STORAGE REQUIREMENTS FOR GEORGIA STREAMS

U.S. GEOLOGICAL SURVEY

WATER RESOURCES INVESTIGATIONS

Open-File Report 82-557

Prepared in cooperation with the
GEORGIA DEPARTMENT OF NATURAL RESOURCES

Cover photograph--Small upstream dam and reservoir--
from Appendix 1 to report of
United States Study Commission
Southeast River Basins

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By R. F. Carter

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Doraville, Georgia

1983

UNITED STATE DEPARTMENT OF THE INTERIOR

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The analyses and compilations in this report were made with inch-pound units of measurement. To convert inch-pound units to metric units, the following conversion factors should be used:

Multiply	By	To obtain
acre-foot (acre-ft)	1233	cubic meter (m^3)
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
inch (in.)	2.540	centimeter (cm)
mile (mi)	1.609	kilometer (km)
million gallons per day (Mgal/d)	3786	cubic meters per day ($^3/d$)
square mile (mi^2)	2.590	square kilometer (km^2)

STORAGE REQUIREMENTS FOR GEORGIA STREAMS

By Robert F. Carter

ABSTRACT

The suitability of a stream as a source of water supply or for waste disposal may be severely limited by low flow during certain periods. A water user may be forced to provide storage facilities to supplement the natural flow if the low flow is insufficient for his needs. This report provides data for evaluating the feasibility of augmenting low streamflow by means of storage facilities. It contains tabular data on storage requirements for draft rates that are as much as 60 percent of the mean annual flow at 99 continuous-record gaging stations, and draft-storage diagrams for estimating storage requirements at many additional sites.

Through analyses of streamflow data, the State was divided into four regions. Draft-storage diagrams for each region provide a means of estimating storage requirements for sites on streams where data are scant, provided the drainage area, mean annual flow, and the 7-day, 10-year low flow are known or can be estimated. These data are tabulated for the 99 gaging stations used in the analyses and for 102 partial-record sites where only base-flow measurements have been made. The draft-storage diagrams are useful not only for estimating in-channel storage required for low-flow augmentation, but also can be used for estimating the volume of off-channel storage required to retain wastewater during low-flow periods for later release. In addition, these relationships can be helpful in estimating the volume of wastewater to be disposed of by spraying on land, provided that the water disposed of in this manner is only that for which streamflow dilution water is not currently available. Mean annual flow can be determined for any stream within the State by using the runoff map in this report. Low-flow indices can be estimated by several methods, including correlation of base-flow measurements with concurrent flow at nearby continuous-record gaging stations where low-flow indices have been determined.

INTRODUCTION

The climate of Georgia is humid. Precipitation averages about 50 inches per year, and on the average, 15 inches of this precipitation appears as stream runoff, an amount equal to 64,000 Mgal/d. About 1,230 Mgal/d of this amount, less than 2 percent, is put to use by man, excluding such categories of use as navigation and electric-power generation. Based on this rate of runoff, it seems that the available supply should be adequate for the demand, but seasonal low flows limit the dependable year-round surface-water supply unless storage is provided.

Demands for very large volumes of water for navigation and electric-power generation are commonly met by construction of large reservoirs on major rivers. These rivers are not conveniently located to supply the needs of many water-using facilities distributed irregularly over large areas. Many surface-water users rely on smaller tributary streams and limit their rate of use to low flow during drought or they consider augmenting their supply from storage. Development of such storage facilities may require use of ungaged streams.

Very few of the reservoirs in Georgia develop as much as 50 percent of the average flow of the stream on which they are located; that is, only a few maintain a draft rate as much as 50 percent of the mean annual flow. This occurs because required storage increases much faster than allowable draft rate increases, especially at high draft rates.

Development of water resources requires hydrologic data to define streamflow characteristics, and analyses of these data to develop methods of estimating storage requirements to meet specific needs. The U.S. Geological Survey has a continuing program to collect these hydrologic data. This report presents one method of storage analysis applicable to practical needs.

Purpose and Scope

The purpose of this report is to provide a means by which a potential user of water from a particular stream can estimate the storage required to maintain a certain draft rate during low-flow periods. This purpose is accomplished, in part, by defining draft-storage relations for streams where continuous-record gaging stations are located. Gaging stations cannot be operated at all the possible sites where draft-storage data might be required; therefore, to extend the usefulness of the present gaging-station network, draft-storage relations at the gaging-station sites were used to develop regional draft-storage curves from which storage requirements can be estimated at sites where only few streamflow data are available. Draft-storage relations in this report are not applicable to regulated streams.

In this report, storage requirements are computed up to 60 percent of the mean annual flow to insure coverage of the usable range. Suitable sites for storage reservoirs are limited in the southern part of the State, especially south of the Fall Line (plate 1) because of the flat terrain. Storage requirements for streams in the south were computed for draft rates as much as 60 percent of mean annual flow for regionalization, but storage values higher than about 30 percent of mean annual are not given in this report.

Cooperation and Acknowledgments

The U.S. Geological Survey and agencies of the State of Georgia have had cooperative agreements for the systematic collection of streamflow records since 1896. Agencies that assisted in collecting data and in performing low-flow analyses through cooperative agreements with the U.S. Geological Survey are:

Georgia Department of Natural Resources, Joe D. Tanner, Commissioner, through the Division of Environmental Protection, J. Leonard Ledbetter, Director.

Assistance in the form of funds or services was also given by the Tennessee Valley Authority, the U.S. Army Corps of Engineers, and the U.S. Department of Agriculture, Soil Conservation Service.

METHODS OF ANALYSIS

An analysis of storage requirements to insure dependable draft rates requires data on streamflow characteristics. Ideally, a long-term record of daily flows should be available at the potential damsite. Unfortunately, this ideal situation is seldom realized. In this report, draft-storage relations have been developed at points on streams where continuous records of streamflow are available, and these relations have been regionalized to estimate storage requirements on streams where information is scant.

Regionalized storage-requirement curves were first published for Georgia streams by Thomson and Carter (1963). Those curves were based on mass curves of streamflow during the drought of 1954 and, hence, were applicable only to a drought period such as that of 1954. Some later storage studies (Carter and Gannon, 1965) were more generally applicable, but were for limited areas. The present study is aimed at delineating storage requirements throughout the State for optimum development of available streamflow. Long periods of streamflow record are analyzed and the probabilities of given amounts of storage being deficient are evaluated.

For convenience, separate analyses were made of within-year and over-year storage requirements, according to the time required for replenishment. Within-year storage was analyzed by use of a computer program which, in effect, constructed a mass curve of streamflow for each year of the record and computed yearly storage requirements for various draft rates. These storage data were analyzed on a frequency basis by statistical methods. For droughts having recurrence intervals greater than 5 years, over-year storage must be considered for draft rates that exceed 40 to 80 percent of the mean annual discharge over most of the State (Regions A, B, and C, pl. 1), and for draft rates that exceed 20 to 40 percent of the mean annual discharge in the remainder of the State (Region D, pl. 1). The analysis of over-year storage is based on probability routing of mean annual discharge to define storage requirement related to the mean annual discharge and the variability of the annual discharges (Riggs and Hardison, 1973). Both analyses are explained in more detail in the following sections.

Within-Year Storage

Draft-storage analyses for each year of record were prepared for all continuous-record gaging stations used in this report. The analyses were based on data for the climatic year (beginning Apr. 1), because a reservoir would most likely be full on that date. Data for the analyses were prepared by use of the U.S. Geological Survey ANSTOR computer program.

In general, draft-storage relations were computed at gaging stations on streams having continuous discharge records of 8 years or more and not materially affected by regulation. Most of the large streams are regulated to some extent; therefore, only streams having drainage areas of about 2,000 mi^2 or less above the gaged site and not subject to significant regulation were used in the analyses.

The program assumes a full reservoir on April 1 and for each of several selected draft rates computes the annual maximum depletions, which are the storage requirements. The computer performs the analyses arithmetically rather than graphically. Table 1 shows a typical output of this program, for the gaging station, Flint River near Culloden, Ga.

Table 1.—Output of computer program for within-year storage, Flint River near Culloden (station 02347500)

[Storage in ft^3/s-days required to maintain the indicated draft rate during year beginning April 1]

Year	Draft rate ft^3/s									
	150	200	260	320	380	440	520	600	700	900
1912									20	770
1913						20	495	1,335	2,695	6,570
1914			90	370	960	1,670	2,865	6,275	12,355	28,300
1915				90	395	825	1,535	2,300	4,150	16,875
1916							150	570	2,840	8,110
1917							5	200	1,010	3,100
1918			22	279	1,130	2,545	5,740	9,150	13,530	24,550
1919							5	185	540	2,260
1920									545	4,525
1921				115	770	1,850	3,445	5,175	12,095	27,485
1922							225	960	2,805	16,405
1929								25	470	3,340
1930			16	361	1,041	1,963	4,298	7,298	11,098	18,908
1938	54	269	1,045	3,787	6,867	10,762	16,631	23,993	34,537	60,537
1939			30	1,122	3,308	6,550	12,682	20,581	31,248	51,893
1940			1,137	4,178	7,665	11,691	17,173	22,827	31,617	56,393
1941	337	1,468	4,486	8,364	13,643	19,439	27,508	35,623	45,833	68,195
1942				14	298	770	1,585	2,539	3,865	16,700
1943				99	584	2,527	5,727	11,817	20,044	36,808
1944							245	1,829	5,172	18,884
1945						14	419	1,465	3,014	8,106
1946							355	1,170	3,754	14,939
1947							530	1,512	5,135	17,009
1948								450	1,455	9,007
1949									465	3,712
1950					8	291	1,524	3,519	8,736	24,926
1951	47	504	1,507	2,827	4,652	6,646	9,376	12,176	18,151	45,291
1952				253	1,163	2,384	5,113	8,803	14,936	46,921
1953								31	462	4,024
1954	1,493	4,210	8,330	13,142	18,046	23,751	32,205	42,473	58,398	96,417
1955		213	974	2,880	6,715	11,166	18,573	27,002	37,622	62,395
1956		218	802	1,500	2,724	5,477	9,223	13,008	17,808	36,187
1957			31	390	1,022	1,787	2,960	4,800	7,779	16,397
1958					47	932	2,825	8,664	17,679	39,927
1959					19	298	1,049	2,049	4,626	11,577
1960						191	709	2,313	6,329	23,748
1961					34	526	2,772	6,371	11,595	24,517
1962				6	823	2,476	5,933	12,425	22,022	45,921
1963						89	1,085	3,181	7,474	25,484
1964								22	498	3,647
1965							30	442	1,688	7,537
1966							192	1,106	2,651	10,831
1967								233	770	3,160
1968			2	177	512	1,732	3,846	7,314	13,836	32,079
1969							225	874	2,039	9,870
1970				209	655	1,531	3,357	6,158	9,889	18,565
1971								437	1,840	8,874
1972				238	1,035	3,015	7,430	12,972	20,009	35,698
1973							694	2,709	6,014	23,180
1974						6	733	2,757	7,295	18,706
1975										335

Frequency curves (fig. 1) of storage required to maintain draft rates of 150, 200, 260, 320, 380, 440, 520, 600, 700, and 900 ft^3/s were prepared from the data in table 1. Storage quantities were arrayed in order of magnitude and assigned order numbers with the largest magnitude as 1. The recurrence interval (RI) of each value in the array was computed by the formula $RI = \frac{N+1}{M}$, where N is the number of years (51 in this example) in the array and M is the order number.

Storage quantities were plotted against the appropriate recurrence interval on extreme log-data graph paper and lines of best fit were drawn through the points. The extreme log-data form used has the abscissa graduated according to the Gumbel Type I extremal distribution and the ordinate scale is graduated logarithmically. The resulting graph paper is commonly referred to as Weibull probability paper (Chow, 1964). By using this method, frequency curves of within-year storage requirements at 99 sites were computed at various draft rates. Only gaging stations having at least 8 years of record were included in the analyses.

The following limits were established for extending frequency curves. (1) For stations at which 8 or 9 years of record were available, the frequency curves were extended to the 10-year recurrence interval. (2) Stations having 10 or more years of record, but less than 20 years, were extended to 20 years. (3) Stations having 20 or more years of record were extended to 30 years. Within these limits, draft-frequency data were read from the curves for recurrence intervals of 2, 5, 10, 20, and 30 years.

The example computation for Flint River near Culloden was extended to 50 years to help illustrate the method of using frequency curves.

Over-Year Storage

Over-year storage will be required to maintain high draft rates. The method for analyzing over-year storage, as described by Riggs and Hardison (1973), is used in this report. This method is based on probability routing of annual mean discharges to define storage requirements. Diagrams in that report show storage requirements in terms of draft rate and variability of annual mean flows. Because these diagrams are based on an assumption of a constant flow during each year, seasonal adjustments, as described by Riggs and Hardison (1973), were made to draft-storage relations computed from them (fig. 2).

The Combined Draft-Storage Relation

Curves showing the relation of draft rates of as much as 60 percent of the mean annual discharge to storage requirements were obtained by combining over-year storage curves and within-year storage curves computed from ANSTOR computer data. A draft-storage curve for Flint River near Culloden for a 20-year recurrence interval (fig. 2) illustrates the method of combining the two. Figure 3 shows draft-storage relations for 2-, 5-, 10-, 20-, and 30-year frequencies for Flint River near Culloden. For a 20-year recurrence interval, over-year storage is required for streams in Georgia when the draft rate exceeds from 30 to 50 percent of the mean annual discharge.

