Prepared in cooperation with the
ARKANSAS GEOLOGICAL COMMISSION
and
ARKANSAS SOIL AND WATER CONSERVATION COMMISSION

INTRODUCTION

Water is one of Arkansas' most vital and important resources. The State's economy is dependent on large quantities of good quality water. Therefore, it is essential to document water usage for future planning and management of the State's existing water resources.

Figure 1 and table 1 show the 1982 total water use for all use categories by county in million gallons per day (Mgal/d). The total estimated water use in the State in 1982 from both surface water (fig. 2) and ground water (fig. 3) was 31,900 Mgal/d, as compared to 33,000 Mgal/d in 1981 (Hall and Holland, 1984). The decrease in total use was due to decreased usage for irrigation and self-supplied industry. Eighty-eight percent (28,000 Mgal/d) of the water was withdrawn from surface-water sources and 12 percent (3,890 Mgal/d) was withdrawn from ground-water sources.

The term "water use," as used in this report, is water withdrawn or diverted from a source for use. Water is tallied each time water is withdrawn from a source. The seven water-use categories discussed herein include public supply, rural (self-supplied), industrial (self-supplied), aquaculture, irrigation, hydroelectric power, and thermoelectric power.

Not all water withdrawn for use is consumed. Water can be used for cooling purposes and then returned to the source; this use is termed nonconsumptive. Consumptive use, however, would include water which has become part of a finished product, or has been lost to the atmosphere by transpiration or evaporation, or is ingested by humans. Consumptive use averaged 3,780 Mgal/d in 1982 as compared to 4,610 Mgal/d in 1981.

For all uses other than power generation, Arkansas used 4,850 Mgal/d of ground and surface water as compared with 5,330 Mgal/d in 1981, which is about a 9 percent decrease. Eighty percent, or 3,890 Mgal/d, was withdrawn from ground-water sources and the rest (960 Mgal/d) was supplied from surface-water sources.

Water-use data in this report is also available from the U.S. Geological Survey's National Water Use Data System (NWUDS), which is the automated system used by the USGS for water-use data storage.

The following agencies and organizations have provided data for this study: Arkansas Geological Commission; Arkansas Department of Health; University of Arkansas College of Agriculture Cooperative Extension Service; Agricultural Stabilization and Conservation Service, Soil Conservation Service, and Statistical Reporting Service of the U.S. Department of Agriculture; Bureau of Mines and U.S. Fish and Wildlife Service of the U.S. Department of the Interior; U.S. Army Corps of Engineers; Arkansas Game and Fish Commission; Arkansas Power and Light Company; Arkansas Department of Parks and Tourism; Arkansas State Highway and Transportation Department; and U.S. Department of Energy.

For readers who prefer to use metric units, million gallons per day may be converted to cubic meters per day and cubic hectometers per day by multiplying by 3.785 and 0.003785, respectively.

PUBLIC SUPPLY

The amount of water withdrawn in 1982 for public-supply systems was 246 Mgal/d. Surface- and ground-water withdrawal was 147 Mgal/d and 99.1 Mgal/d, respectively. Of the total amount withdrawn, 61 Mgal/d were consumed. The water was distributed to about 1.67 million people from 542 water systems in the State. Distribution of use is shown in figure 4. The largest public-supply use (49.1 Mgal/d) was in Pulaski County, which is also the most populous county in the State.

RURAL SELF-SUPPLIED

The rural self-supplied use category includes domestic use and water use by livestock. Domestic use refers to use in residences, generally in rural areas, having their own private water systems. Rural self-supplied use is shown by county in figure 5. In 1982, rural self-supplied withdrawals were 117 Mgal/d. Of this amount, 55.6 Mgal/d were for domestic use and 61.2 Mgal/d were for livestock. Consumptive use of self-supplied water is considered to be 100 percent. All domestic water supplies were withdrawn from ground-water sources whereas 21.4 Mgal/d, 35 percent, of water withdrawn for livestock were from ground-water sources. Therefore, 77.0 Mgal/d or about 66 percent of rural self-supplied water were withdrawn from ground water. Washington and Benton Counties were the two largest users of rural self-supplied water withdrawing 8.89 and 6.89 Mgal/d, respectively. Some of the largest livestock and poultry operations are located in these counties.

