.5	2.1	1.8	0.6	T	T	T	T	T	0.1	1.2	2.6	10.9
NY	Albany	53	16.5	13.9	11.5	2.5	0.1	T	T	-	T	0.2	4.2	14.3	63.2
	Buffalo	56	24.4	17.8	12.0	3.2	0.2	T	T	T	T	0.3	11.0	22.6	91.5
	New York	131	7.5	8.5	5.1	0.9	T	-	T	-	-	-	0.9	5.4	28.3
NC	Charlotte	60	2.0	1.6	1.2	T	T	T	-	-	-	T	0.1	0.5	5.4
	Raleigh	55	2.3	2.5	1.3	-	T	T	-	-	-	-	0.1	0.8	7.0
ND	Bismarck	60	7.8	7.0	8.5	4.1	0.9	T	T	T	0.2	1.8	7.0	7.0	44.3
OH	Cincinnati	52	7.2	5.7	4.6	0.5	-	T	T	-	-	0.3	2	3.7	24.0
	Cleveland	58	13.4	12.0	10.5	2.4	0.1	T	T	-	T	0.6	5.2	11.8	56.0
	Columbus	52	8.9	6.1	4.7	0.9	-	T	T	-	T	0.1	2.2	5.3	28.2
OK	Oklahoma City	60	3.1	2.4	1.5	T	T	T	T	T	-	T	0.5	1.8	9.3
OR	Portland	55	3.2	1.1	0.4	T	-	T	-	T	T	-	0.4	1.4	6.5
PA	Philadelphia	57	6.0	6.5	3.6	0.3	T	T	-	-	-	-	0.7	3.2	20.3
	Pittsburgh	47	11.8	9.1	8.8	1.7	0.1	T	T	T	T	0.4	3.5	8.1	43.5
RI	Providence	46	9.8	9.9	7.4	0.7	0.2	-	-	-	-	0.1	1.1	6.8	36.0
SC	Columbia	52	0.4	0.8	0.2	T	-	-	-	T	-	-	T	0.3	1.7
SD	Sioux Falls	54	6.9	8.2	9.4	2.8	T	T	T	-	T	0.8	5.8	7.1	41.0
TN	Memphis	49	2.2	1.4	0.8	T	T	T	-	-	-	T	0.1	0.6	5.1
	Nashville	57	3.7	3.0	1.5	-	-	T	-	T	-	-	0.4	1.4	10.0
TX	Dallas-Fort Worth	43	1.1	0.9	0.2	T	T	-	-	-	-	T	0.1	0.2	2.5
	El Paso	57	1.3	0.8	0.4	0.3	T	T	T	-	T	-	0.9	1.6	5.3
	Houston	65	0.2	0.2	T	T	T	T	-	-	-	-	T	T	0.4
UT	Salt Lake City	71	13.7	10.0	9.3	4.9	0.6	T	T	T	0.1	1.3	6.8	11.8	58.5
VT	Burlington	56	19.4	16.5	13.4	4.1	0.2	-	T	-	-	0.2	6.7	17.7	78.2
VA	Norfolk	49	2.8	3.0	1.0	-	T	T	-	T	-	-	-	0.9	7.7
	Richmond	60	4.8	4.0	2.4	0.1	T	-	-	-	-	T	0.4	2.0	13.7
WA	Seattle-Tacoma	52	4.9	1.6	1.3	0.1	T	-	-	-	T	-	1.1	2.4	11.4
	Spokane	52	15.5	7.6	3.9	0.6	0.1	T	-	-	T	0.4	6.2	14.5	48.8
WV	Charleston	49	11.1	8.7	5.4	0.9	-	T	T	T	T	0.2	2.4	5.3	34.0
WI	Milwaukee	59	14.1	9.5	8.4	1.8	0.1	T	T	T	T	0.2	3.1	10.1	47.3
WY	Cheyenne	64	6.6	6.2	11.8	9.3	3.2	0.2	T	T	0.9	3.7	7.1	6.2	55.2
PR	San Juan	44	-	-	-	-	-	-	-	-	T	-	-	-	T

- Represents zero or rounds to zero. ¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.