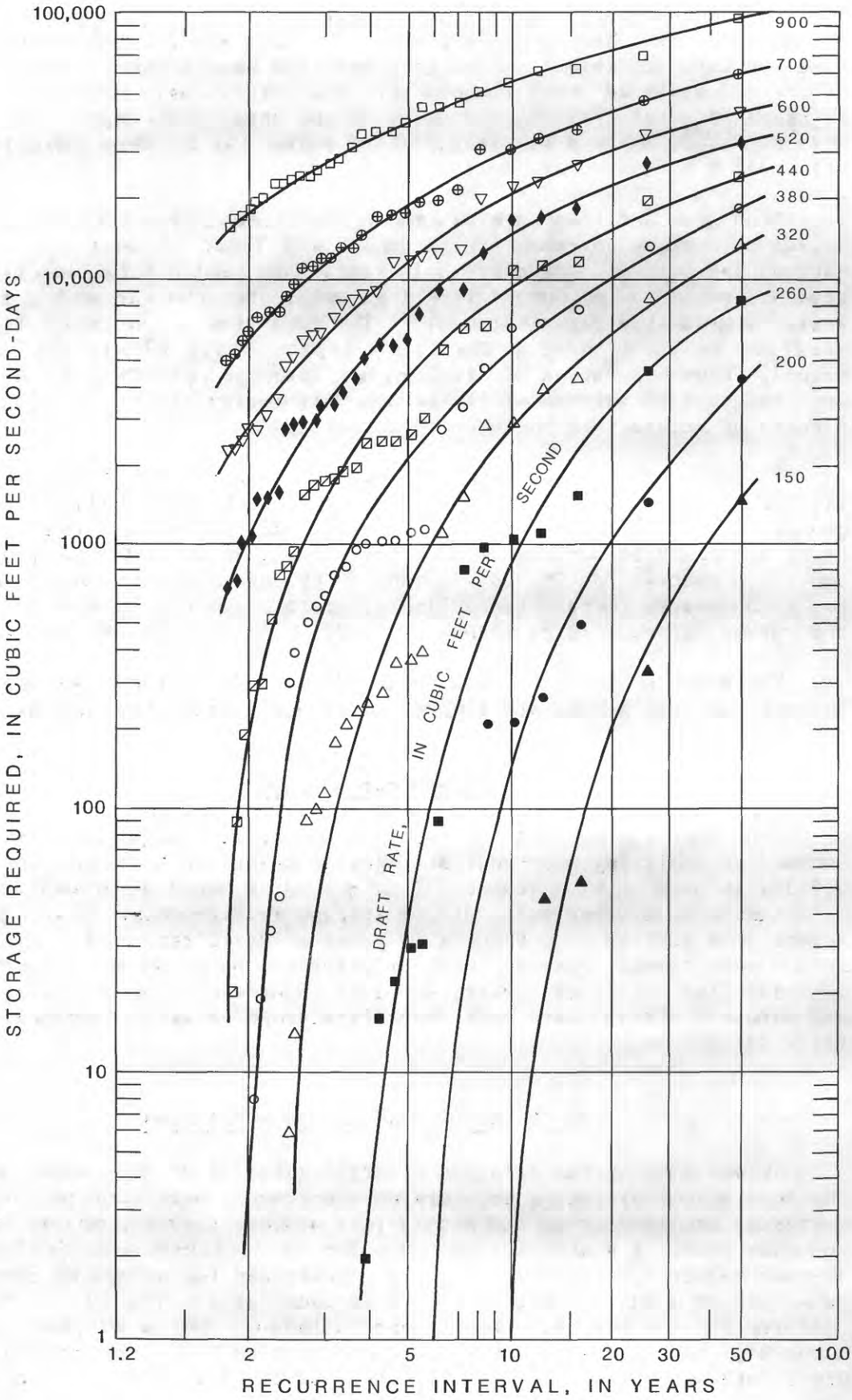

Figure 1.— Draft-storage-frequency diagram for Flint River near Culloden (station 02347500).

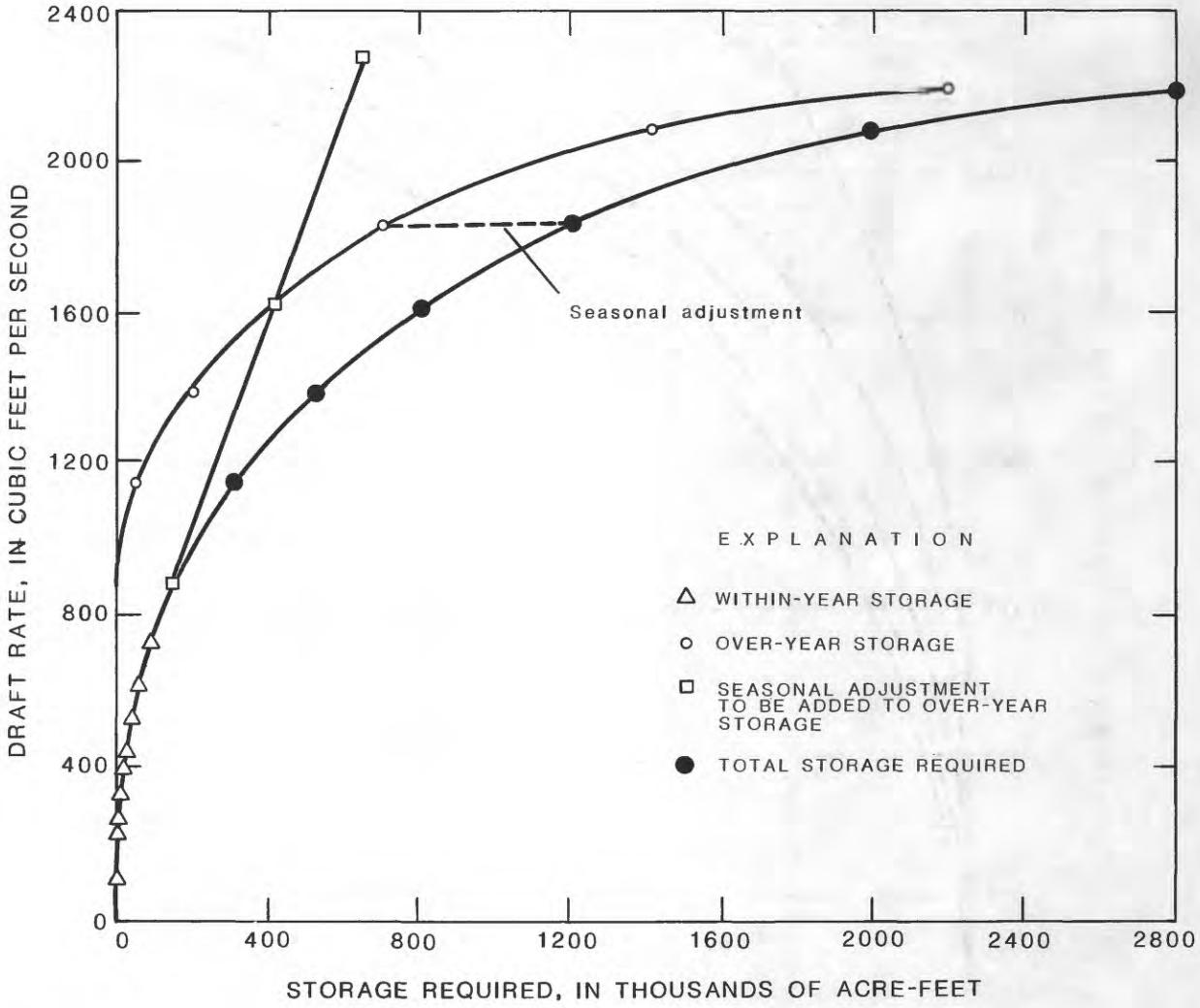

Figure 2.— Draft-storage diagram for 20-year recurrence interval for Flint River near Culloden (station 02347500), showing method of combining within-year and over-year storage curves.

Regionalization of Draft-Storage Relations

Draft-storage relations at other than gaged sites can be estimated by relating draft-storage data to some flow parameter that can be estimated at the ungaged site. Draft-storage relations computed from streamflow records tend to have similar areal characteristics and patterns and lend themselves to definition of regional families of storage curves when compared with a third parameter, such as a characteristic of low flow. The selection of a low-flow index is not critical and, for this report, the index used is the minimum average flow for 7 consecutive days with a 10-year recurrence interval (7Q10). To eliminate the effect of stream size, the data need to be converted to ratios to drainage-area size or to ratios to magnitudes of mean annual flow or storage. Regional storage curves previously published for Georgia streams used flow and storage data in units of ratio to drainage area. However, the magnitude of mean annual flow is a factor affecting draft-storage relations, especially for the higher draft rates. Tests of the two methods of adjusting for stream size showed that more consistent

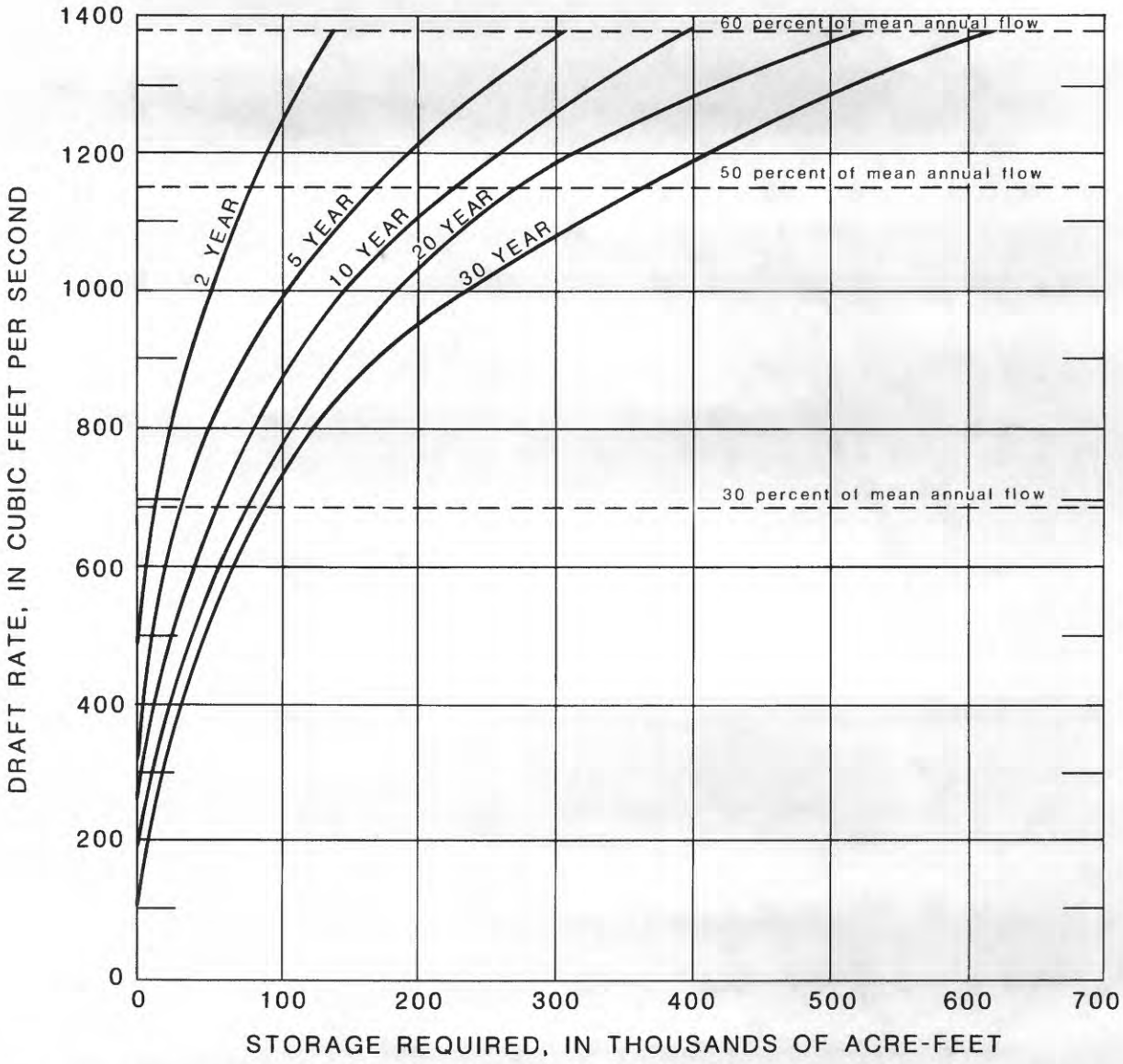

Figure 3.— Draft-storage diagram for selected frequencies for Flint River near Culloden (station 02347500). Storage not adjusted for reservoir seepage and evaporation.

results are achieved by expressing all three parameters, draft, storage, and index flow, as ratios to the mean annual flow or volume rather than as ratios to the drainage area. This results in dimensionless units because flows (draft rates and 7-day, 10-year low flows) are expressed as ratios to mean annual flows and storage volumes are expressed as ratios to mean annual flow volumes.

Georgia extends from the mountains to the sea and, consequently, has diverse geologic, topographic, and hydrologic features. As a result, it was necessary to divide the State into four regions (pl. 1) to achieve good agreement of plotted data with the draft-storage curves and get low standard

errors of estimate. These regions conform, in part, to physiographic provinces. The need for such subdivision was first noted during preparation of regional storage curves based on the 1954 drought. Actual locations and boundaries of the regions in this report were mainly dictated by general patterns of draft-storage relationships. Region A conforms closely to the Valley and Ridge physiographic province in the northwest. Region B includes the remainder of the area north of the Fall Line, the Blue Ridge and the Piedmont provinces. The Coastal Plain, the area south of the Fall Line, is subdivided into Regions C and D.

PRESENTATION OF DRAFT-STORAGE DATA

Drainage areas, mean annual discharges, 7-day,10-year low flows, and locations by region are listed in table 2 for 99 continuous-record gaging stations and for 102 partial-record gaging stations. Low-flow data (7-day, 10-year) shown in table 2 were taken from the report by Carter and Putnam (1977). Draft-storage relations for the 99 continuous-record stations are listed in table 3 up to draft rates as much as 60 percent of the mean annual flow. High values of draft and storage are not shown for many streams in Regions C and D in the south, because the flat terrain limits availability of favorable sites for large reservoirs. Because of their length, tables 2 and 3 are placed at the end of the report.