INDUSTRIAL SELF-SUPPLIED

Self-supplied industrial water use for 1982 was 192 Mgal/d. Of this amount, 83.0 Mgal/d were withdrawn from ground water and 109 Mgal/d were withdrawn from surface water. Ranges of distribution by county are shown in figure 6. Consumptive use was estimated to be 26 Mgal/d. The largest use of self-supplied water was for the production of paper in Ashley, Jefferson, and Little River Counties.

AQUACULTURE

In 1982, aquaculture withdrawals were 358 Mgal/d, of which 238 Mgal/d were withdrawn from ground water, and 120 Mgal/d were withdrawn from surface water. Aquaculture in Arkansas consists primarily of catfish and minnow farms and to a lesser extent for trout hatcheries. Distribution of aquaculture water use by county is shown in figure 7. There was a 1.4 percent increase in water withdrawn for aquaculture in 1982 compared to 1981. Consumptive use was 200 Mgal/d, which is 56 percent of the total use. The largest use of water for aquaculture was in Lonoke County.

IRRIGATION

Withdrawals for irrigation during 1982 were estimated to be 3,940 Mgal/d. Of this amount, 3,390 Mgal/d (86 percent) were withdrawn from ground water and 549 Mgal/d (14 percent) were from surface water. Distribution of irrigation water withdrawn by county is shown in figure 8. Arkansas and Poinsett Counties were the largest users of irrigation water, 457 and 335 Mgal/d, respectively.

Eighty-five percent (3,350 Mgal/d) of the total irrigation withdrawal was for irrigating 1.2 million acres of rice on the Coastal Plain in eastern Arkansas. This represents about a 13 percent decrease in both usage and acres compared to 1981. Approximately 2,870 Mgal/d were withdrawn from ground water chiefly from the shallow deposits of Quaternary age.

Consumptive use was estimated to be 75 percent of use for rice and 70 percent for other crops. Thus, consumptive use was 2,920 Mgal/d for irrigation.

HYDROELECTRIC POWER

Water from rivers and reservoirs for hydroelectric power generation in 1982 totaled about 25,700 Mgal/d, up about 32 percent from 17,400 Mgal/d in 1981. Distribution of water use to produce hydroelectric power is shown in figure 9. The largest use of water for hydroelectric power generation (15,200 Mgal/d) was at Dardanelle Dam on the Arkansas River in Yell County.

THERMOELECTRIC POWER

In 1982, water withdrawn for thermoelectric power generation totaled about 1,430 Mgal/d, down 86 percent from the amount (10,300 Mgal/d) reported in 1981. The apparent decline is due primarily to a reporting error that caused the data contained in the 1980 and 1981 water use reports to be excessively high. Distribution of water use to produce thermoelectric power is shown in figure 10. Surface water used for cooling purposes at Arkansas Power and Light Company's nuclear-fueled powerplant in Pope County amounted to 940 Mgal/d (66 percent of the total). The remaining 484 Mgal/d of surface water were used at powerplants using fossil fuels in which a total of 5.24 Mgal/d of ground water was also used.

The consumptive use of water by thermoelectric power generation, as it evaporated in the form of steam, was estimated to be 486 Mgal/d.

SELECTED REFERENCES

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Hall, A. P. and Holland, T. W., 1984, Water use in Arkansas, 1981: U.S. Geological Survey Water-Resources Investigations Report 84-4070, 1 sheet.

Brown, P. F. and Flanders, D. H., 1983, Directory of manufacturers 1982 edition: Arkansas Industrial Development Foundation, 296 p.

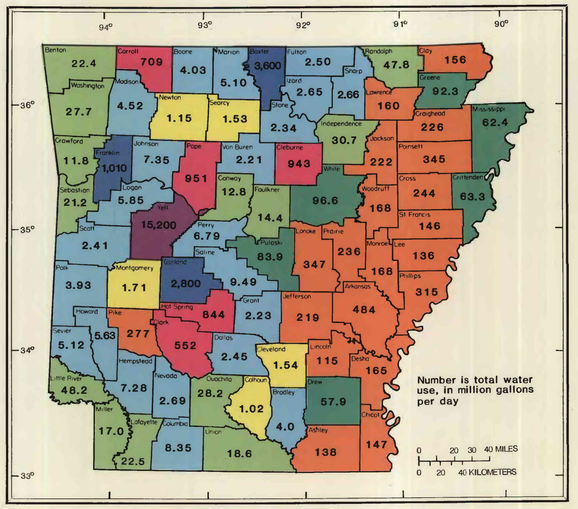

Figure 1.--Total water use in Arkansas, 1982.