No. 377. Sunshine, Average Wind Speed, Heating and Cooling Degree Days, and Average Relative Humidity—Selected Cities

[Airport data, except as noted. For period of record through 1998, except as noted. M=morning, A=afternoon]

State	Station	Average percentage of possible sunshine		Average wind speed (m.p.h.)				Average relative humidity (percent)								
		Length of record (yr.)	Annual	Length of record (yr.)	Annual	Jan.	July	Heating degree days	Cooling degree days	Length of record (yr.)	Annual		Jan.		July	
											M	A	M	A	M	A
AL	Mobile	47	60	50	8.8	10.1	6.9	1,702	2,627	36	87	59	82	63	90	62
AK	Juneau	47	23	53	8.3	8.0	7.5	8,897	-	32	79	69	76	73	78	66
AZ	Phoenix	57	81	53	6.2	5.3	7.1	1,350	4,162	38	50	23	65	32	43	20
AR	Little Rock	35	60	56	7.8	8.4	6.7	3,155	2,005	34	83	57	80	62	86	55
CA	Los Angeles	60	72	50	7.5	6.7	7.9	1,458	727	39	79	65	71	61	86	68
	Sacramento	49	73	48	7.9	7.2	8.9	2,749	1,237	12	82	46	90	70	76	29
	San Diego	55	72	58	7.0	6.0	7.5	1,256	984	38	77	63	72	58	82	67
	San Francisco	68	71	71	10.6	7.2	13.6	3,016	145	39	84	62	86	67	86	60
CO	Denver	61	67	47	8.6	8.6	8.3	6,020	679	35	67	40	63	49	68	34
CT	Hartford	41	52	44	8.4	9.0	7.3	6,151	677	39	77	52	72	56	79	51
DC	Washington	47	55	50	9.0	9.8	7.8	4,937	1,046	51	78	55	75	60	79	54
DE	Washington	48	55	50	9.4	10.0	8.3	4,047	1,549	38	75	53	70	56	76	53
FL	Jacksonville	47	61	49	7.9	8.1	7.0	1,434	2,551	62	89	56	87	58	89	59
	Miami	46	68	49	9.2	9.5	7.9	200	4,198	34	83	61	84	59	83	63
GA	Atlanta	61	59	60	9.1	10.4	7.7	2,991	1,667	38	82	56	79	60	88	59
HI	Honolulu	47	74	49	11.3	9.4	13.1	-	4,474	29	72	56	81	61	68	51
ID	Boise	56	58	59	8.7	8.0	8.4	5,861	754	59	69	43	80	70	54	22
IL	Chicago	37	52	40	10.4	11.7	8.4	6,536	752	40	80	61	78	69	82	57
	Peoria	52	53	55	9.9	11.0	7.8	6,148	982	39	83	63	80	70	87	61
IN	Indianapolis	64	51	50	9.6	10.9	7.5	5,615	1,014	39	84	62	81	71	87	60
IA	Des Moines	46	55	49	10.7	11.4	8.9	6,497	1,036	37	80	61	77	68	83	59
KS	Wichita	39	62	45	12.2	12.0	11.3	4,791	1,628	45	80	56	79	64	79	50
KY	Louisville	47	53	51	8.3	9.5	6.8	4,514	1,288	38	81	59	77	65	85	58
LA	New Orleans	47	60	50	8.2	9.3	6.1	1,513	2,655	50	88	64	85	67	91	66
ME	Portland	54	55	58	8.7	9.1	7.6	7,378	268	58	79	59	76	61	80	59
MD	Baltimore	45	58	48	8.9	9.6	7.7	4,707	1,137	45	77	54	72	57	80	53
MA	Boston	60	55	41	12.4	13.8	11.0	5,641	678	34	72	58	68	58	74	56
MI	Detroit	37	49	40	10.3	12.0	8.5	6,569	626	40	81	60	80	70	82	54
	Sault Ste. Marie	54	43	57	9.2	9.6	7.8	9,316	131	57	85	67	81	74	89	62
MN	Duluth	47	49	49	11.0	11.6	9.4	9,818	180	37	81	64	77	70	85	60
	Minneapolis-St. Paul	57	54	60	10.5	10.5	9.4	7,991	682	39	79	61	75	68	81	56
MS	Jackson	30	59	35	7.1	8.3	5.5	2,467	2,215	35	91	59	86	65	94	61
MO	Kansas City	23	59	26	10.6	11.2	9.2	5,393	1,288	26	81	61	77	65	85	60