Eleven of the gaging stations listed in table 3 were moved to near the end of the table to allow better definition of their draft-storage relations. This was done because they are in mountainous areas and have a regimen of flow that is greater, per unit of drainage area, than the State average. If these gaging stations had not been handled in this manner, table 3 would have been required to contain a greater number of columns, many of which would have been blank for most gaging stations.

Families of draft-storage curves are presented for each of the four regions for use in estimating storage requirements for ungaged streams. These curves are shown in figures 4-7 with 2-, 5-, 10-, 20-, and 30-year recurrence intervals shown as a, b, c, d, and e, respectively, for each figure number. These plots define the storage required for draft rates as much as 60 percent of the mean annual discharge. Definition of the curves is illustrated by plots of gaging-station data for a storage of 7 percent of the mean annual runoff for a 10-year frequency of recurrence in Region B (fig. 5c). The method for using the curves is explained in the section, "Application to Stream-Development Problems."

Draft rates and storage data in table 3 are expressed as ratios to the drainage area of each gaging station instead of as ratio to mean, as in figures 4-7. It was felt that use of only one multiplier (drainage area) in table 3 for figures in the column headings (draft rates) and for figures in the body of the report (storage volumes) would make the table easier to use and would help to prevent errors. If the data in this table were expressed in units of ratio to mean, then two multipliers would be necessary. Mean annual flow would be needed for draft rates and mean annual flow volume would be needed for storage values, and this could possibly cause confusion.

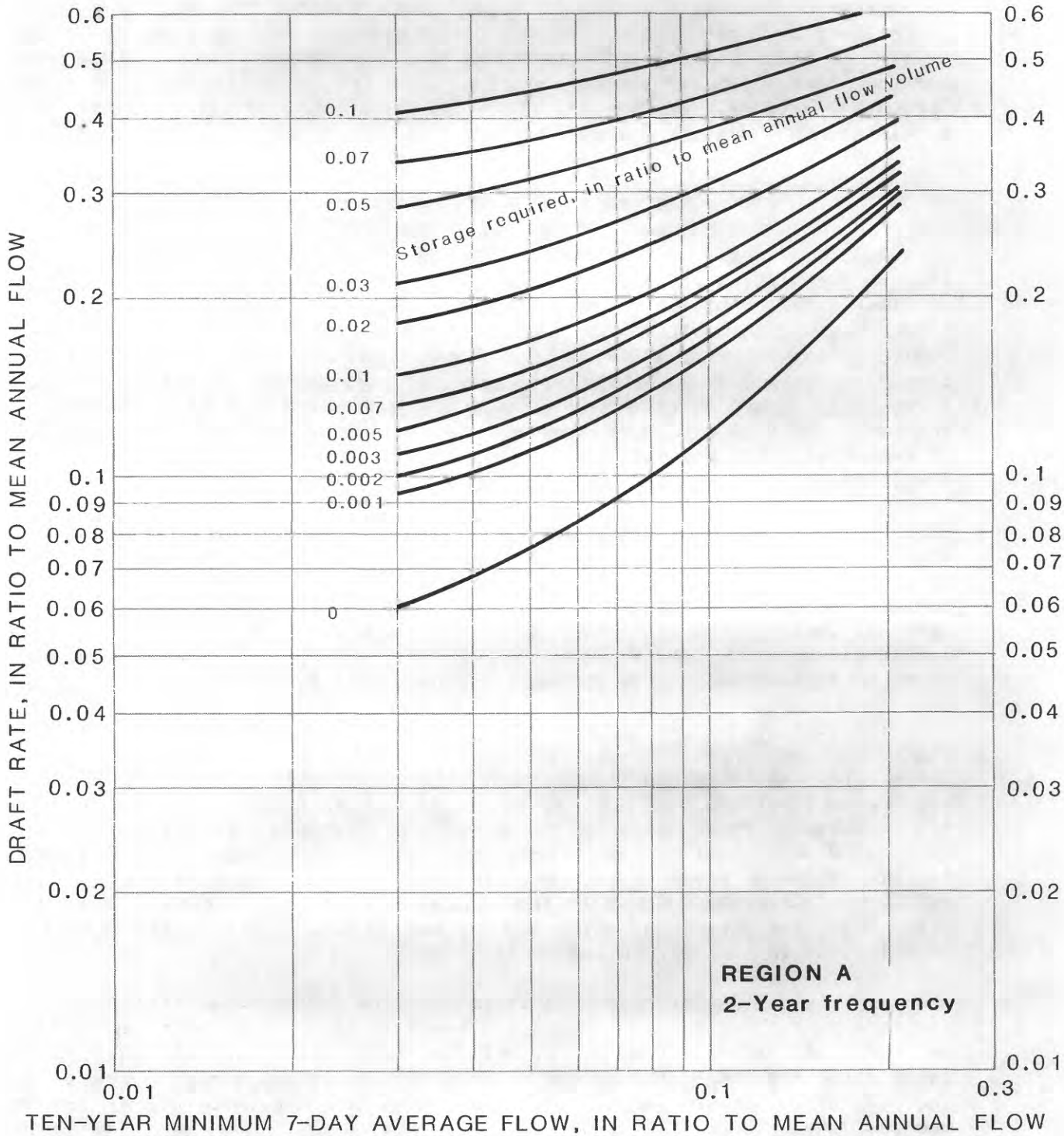

Figure 4a.— Draft-storage relations for 2-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region A. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

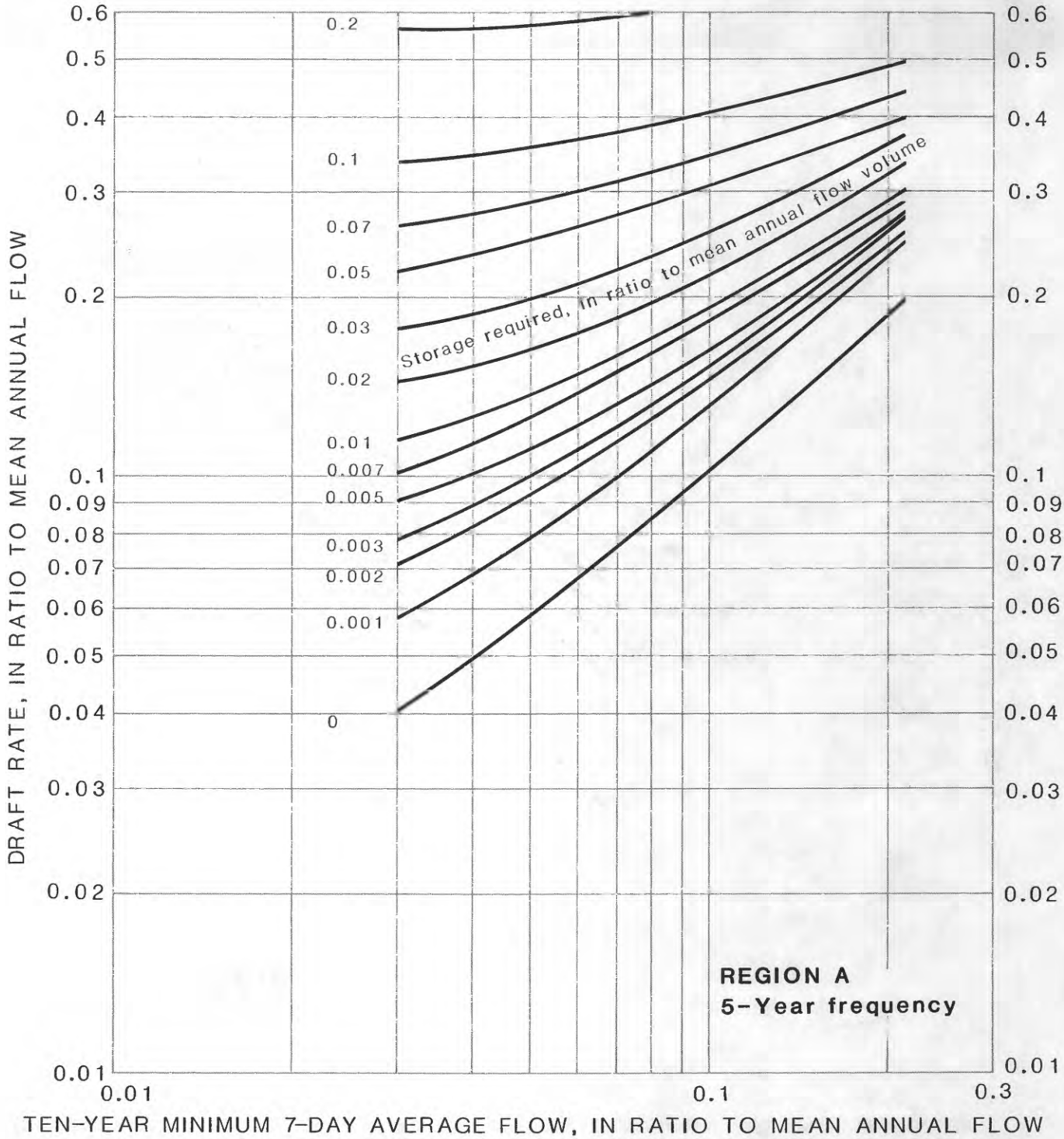

Figure 4b.— Draft-storage relations for 5-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region A. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

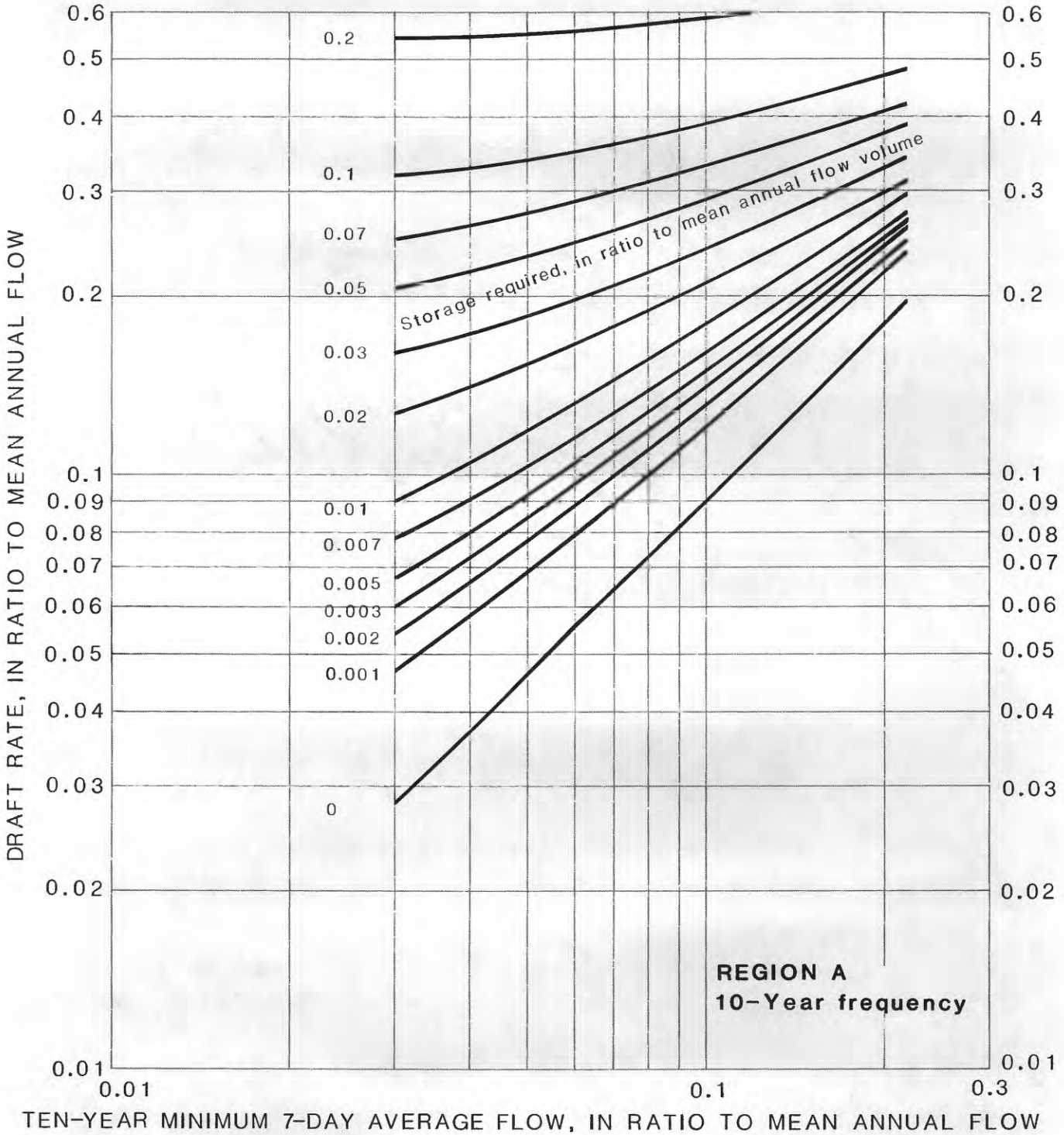

Figure 4c.— Draft-storage relations for 10-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region A. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