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EXPLANATION

WATER USE, IN MILLION GALLONS PER DAY

- 0-1
- 1-2
- 2-10
- 10-50
- 50-100
- 100-500
- 500-1,000
- 1,000-5,000
- MORE THAN 5,000

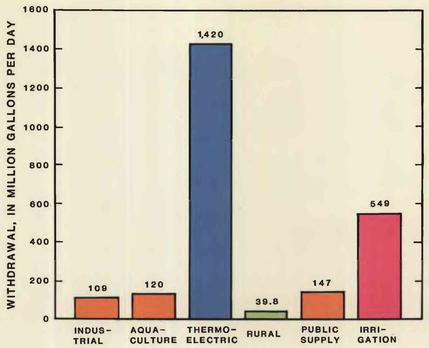

Figure 2.--Surface-water use.

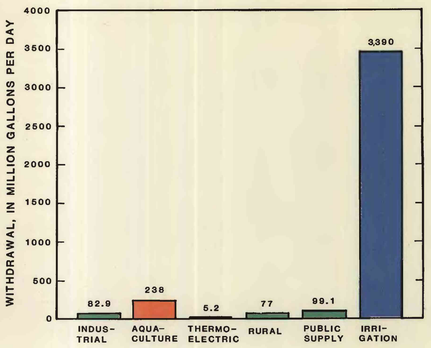

Figure 3.--Ground-water use.

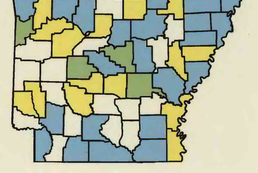

Figure 4.--Public supply.

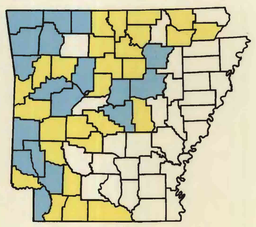

Figure 5.--Rural (self-supplied).

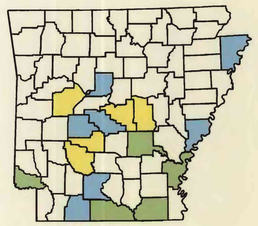

Figure 6.--Industrial (self-supplied).

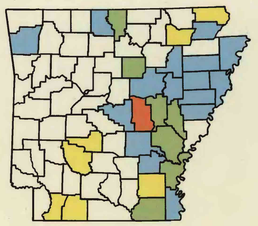

Figure 7.--Aquaculture.

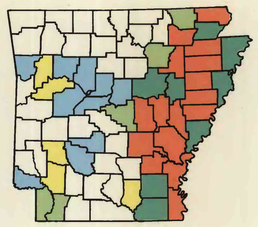

Figure 8.--Irrigation.

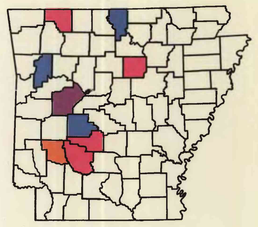

Figure 9.--Hydroelectric power.

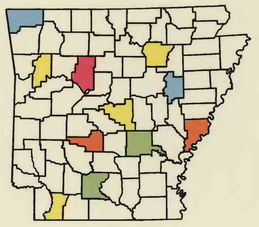

Figure 10.--Thermoelectric power.