	St. Louis	47	55	49	9.7	10.6	8.0	4,758	1,534	38	82	60	81	67	84	57
MT	Great Falls	57	51	57	12.6	14.9	10.0	7,741	388	37	68	46	67	61	68	31
NE	Omaha	49	59	62	10.5	10.9	8.8	6,300	1,072	34	81	60	79	66	85	60
NV	Reno	53	69	56	6.6	5.6	7.2	5,674	508	35	69	32	79	51	61	19
NH	Concord	54	55	56	6.7	7.3	5.7	7,554	328	33	81	54	76	59	84	51
NJ	Atlantic City	37	56	40	9.9	10.9	8.3	5,169	826	34	82	56	78	59	83	57
NM	Albuquerque	56	76	59	8.9	8.0	8.9	4,425	1,244	38	59	29	68	40	59	27
NY	Albany	57	49	60	8.9	9.8	7.5	6,894	507	33	80	58	78	63	81	55
	Buffalo	52	43	59	11.9	14.0	10.3	6,747	477	38	80	62	79	73	79	55
	New York ²	42	64	61	9.3	10.7	7.6	4,805	1,096	64	72	56	68	60	75	55
NC	Charlotte	49	59	49	7.4	7.8	6.6	3,341	1,582	38	82	53	78	56	86	56
	Raleigh	47	59	49	7.6	8.4	6.7	3,457	1,417	34	85	54	79	55	89	58
ND	Bismarck	56	55	59	10.2	10.0	9.2	8,968	488	39	81	58	75	70	85	49
OH	Cincinnati	44	49	51	9.0	10.5	7.2	5,248	996	36	82	60	80	69	86	57
	Cleveland	54	45	57	10.5	12.2	8.6	6,201	621	38	80	62	78	70	82	57
	Columbus	46	48	49	8.3	9.8	6.5	5,708	797	39	80	59	77	68	84	56
OK	Oklahoma City	44	64	50	12.3	12.6	10.9	3,659	1,859	33	80	56	78	60	80	51
OR	Portland	47	39	50	7.9	10.0	7.6	4,522	371	58	85	59	85	75	82	45
PA	Philadelphia	55	56	58	9.5	10.3	8.2	4,954	1,101	39	76	55	73	59	79	54
	Portland	43	44	46	9.0	10.5	7.3	5,968	654	38	79	57	76	66	83	54
RI	Providence	42	55	45	10.4	11.1	9.4	5,884	606	35	75	55	71	57	77	56
SC	Columbia	48	60	50	6.8	7.2	6.3	2,649	1,966	32	87	51	83	55	89	54
SD	Sioux Falls	50	57	50	11.1	10.9	9.8	7,809	744	35	82	62	78	70	84	56
TN	Memphis	43	59	50	8.8	10.0	7.5	3,082	2,118	59	81	58	79	64	84	58
	Nashville	54	57	57	8.0	9.1	6.5	3,729	1,616	33	84	58	80	64	89	58
TX	Dallas-Fort Worth	42	64	45	10.7	11.0	9.8	2,407	2,603	35	82	57	80	61	81	50
	El Paso	53	80	56	8.8	8.3	8.3	2,708	2,094	38	56	27	65	35	61	29
	Houston	26	56	29	7.8	8.2	6.9	1,599	2,700	29	90	61	86	66	93	58
UT	Salt Lake City	69	62	69	8.8	7.5	9.5	5,765	1,047	39	67	43	79	69	52	22
VT	Burlington	52	44	55	9.0	9.8	8.0	7,771	388	33	77	59	73	64	79	53
VA	Norfolk	47	58	50	10.6	11.5	8.9	3,495	1,422	50	78	57	75	59	81	59
	Richmond	50	56	50	7.7	8.1	6.9	3,963	1,348	64	83	53	80	57	85	56
WA	Seattle-Tacoma ³	51	38	50	8.9	9.6	8.2	4,908	190	39	83	62	81	74	81	49
	Spokane	48	48	51	8.9	8.8	8.6	6,842	398	39	78	52	85	79	65	28
WV	Charleston	47	48	51	5.9	7.1	4.8	4,646	1,031	51	83	56	78	63	90	59
WI	Milwaukee	55	52	58	11.5	12.6	9.7	7,324	479	38	80	65	76	69	82	62
WY	Cheyenne	60	64	41	12.9	15.3	10.4	7,326	285	39	65	45	57	50	70	38
PR	San Juan	40	76	43	8.4	8.4	9.7	-	5,558	43	79	65	82	64	79	67

- Represents zero. ¹ Percent of days that are either clear or partly cloudy. Period of record through 1997. ² Airport data for sunshine. ³ Does not represent airport data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.