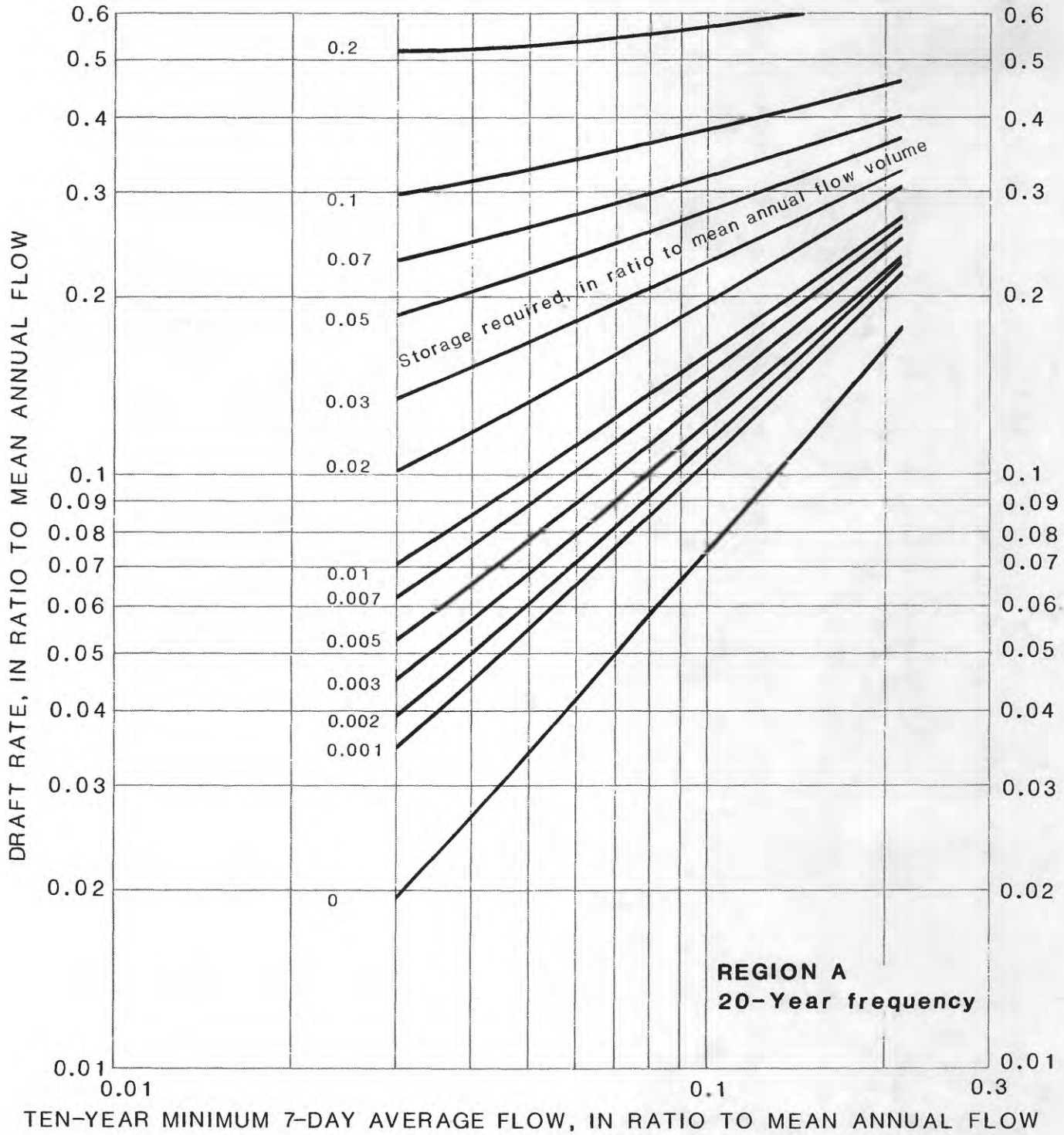

Figure 4d.— Draft-storage relations for 20-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region A. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

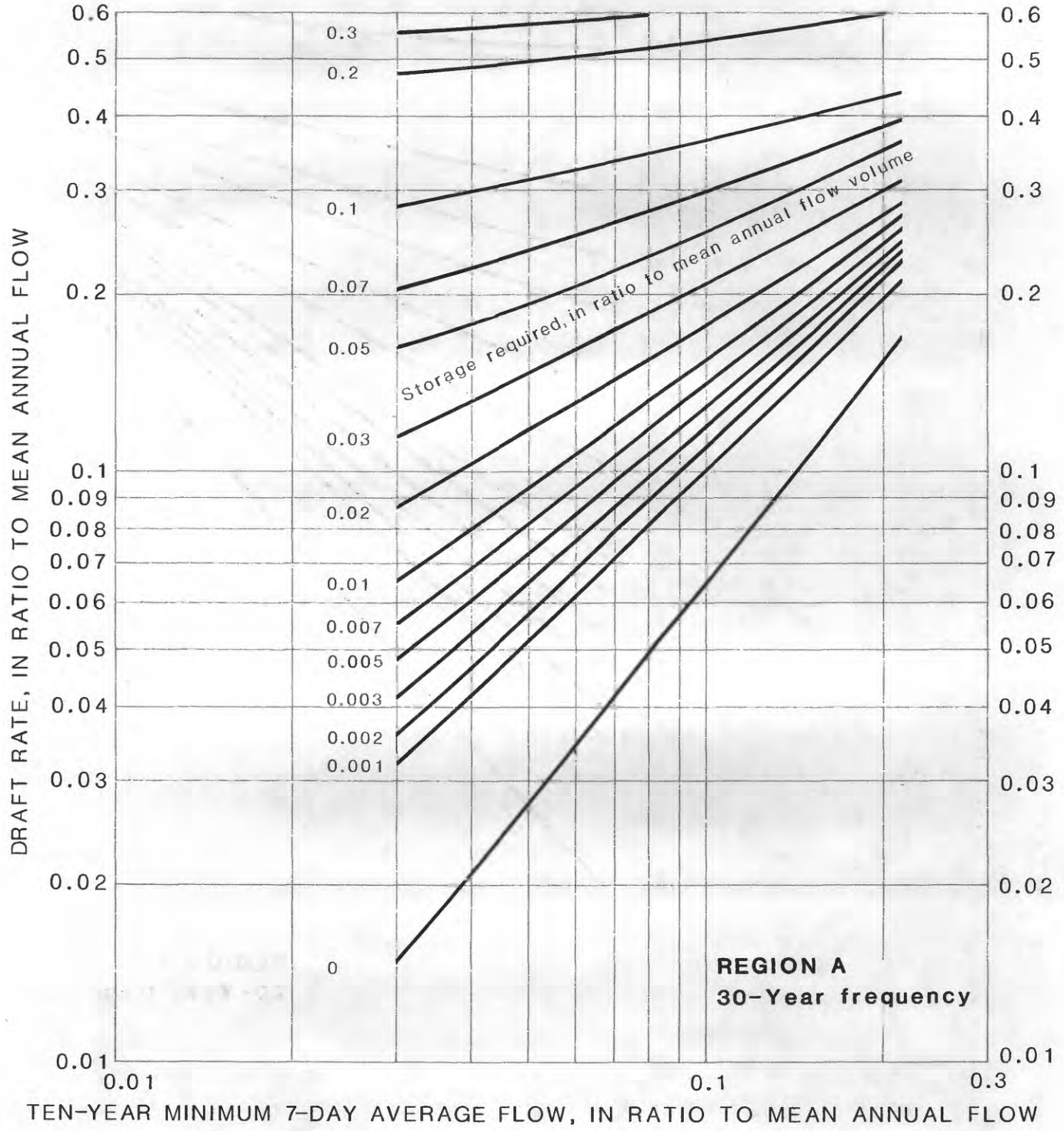

Figure 4e.— Draft-storage relations for 30-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region A. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

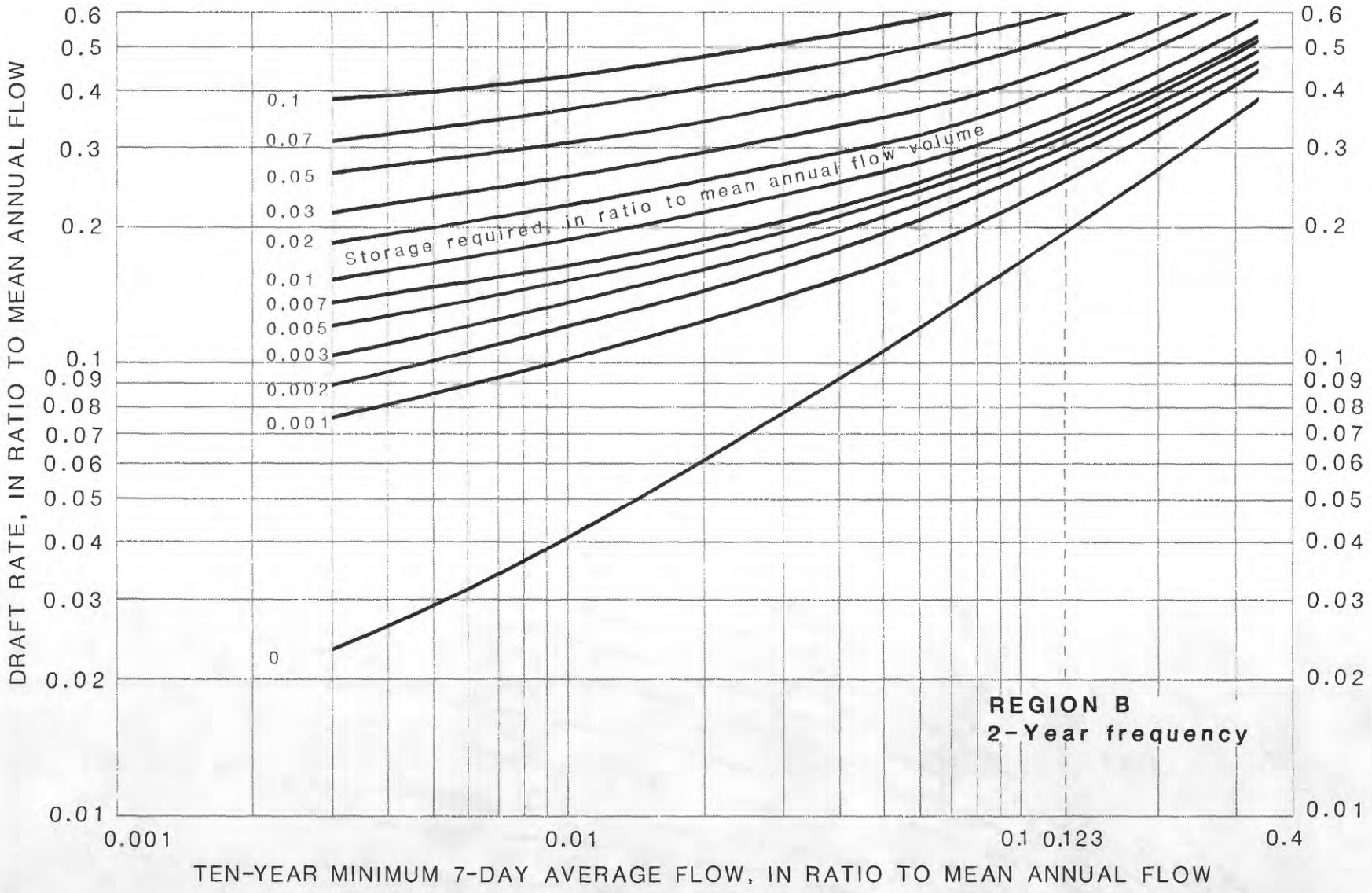

Figure 5a.— Draft-storage relations for 2-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region B. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation. Computation of storage requirement for a stream site with a low-flow index of 0.123 mean annual flow is illustrated as explained in "Determination of Storage Required at Pontential Reservoir Sites".

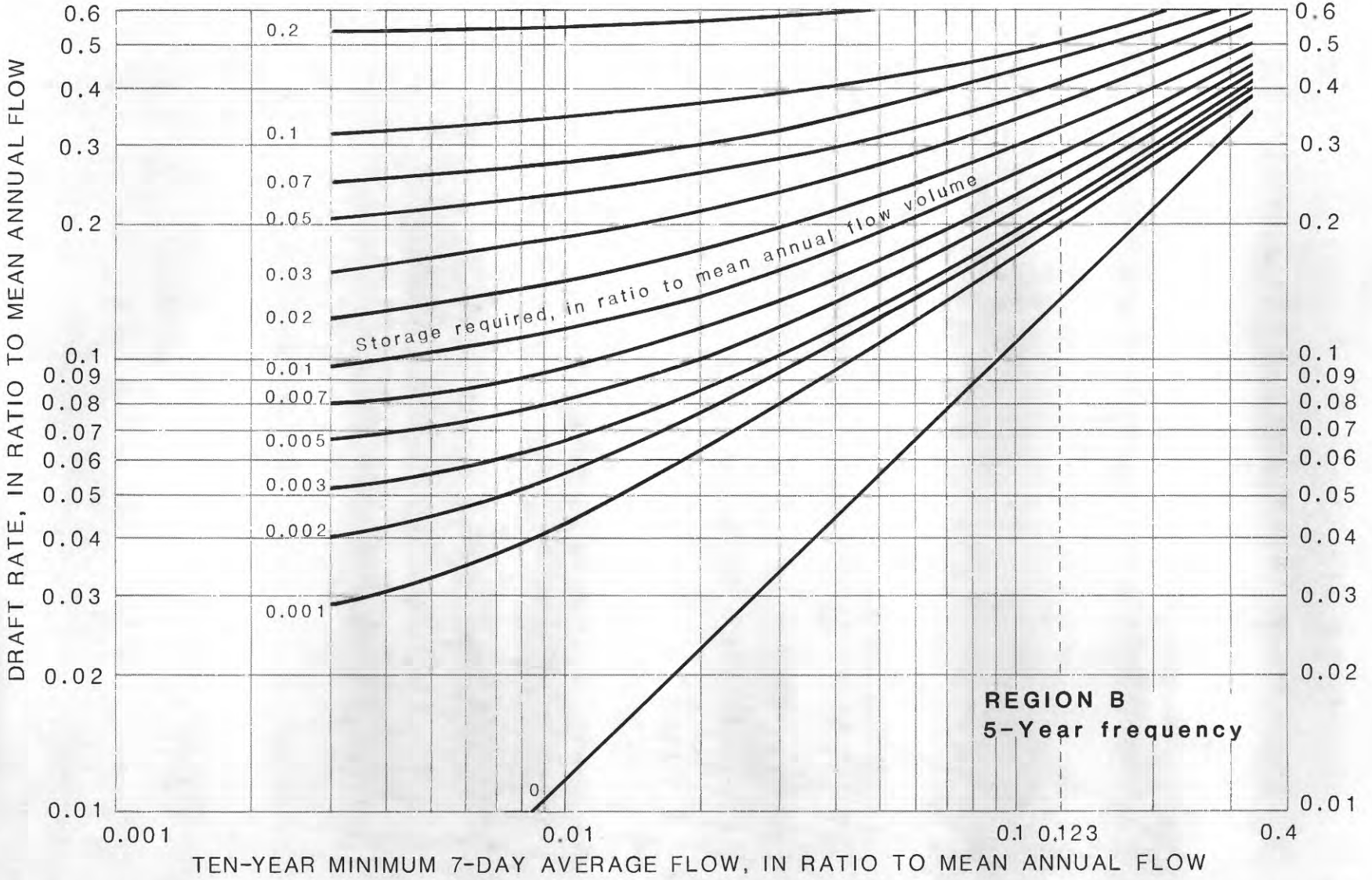

Figure 5b.— Draft-storage relations for 5-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region B. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation. Computation of storage requirement for a stream site with a low-flow index of 0.123 mean annual flow is illustrated as explained in "Determination of Storage Required at Pontential Reservoir Sites".