Table 1.--Use of water in Arkansas counties, 1982

[In million gallons per day[1/]]

County	Public supply: Ground water	Public supply: Surface water	Public supply: Total	Self-supplied industry: Ground water	Self-supplied industry: Surface water	Self-supplied industry: Total	Rural use: Domestic: Ground water	Rural use: Livestock: Ground water	Rural use: Livestock: Surface water	Rural use: Total	Irrigation: Ground water	Irrigation: Surface water	Irrigation: Total	Aquaculture: Ground water	Aquaculture: Surface water	Aquaculture: Total	Hydro-electric power2/: Surface water	Thermoelectric power: Ground water	Thermoelectric power: Surface water	Thermoelectric power: Total	County total3/: Ground water	County total3/: Surface water	County total3/: Total	County
Arkansas	3.430	0.0	3.43	0.104	0.0	0.104	0.34	0.033	0.048	0.421	318.986	137.676	456.662	10.088	13.791	23.879	0.0	0.0	0.0	0.0	333	151	484	Arkansas
Ashley	2.210	.0	2.21	10.040	34.520	44.560	.85	.046	.070	.966	74.996	4.539	79.535	6.748	4.207	10.955	.0	.0	.0	.0	94.9	43.3	138	Ashley
Baxter	.460	1.610	2.07	.233	.0	.233	1.14	.069	.391	1.600	.0	.088	.088	.495	21.179	21.674	3.576	.0	.0	.0	2.40	3,600	3,600	Baxter
Benton	.430	8.824	9.25	.077	.030	.107	2.35	1.815	2.724	6.889	.0	.595	.595	.495	.034	.529	.0	.0	5.004	5.004	5.17	17.2	22.4	Benton
Boone	1.668	.030	1.70	.0	.0	.0	1.01	.163	.923	2.096	.0	.077	.077	.090	.072	.162	.0	.0	.0	.0	2.93	1.10	4.03	Boone
Bradley	.865	.0	.865	.439	.0	.439	.19	.138	.207	.535	.579	.878	1.457	.070	.637	.707	.0	.0	.0	.0	2.28	1.72	4.00	Bradley
Calhoun	.279	.0	.279	.371	.0	.371	.23	.037	.055	.322	.0	.021	.021	.0	.024	.024	.0	.0	.0	.0	.917	.100	1.02	Calhoun
Carroll	1.650	.920	2.57	.020	.0	.020	.63	.293	1.657	2.580	.0	.105	.105	.0	.118	.118	703.28	.0	.0	.0	2.59	706	709	Carroll
Chicot	1.750	.0	1.75	.031	.0	.031	.47	.056	.085	.611	67.86	71.27	139.13	3.562	2.322	5.884	.0	.0	.0	.0	73.73	73.68	147.4	Chicot
Clark	.422	1.466	1.89	.188	1.457	1.645	.47	.136	.205	.811	.889	5.114	6.003	1.087	.287	1.374	541.12	.0	.0	.0	3.19	549	552	Clark
Clay	1.147	.0	1.15	.043	.0	.043	.76	.093	.093	.946	141.764	11.09	152.854	1.110	.083	1.193	.0	.0	.0	.0	145	11.3	156	Clay
Cleburne	.130	1.800	1.93	.216	.001	.217	.19	.536	.803	1.529	.0	.036	.036	.0	11.383	11.383	927.89	.0	.0	.0	1.07	942	943	Cleburne
Cleveland	.433	.0	.433	.003	.0	.003	.45	.142	.213	.805	.0	.147	.147	.0	.147	.147	.0	.0	.0	.0	1.03	.507	1.54	Cleveland
Columbia	2.709	.0	2.71	2.973	.0	2.973	.80	.209	.315	1.324	.041	.041	.082	.888	.375	1.263	.0	.0	.0	.0	7.62	.731	8.35	Columbia
Conway	1.116	.0	1.12	.031	5.179	5.210	.68	.514	.770	1.964	2.82	1.169	3.989	.0	.515	.515	.0	.0	.0	.0	5.16	7.63	12.8	Conway