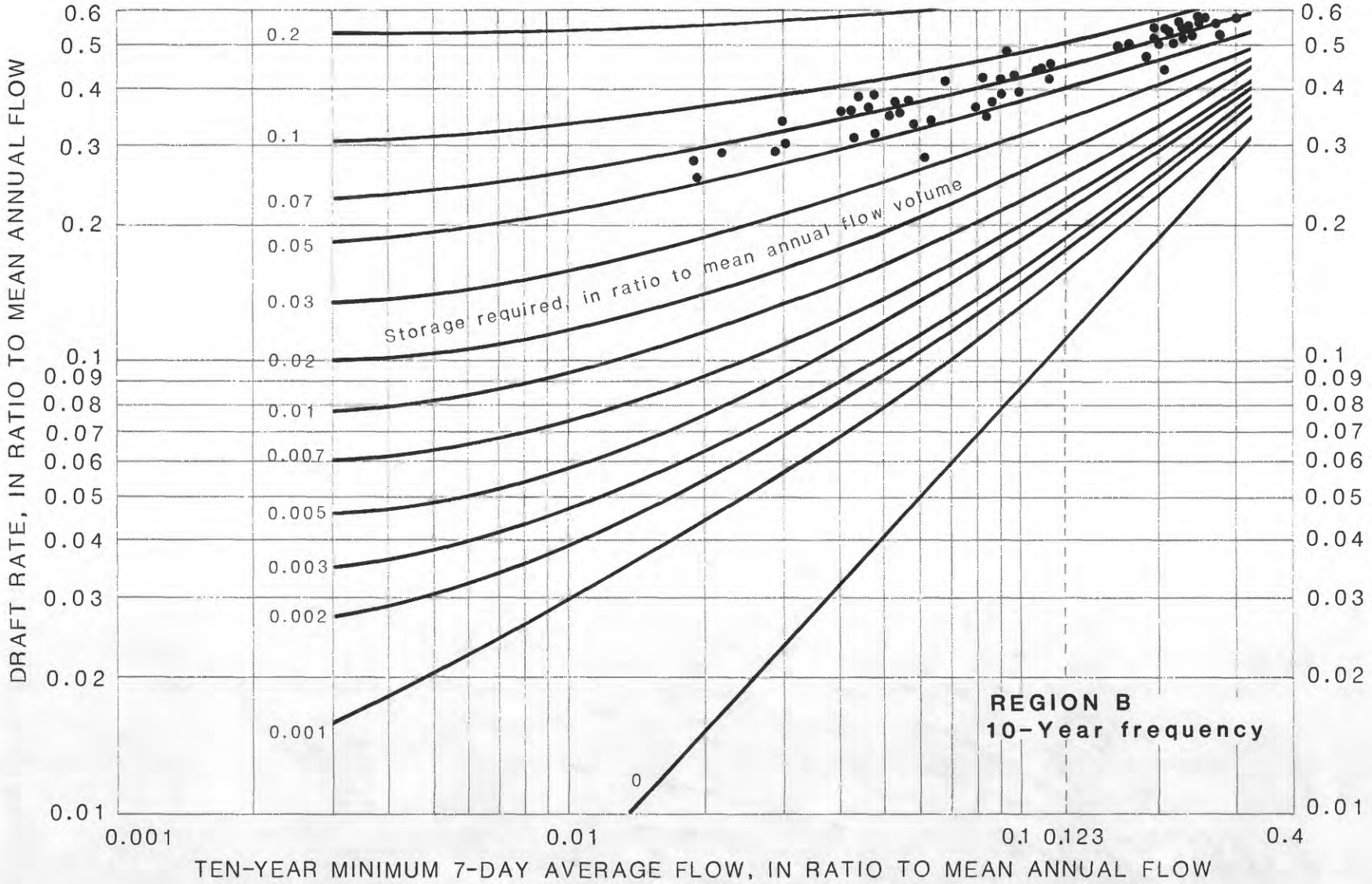

Figure 5c.— Draft-storage relations for 10-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region B. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation. Definition of curves is illustrated by plotting of data points for the curve representing 0.07 mean annual flow volume. Computation of storage requirement for a stream site with a low-flow index of 0.123 mean annual flow is illustrated as explained in "Determination of Storage Required at Potential Reservoir Sites".

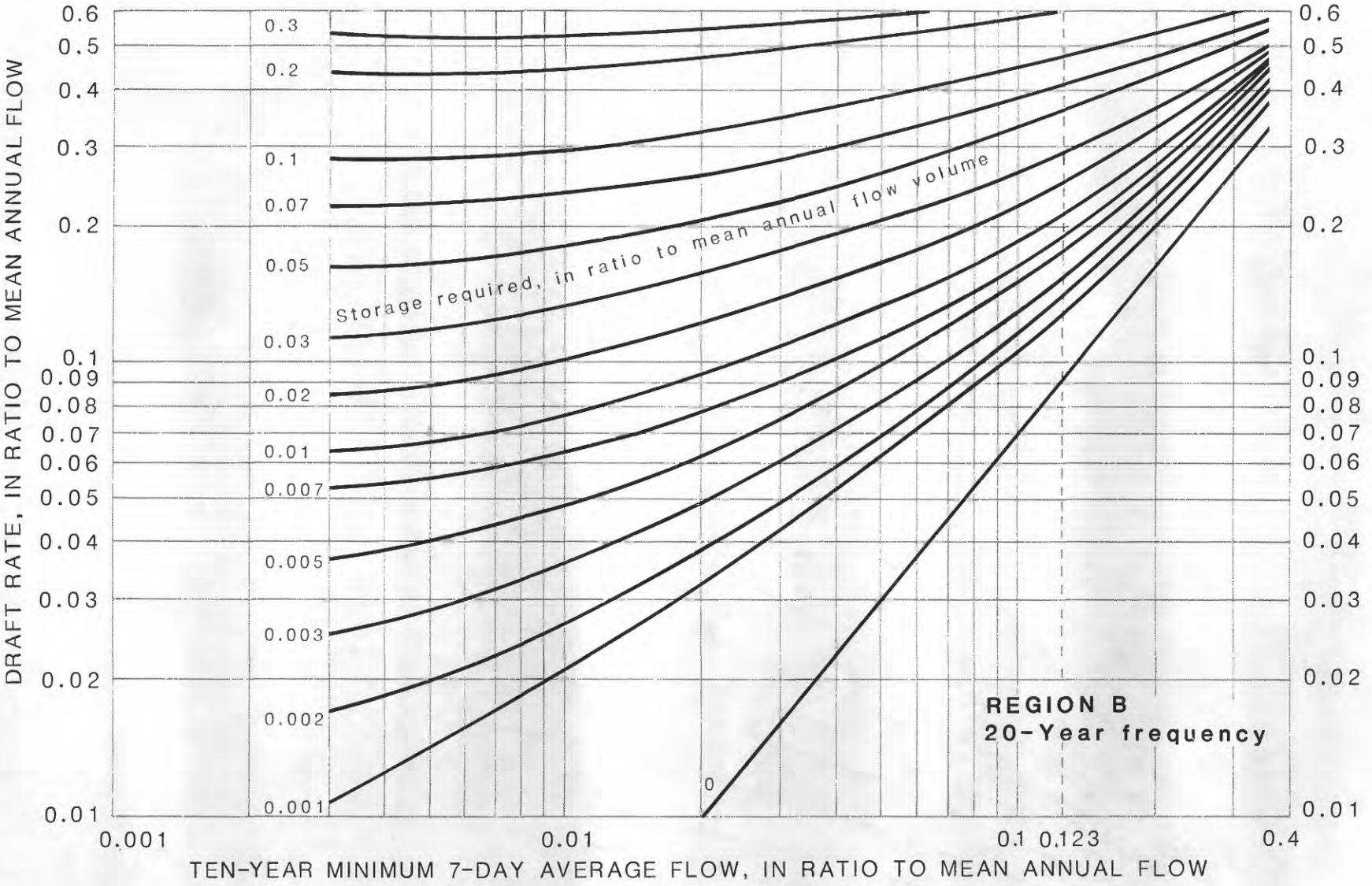

Figure 5d.— Draft-storage relations for 20-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region B. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation. Computation of storage requirement for a stream site with a low-flow index of 0.123 mean annual flow is illustrated as explained in "Determination of Storage Required at Pontential Reservoir Sites".

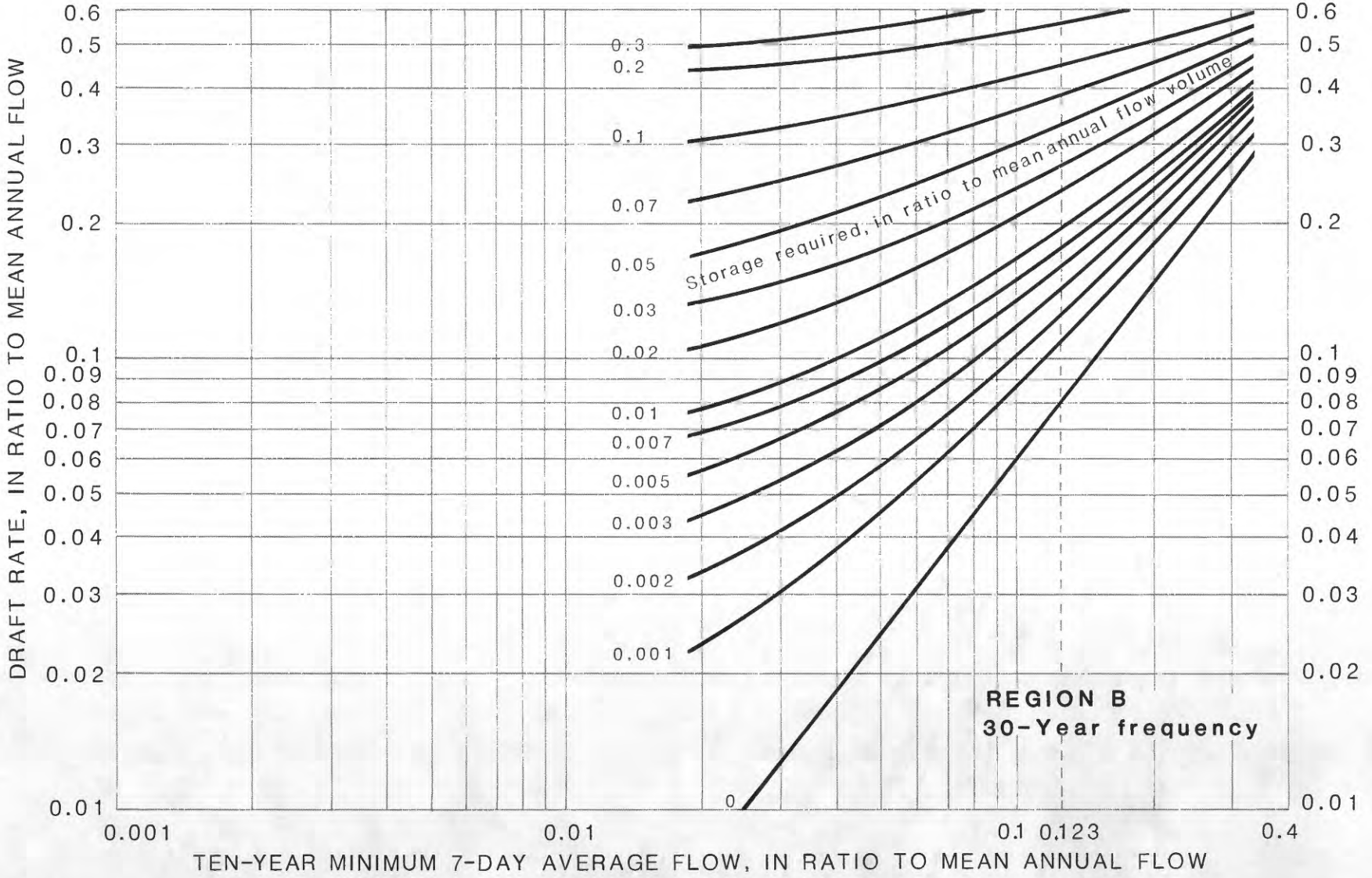

Figure 5e.— Draft-storage relations for 30-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region B. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation. Computation of storage requirement for a stream site with a low-flow index of 0.123 mean annual flow is illustrated as explained in "Determination of Storage Required at Pontential Reservoir Sites".

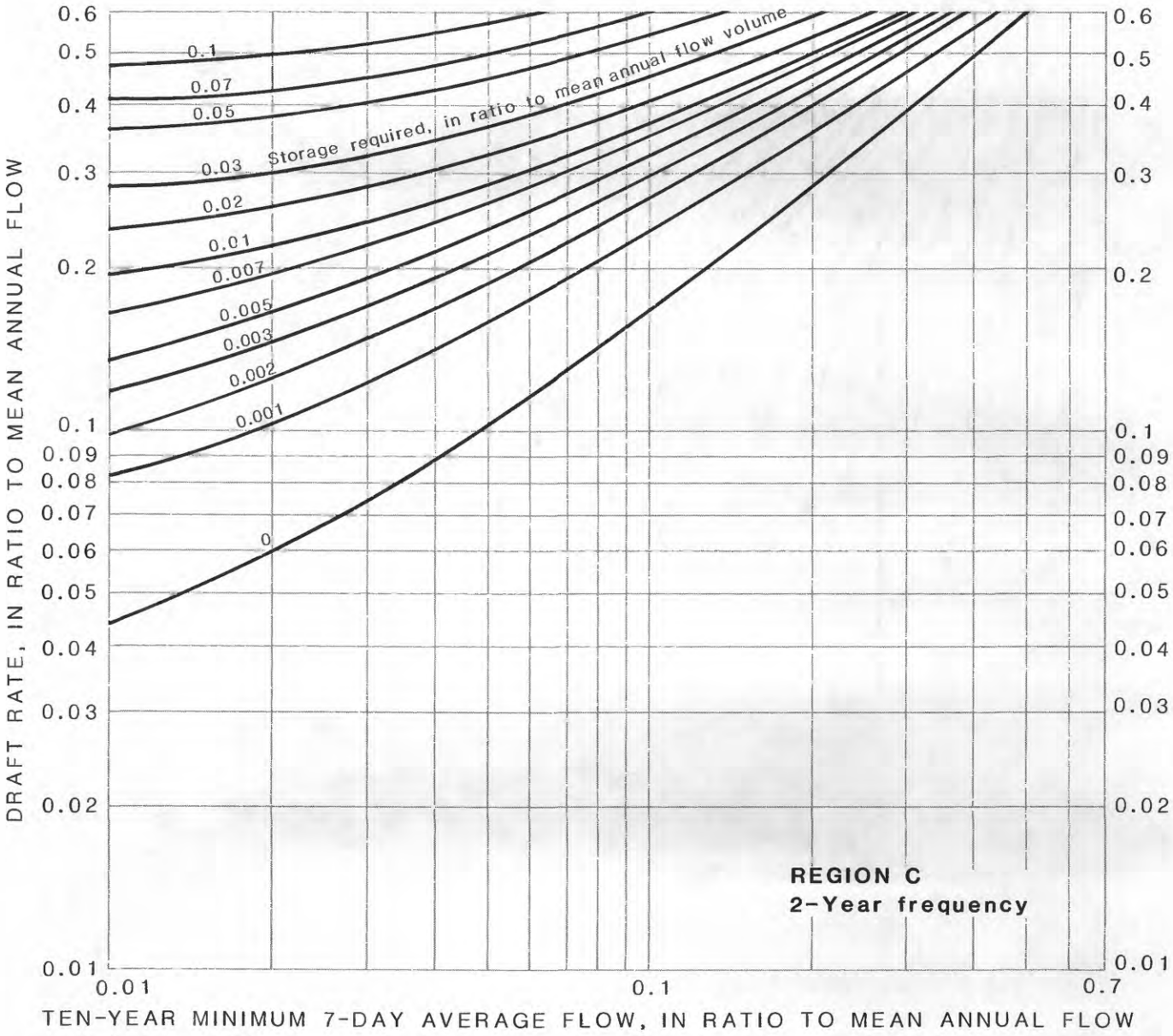

Figure 6a.— Draft-storage relations for 2-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region C. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

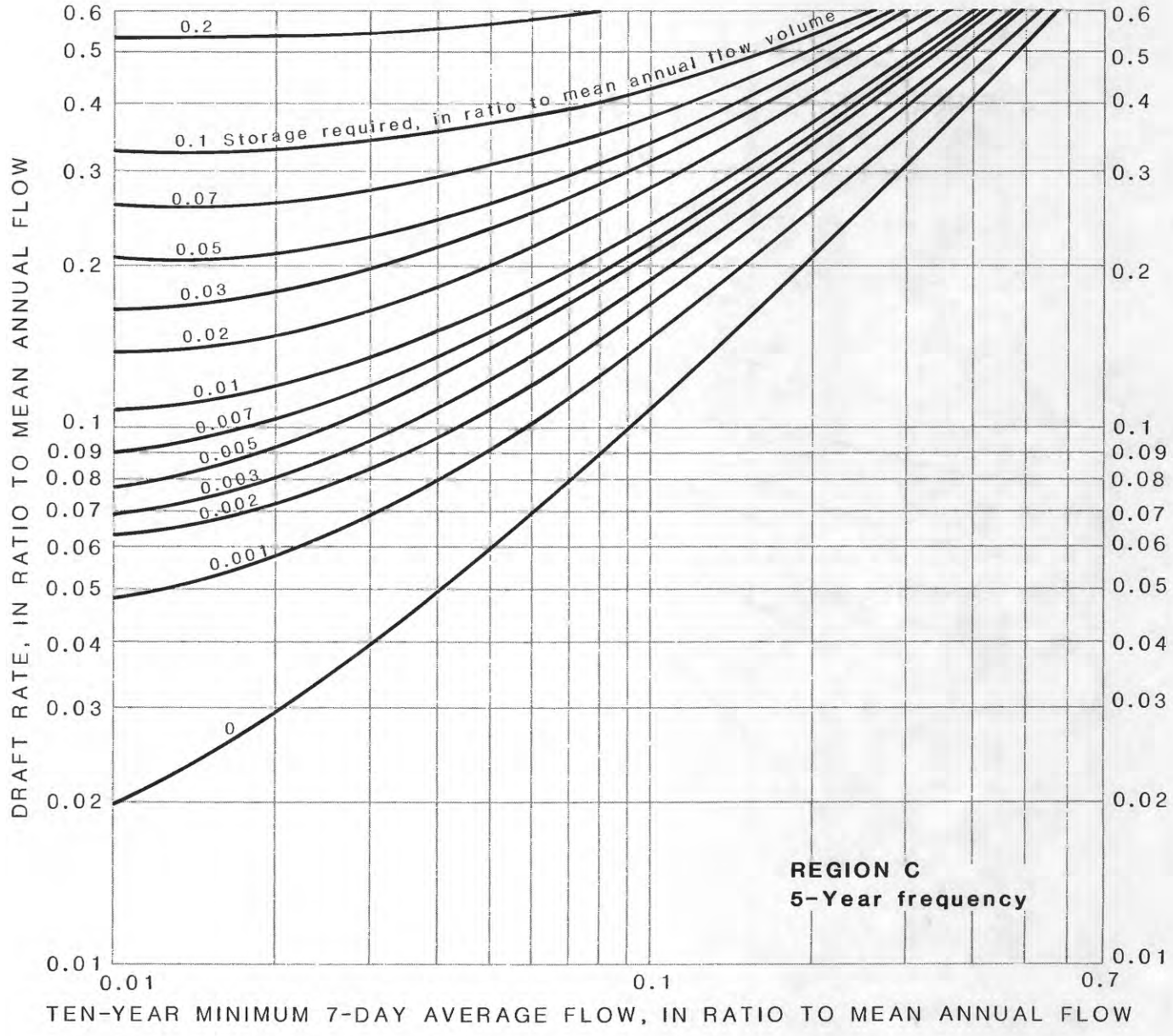

Figure 6b.— Draft-storage relations for 5-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region C. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

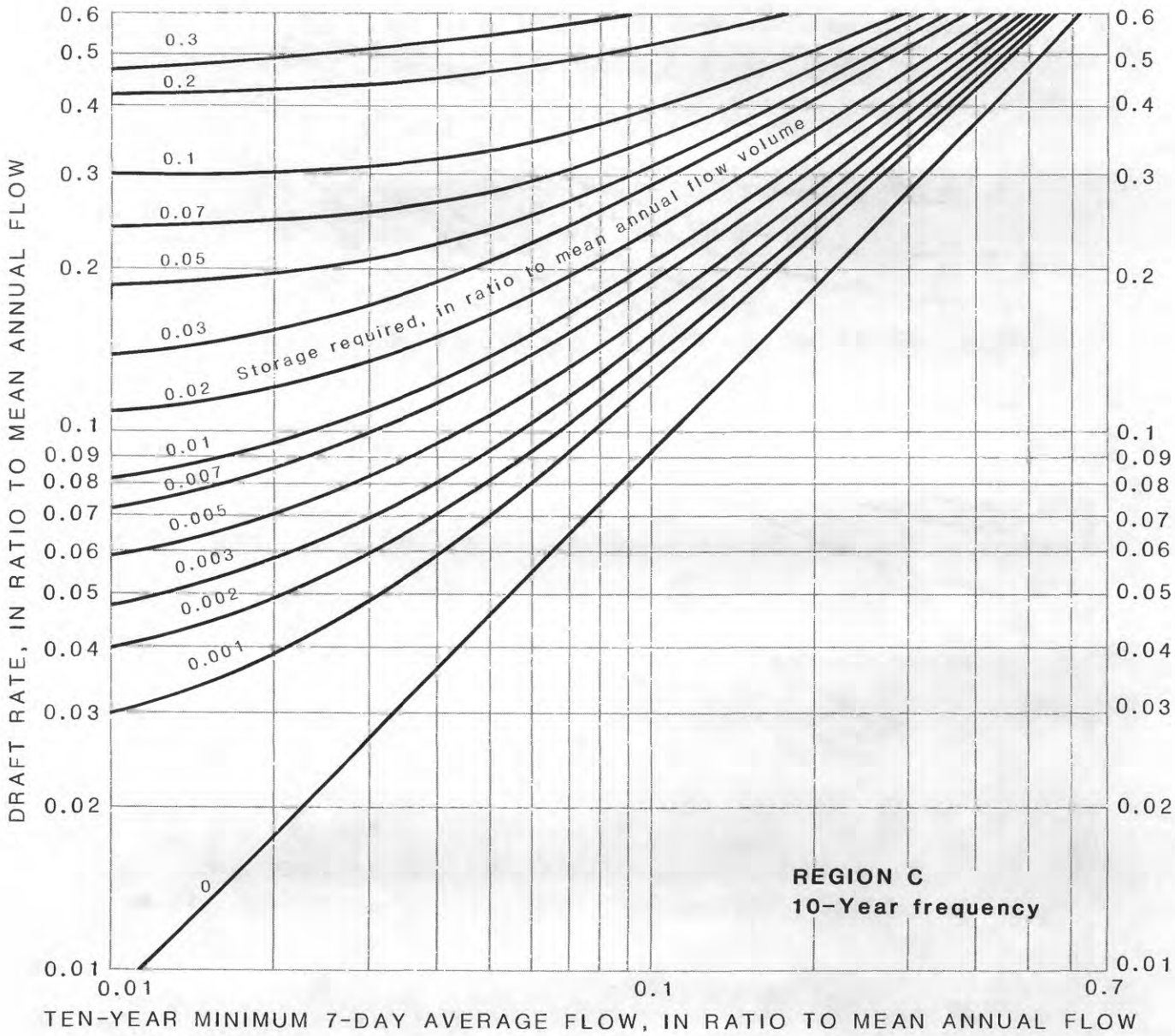

Figure 6c.— Draft-storage relations for 10-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region C. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