Craighead	6.767	.0	6.77	.103	.0	.103	.22	.117	.077	.414	200.348	17.964	218.312	.128	.335	.463	.0	.0	.0	.0	208	18.4	226	Craighead
Crawford	.0	4.861	4.86	.025	.190	.215	1.18	.450	.675	2.305	2.984	.935	3.919	.020	.467	.487	.0	.0	.0	.0	4.66	7.13	11.8	Crawford
Crittenden	5.233	.0	5.23	.020	.0	.020	.71	.019	.005	.734	53.214	.0	53.214	3.374	.761	4.135	.0	.0	.0	.0	62.6	.766	63.3	Crittenden
Cross	2.071	.0	2.07	.327	.0	.327	.49	.079	.020	.589	237.561	.0	237.561	2.801	1.371	4.172	.0	.0	.0	.0	243.0	1.39	244	Cross
Dallas	.829	.0	.829	.141	.0	.141	.34	.035	.052	.427	.0	.88	.88	.116	.054	.170	.0	.0	.0	.0	1.46	.986	2.45	Dallas
Desha	1.349	.0	1.35	.876	11.680	12.556	.48	.057	.085	.622	103.16	34.40	137.56	11.486	1.835	13.321	.0	.0	.0	.0	117	48.0	165	Desha
Drew	2.673	.0	2.67	.044	.0	.044	.38	.095	.142	.617	43.613	9.366	52.979	.908	.664	1.572	.0	.0	.0	.0	47.7	10.2	57.9	Drew
Faulkner	.823	3.380	4.20	.071	.0	.071	1.82	.383	.574	2.777	.310	6.27	6.58	.0	.773	.773	.0	.0	.0	.0	3.41	11.0	14.4	Faulkner
Franklin	.0	1.197	1.20	.153	.031	.184	.60	.559	.839	1.998	.50	1.119	1.619	.0	.088	.088	1.001.32	0.003	1.063	1.066	1.82	1,010	1,010	Franklin
Fulton	.341	.0	.341	.008	.0	.008	.48	.129	.728	1.337	.0	.063	.063	.0	.748	.748	.0	.0	.0	.0	.958	1.54	2.50	Fulton
Garland	.129	10.193	10.32	.594	2.380	2.974	1.22	.129	.195	1.544	.0	.044	.044	.0	.822	.822	2,786.5	.0	.0	.0	2.07	2,800	2,800	Garland
Grant	1.286	.040	1.33	.042	.0	.042	.24	.075	.114	.429	.0	.032	.032	.135	.260	.395	.0	.0	.0	.0	1.78	.446	2.23	Grant
Greene	2.772	.0	2.77	.131	.0	.131	1.01	.099	.066	1.175	79.18	1.780	80.96	6.423	.814	7.237	.0	.0	.0	.0	89.6	2.66	92.3	Greene
Hempstead	2.140	.0	2.14	.015	.0	.015	1.08	.726	1.083	2.889	.997	.62	1.699	.020	.557	.577	.0	.0	.0	.0	4.98	2.30	7.28	Hempstead
Hot Spring	.089	1.640	1.73	.113	1.354	1.467	.78	.154	.231	1.165	.057	2.236	2.293	.0	1.941	1.941	638.36	.0	197.571	197.571	1.19	843	844	Hot Spring
Howard	.139	1.731	1.87	.262	.120	.382	.56	.798	1.197	2.555	.0	.027	.027	.0	.798	.798	.0	.0	.0	.0	1.76	3.87	5.63	Howard
Independence	1.130	2.530	3.66	.127	.0	.127	1.06	.390	.911	2.361	23.052	.041	23.093	.084	.331	.415	.0	.010	1.093	1.103	25.8	4.91	30.7	Independence
Izard	1.134	.0	1.13	.005	.170	.175	.42	.116	.156	1.192	.023	.084	.107	.038	.0	.038	.0	.0	.0	.0	1.24	.910	2.65	Izard
Jackson	1.595	.0	1.60	.742	.0	.742	.36	.054	.084	.498	211.05	5.56	216.61	2.763	.747	3.510	.0	.0	.0	.0	216	6.39	222	Jackson
Jefferson	10.926	.0	10.93	39.787	.050	39.837	.47	.098	.148	.716	123.87	17.15	141.02	6.246	2.041	8.287	.0	1.871	16.927	18.798	183	36.3	219	Jefferson
Johnson	.0	2.050	2.05	.075	.0	.075	.92	.320	.479	1.719	2.175	.379	2.554	.026	.921	.947	.0	.0	.0	.0	3.52	3.83	7.35	Johnson
Lafayette	.865	.0	.865	.204	.0	.204	.35	.326	.491	1.167	16.539	1.309	17.848	.527	.509	1.036	.0	1.389	.0	1.389	20.2	2.31	22.5	Lafayette
Lawrence	1.341	.0	1.34	.007	.080	.087	.68	.061	.345	1.086	155.834	.0	155.834	1.059	.212	1.271	.0	.0	.0	.0	159	.637	160	Lawrence
Lee	1.380	.0	1.38	.002	.0	.002	.44	.062	.041	.543	131.941	.0	131.941	.271	2.429	2.700	.0	.0	.0	.0	134	2.47	136	Lee
Lincoln	.848	.0	.848	.378	.0	.378	.14	.148	.221	.509	90.129	19.47	109.599	1.043	2.566	3.609	.0	.0	.0	.0	92.7	22.3	115	Lincoln
Little River	.866	.0	.866	.247	40.366	40.613	.70	.185	.277	1.162	2.35	3.04	5.390	.0	.212	.212	.0	.0	.0	.0	4.35	43.9	48.2	Little River
Logan	.092	1.399	1.49	.045	.013	.058	.91	.645	.967	2.522	1.61	.0	1.61	.0	.171	.171	.0	.0	.0	.0	3.30	2.55	5.85	Logan
Lonoke	2.075	.0	2.08	1.088	.0	1.088	1.50	.167	.251	1.918	198.323	39.0	237.323	102.562	1.916	104.478	.0	.0	.0	.0	306	41.2	347	Lonoke
Madison	.020	.536	.556	.035	.0	.035	.77	.436	2.470	3.676	.0	.130	.130	.0	.129	.129	.0	.0	.0	.0	1.26	3.26	4.52	Madison
Marion	.506	.0	.506	.185	.060	.245	.59	.080	.454	1.124	.0	.008	.008	3.214	.0	3.214	.0	.0	.0	.0	4.58	.522	5.10	Marion
Miller	.210	2.600	2.81	.188	.220	.408	1.02	.428	.639	2.087	3.49	7.807	11.297	.321	.054	.375	.0	.0	.0	.0	5.66	11.3	17.0	Miller
Mississippi	4.641	.0	4.64	4.394	.0	4.394	.69	.055	.014	.759	27.81	22.83	50.64	2.019	.003	2.022	.0	.0	.0	.0	39.6	22.8	62.4	Mississippi
Monroe	1.296	.0	1.30	.0	.0	.0	.23	.012	.019	.261	117.09	14.82	131.61	33.154	.662	33.816	.0	.0	.0	.0	152	15.5	168	Monroe
Montgomery	.0	.160	.160	.110	.0	.110	.53	.266	.401	1.197	.0	.125	.125	.0	.116	.116	.0	.0	.0	.0	.906	.802	1.71	Montgomery
Nevada	.608	.0	.608	.044	.0	.044	.55	.451	.676	1.677	.217	.147	.364	.0	.0	.0	.0	.0	.0	.0	1.87	.823	2.69	Nevada
Newton	.090	.0	.090	.120	.0	.120	.59	.047	.266	.903	.0	.038	.038	.0	.0	.0	.0	.0	.0	.0	.847	.304	1.15	Newton
Ouachita	.908	2.100	3.01	2.485	7.332	9.817	.08	.123	.186	.389	.018	.0	.018	.032	.032	.064	.0	.0	14.919	14.919	3.65	24.6	28.2	Ouachita
Perry	.099	.187	.286	.085	.0	.085	.42	.175	.263	.858	.004	5.32	5.324	.0	.244	.244	.0	.0	.0	.0	.783	6.01	6.79	Perry
Phillips	3.405	.0	3.41	2.362	.0	2.362	.51	.034	.052	.596	65.555	.56	66.115	.037	.094	.131	.0	.123	241.918	242.041	72.0	243	315	Phillips
Pike	.055	.796	.851	.121	.0	.121	.55	.385	.578	1.513	.83	.395	1.225	.0	.0	.0	273.52	.0	.0	.0	1.94	275	277	Pike
Poinsett	2.549	.0	2.55	.209	.0	.209	.25	.091	.060	.401	334.861	.0	334.861	2.662	3.657	6.319	.0	.0	.0	.0	341	3.72	345	Poinsett
Polk	.195	.466	.661	.031	.0	.031	.91	.786	1.149	2.825	.0	.171	.171	.0	.244	.244	.0	.0	.0	.0	1.90	2.03	3.93	Polk
Pope	.0	4.725	4.73	.227	.0	.227	1.61	.818	1.228	3.656	2.028	.084	2.112	.0	.110	.110	.0	.0	4/939.73	939.73	4.68	946	951	Pope