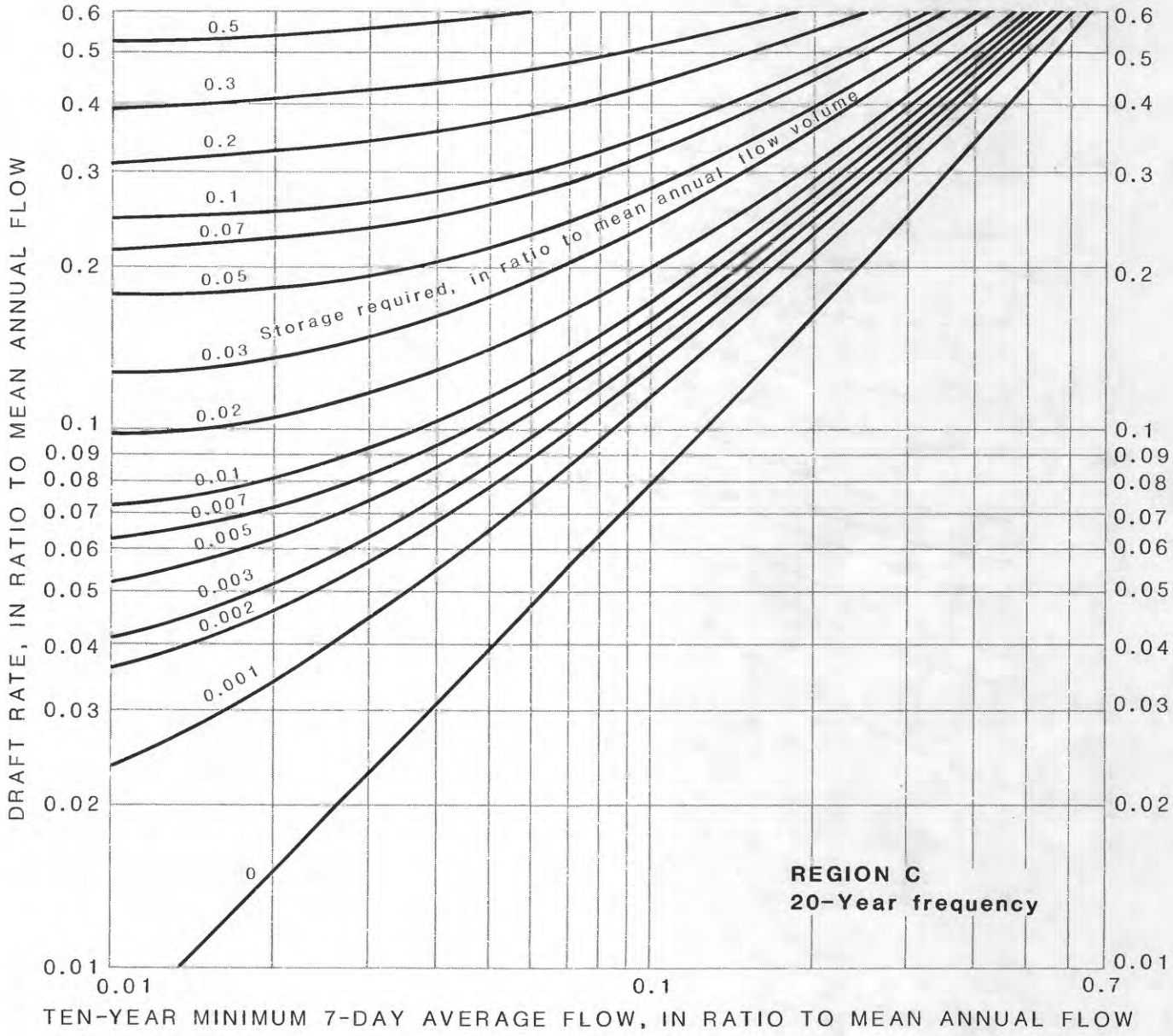

Figure 6d.— Draft-storage relations for 20-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region C. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

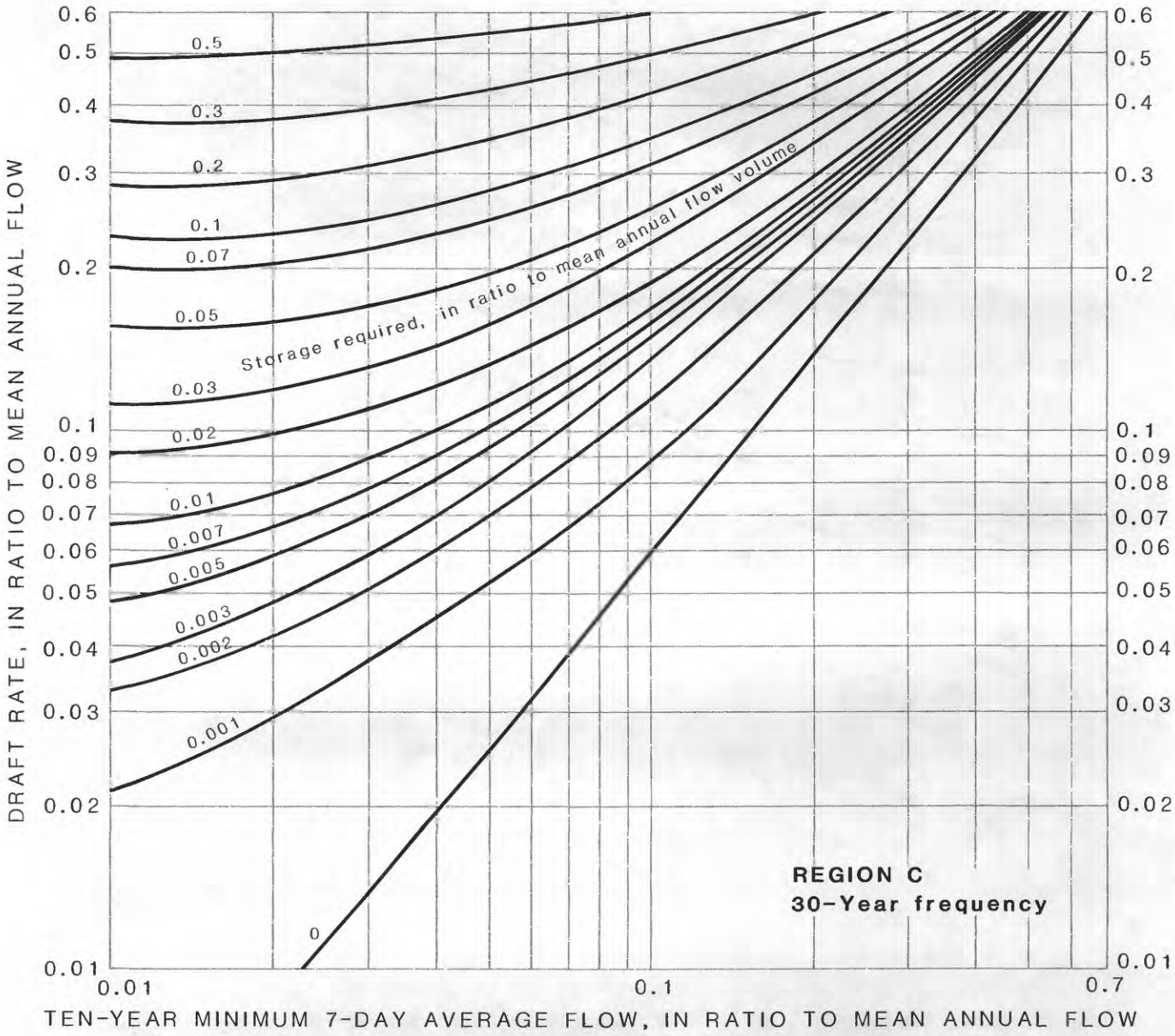

Figure 6e.— Draft-storage relations for 30-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region C. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

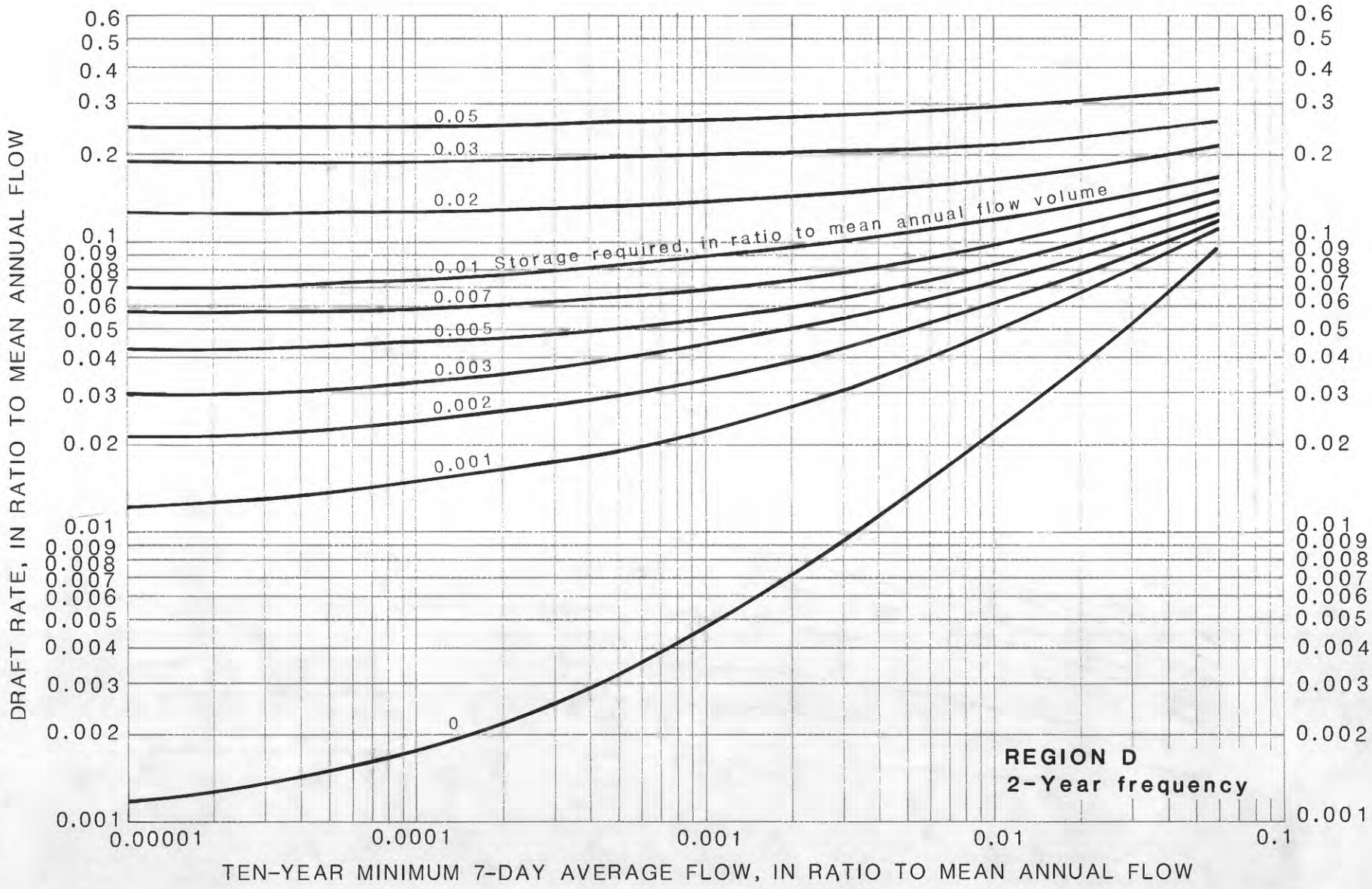

Figure 7a.— Draft-storage relations for 2-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region D. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

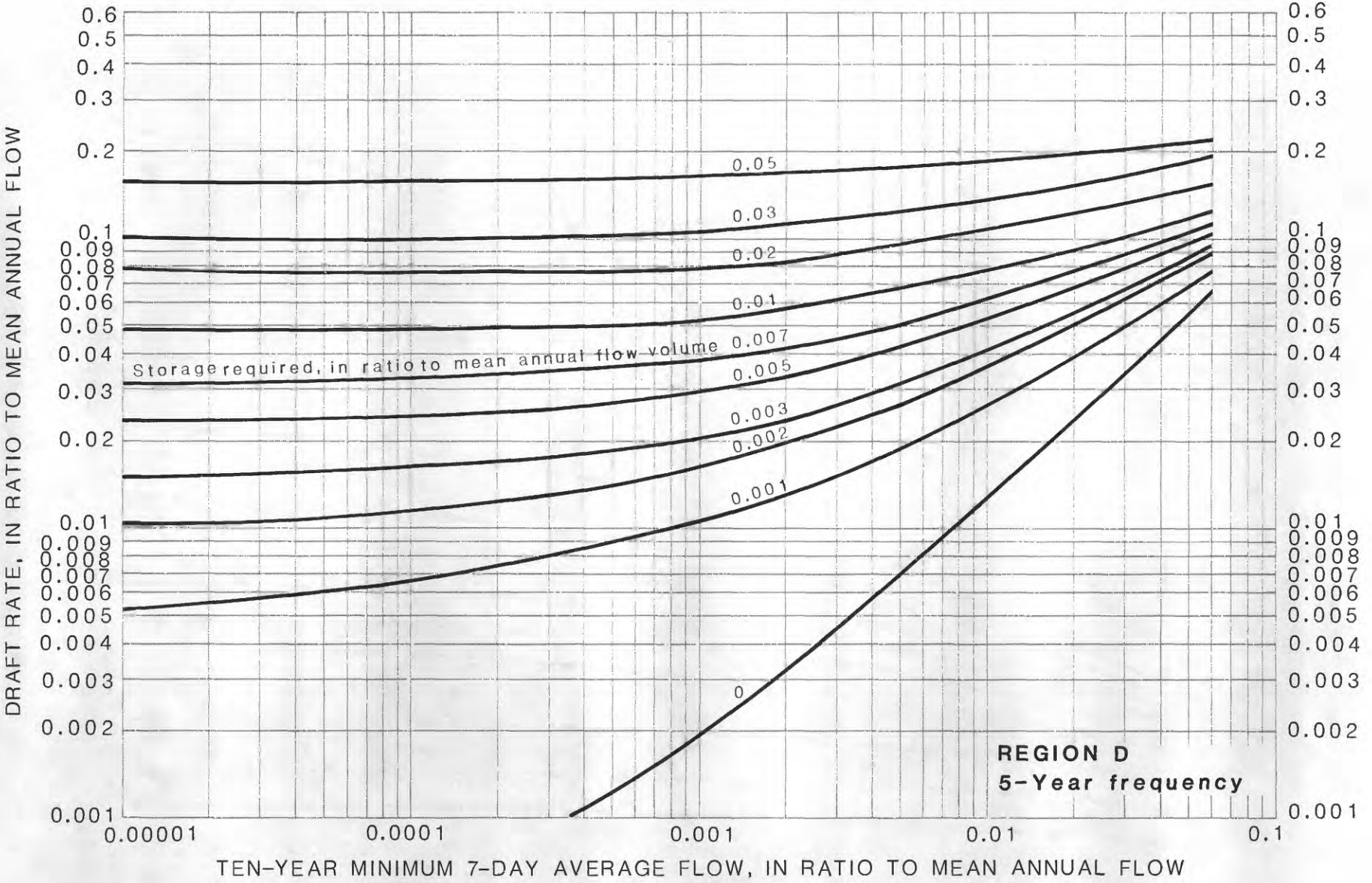

Figure 7b.— Draft-storage relations for 5-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region D. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