Prairie	.857	.0	.857	.0	.0	.0	.10	.044	.068	.212	149.44	39.25	188.69	24.857	22.085	46.942	.0	.0	.0	.0	175	61.4	236	Prairie
Pulaski	1.580	47.490	49.07	.986	.480	1.466	3.93	.099	.148	4.177	20.677	4.417	25.094	1.045	1.591	2.636	.0	1.482	.0	1.482	29.8	54.1	83.9	Pulaski
Randolph	.206	.453	.659	.015	.0	.015	.69	.078	.444	1.212	42.72	2.56	45.28	.356	.217	.571	.0	.0	.0	.0	44.1	3.67	47.8	Randolph
St. Francis	2.616	.0	2.62	.111	.0	.111	.49	.052	.013	.595	131.05	8.74	139.79	.398	1.618	2.016	.0	.037	.381	.418	135	10.8	146	St. Francis
Saline	.688	3.402	4.09	.074	2.508	2.582	1.80	.067	.100	1.967	.238	.277	.515	.084	.251	.335	.0	.0	.0	.0	2.95	6.54	9.49	Saline
Scott	.0	.774	.774	.012	.0	.012	.62	.377	.566	1.563	.0	.006	.006	.0	.061	.061	.0	.0	.0	.0	1.01	1.40	2.41	Scott
Searcy	.232	.0	.232	.005	.0	.005	.59	.104	.588	1.282	.0	.007	.007	.0	.0	.0	.0	.0	.0	.0	.931	.595	1.53	Searcy
Sebastian	.133	17.840	17.97	.046	.100	.146	.86	.296	.442	1.598	.526	.021	.547	.0	.881	.881	.0	.0	.0	.0	1.86	19.3	21.2	Sebastian
Sevier	.176	1.500	1.68	.121	4/.117	.238	.65	.655	.983	2.288	.0	.925	.925	.0	.0	.0	.0	.0	.0	.0	1.60	3.52	5.12	Sevier
Sharp	1.101	.116	1.22	.002	.0	.002	.40	.066	.371	1.837	.0	.104	.104	.0	.502	.502	.0	.0	.0	.0	1.57	1.09	2.66	Sharp
Stone	.019	.460	.48	.016	.0	.016	.55	.173	.979	1.702	.0	.084	.084	.020	.038	.058	.0	.0	.0	.0	.778	1.56	2.34	Stone
Union	7.165	.0	7.17	9.638	.391	10.029	.33	.343	.514	1.188	.0	.066	.066	.077	.019	.096	.0	.0	.0	.0	17.6	.991	18.6	Union
Van Buren	.035	.716	.751	.003	.0	.003	.57	.106	.597	1.273	.019	.048	.067	.0	.123	.123	.0	.0	.0	.0	.733	1.48	2.21	Van Buren
Washington	.015	15.043	15.06	.041	.020	.061	2.31	2.633	3.950	8.893	.0	.389	.389	3.214	.139	3.353	.0	.0	.0	.0	8.21	19.5	27.7	Washington
White	.489	3.348	3.84	.034	.0	.034	1.28	.478	.719	2.477	43.918	42.038	85.976	.757	3.450	4.207	.0	.0	.0	.0	47.0	49.6	96.6	White
Woodruff	.728	.0	.728	.0	.0	.0	.28	.016	.025	.321	157.502	.0	157.502	.609	3.854	4.463	.0	.322	5.653	5.975	159	9.53	168	Woodruff
Yell	.878	.762	1.64	.888	.223	1.111	.79	.859	1.289	2.938	1.86	3.459	5.319	.0	.442	.442	15,214.24	.0	.0	.0	5.28	15,200	15,200	Yell
Totals3/	99.1	147	246	83.0	109	192	55.6	21.4	39.8	117	3,390	549	3,940	238	120	358	25,700	5.24	1,420	1,430	3,890	28,000	31,900	

[1] To convert million gallons per day to acre-feet per year, multiply by 1,120. [2] No ground water used for generation of hydroelectric power. [3] Due to rounding of numbers, county and category total may not total. Values reported for 1980 and 1981 water use (Holland and Ludwig, 1981; Hall and Holland, 1984) were too high.

WATER USE IN ARKANSAS, 1982

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1986