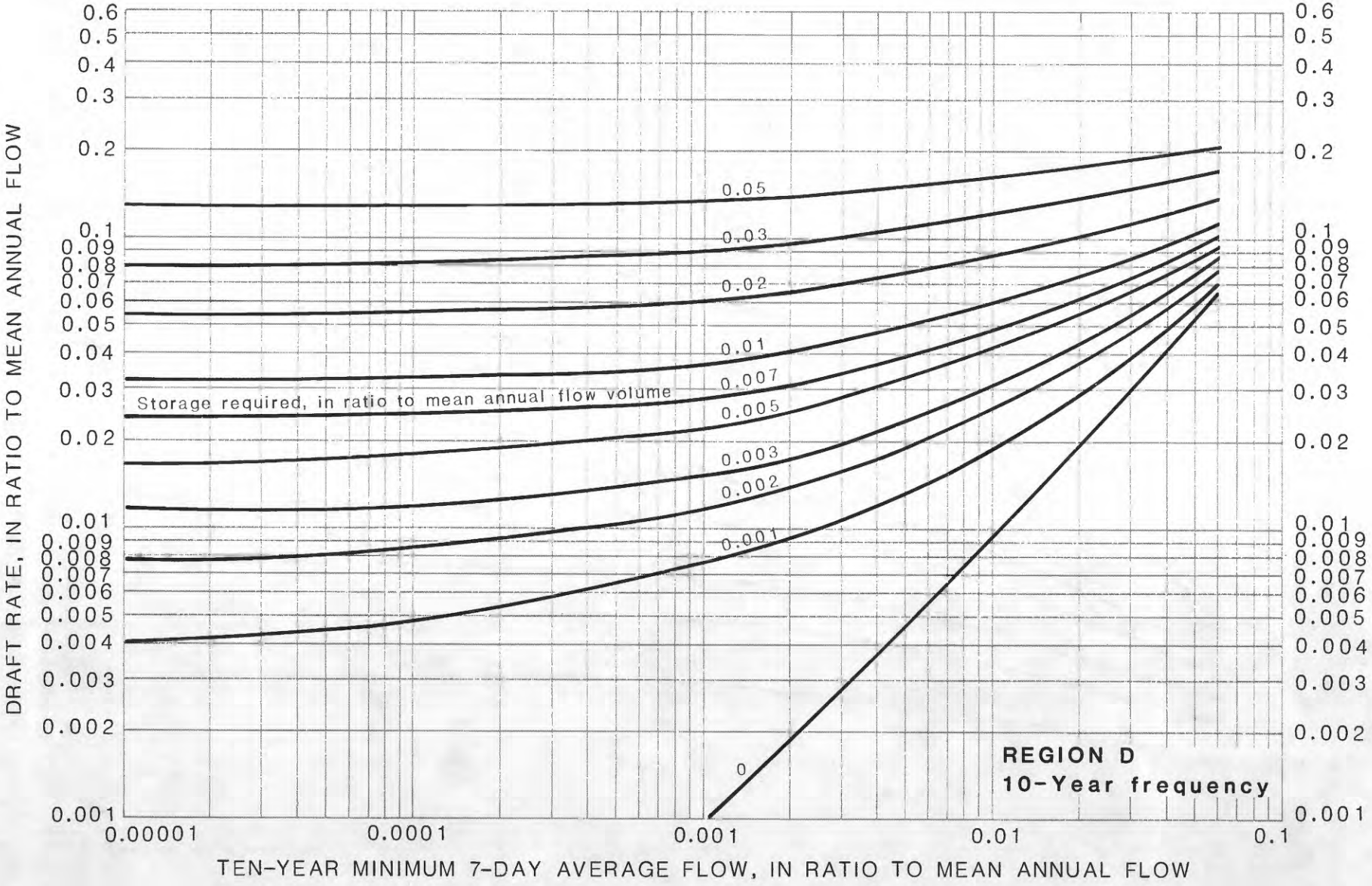

Figure 7c.— Draft-storage relations for 10-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region D. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

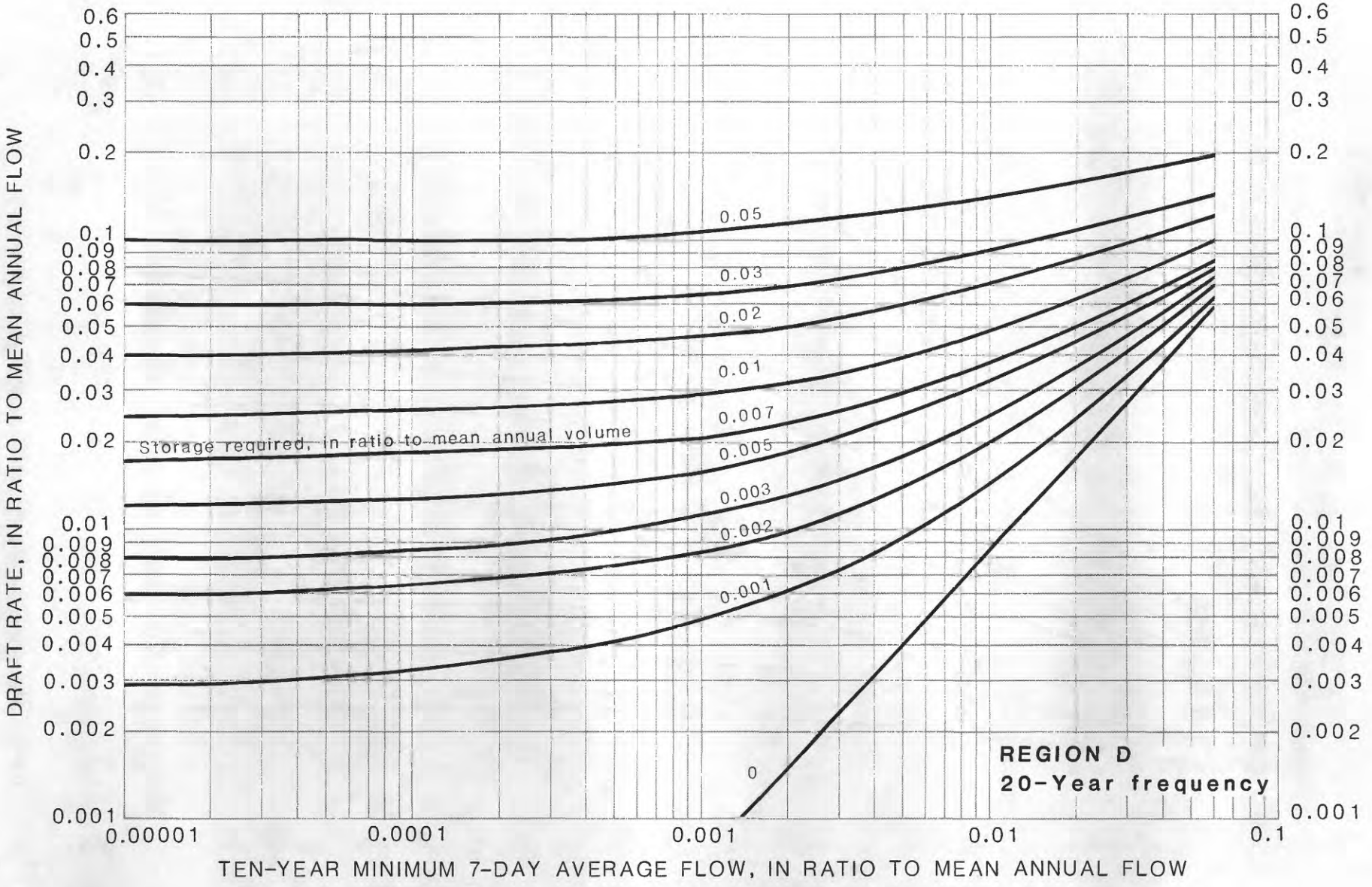

Figure 7d.— Draft-storage relations for 20-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region D. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

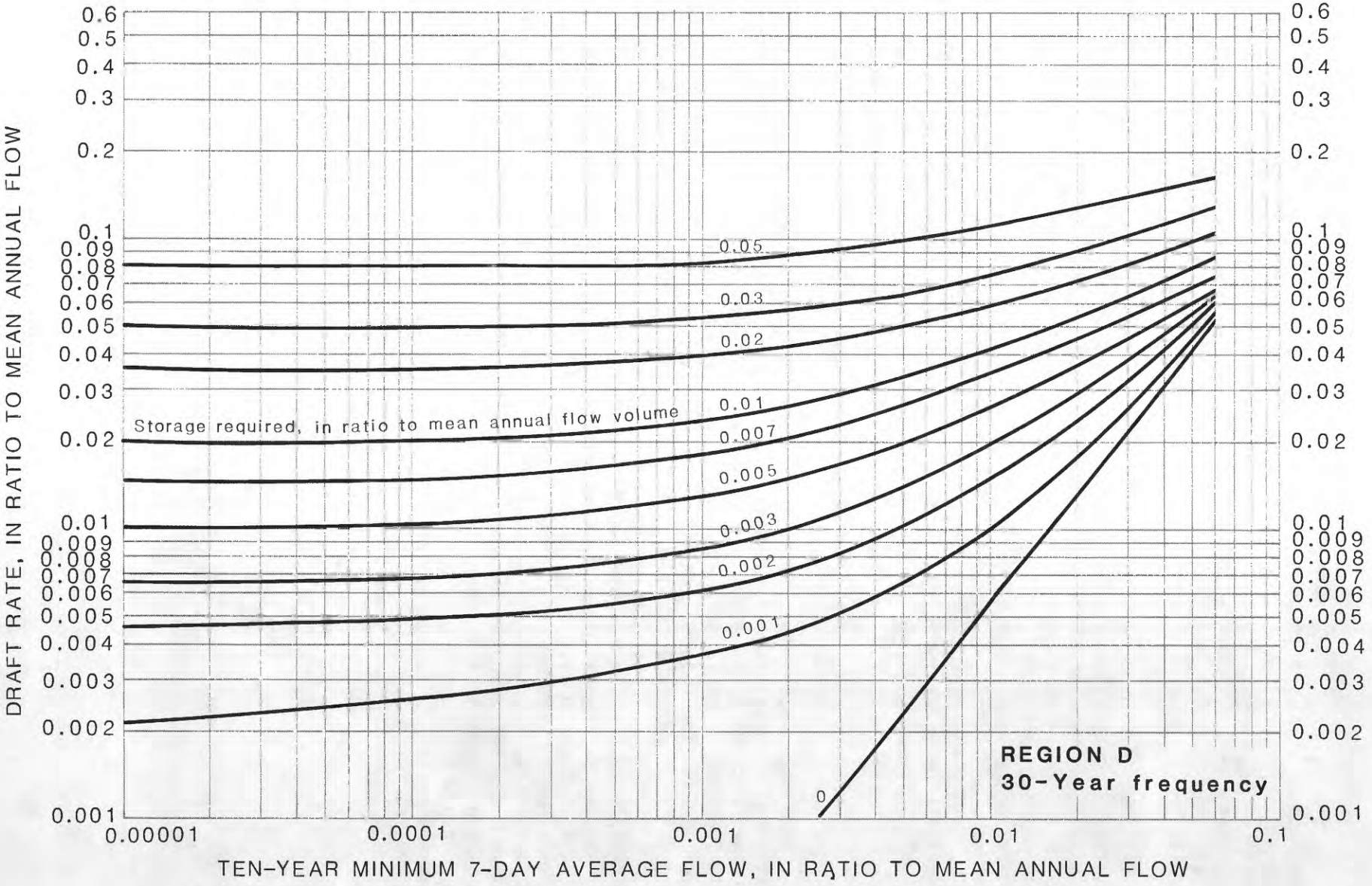

Figure 7e.— Draft-storage relations for 30-year frequency related to the 10-year recurrence interval, 7-day average flow for streams in region D. Relations shown are for uniform draft rates. No adjustment has been made for reservoir seepage and evaporation.

ACCURACY

Storage requirements estimated by use of regional draft-storage curves are subject to certain errors. The magnitude of these errors may be estimated by comparison of storage requirements estimated from regional curves with storage-requirement data obtained from analyses of gaging-station records (fig. 8). All data in figure 8 are for a 20-year frequency. The data from regional draft-storage curves in figure 8 have a standard error of estimate of about 35 percent.

The designer of a storage project is likely to be interested in how effective his estimate of storage requirement will be in maintaining the desired draft rate rather than merely wanting to know how well he can estimate storage requirement. Therefore, draft rates that may be maintained with selected volumes of storage as indicated by the regional draft-storage curves, are compared with draft rates that may be maintained with those same volumes of storage as indicated by analyses of gaging-station records (fig. 9). These data are also for a 20-year frequency. The standard error of estimate of draft rates in figure 9 obtained from regional draft-storage curves is about 15 percent.

ADJUSTMENT FOR NATURAL STORAGE DEPLETION

No allowances were made for losses due to seepage, evaporation, or sediment accumulation in computation of draft-storage relations. Seepage losses must be evaluated at the individual reservoir site on the basis of the permeability and porosity of the underlying geologic formations. Average annual evaporation from lakes in Georgia varies from about 37 inches near the Tennessee State line to almost 46 inches near the Florida State line (fig. 10). The State average is about 43 inches. The average annual precipitation varies from about 72 inches in the extreme northeast to about 44 inches in the vicinity of Augusta (fig. 11) with a State average of 50 inches. Thus, under average conditions, annual rainfall on a reservoir exceeds annual evaporation. However, during hot summers having normal rainfall or less, evaporation exceeds rainfall, possibly as much as 30 inches in some areas (Thomson and others, 1956). Losses in reservoir capacity due to sediment accumulations are related to sediment-transport capacity of the tributary stream and size of the reservoir. Those losses can be evaluated on the basis of characteristics of individual reservoir sites and tributary streams. They are not generally subject to regional analysis.

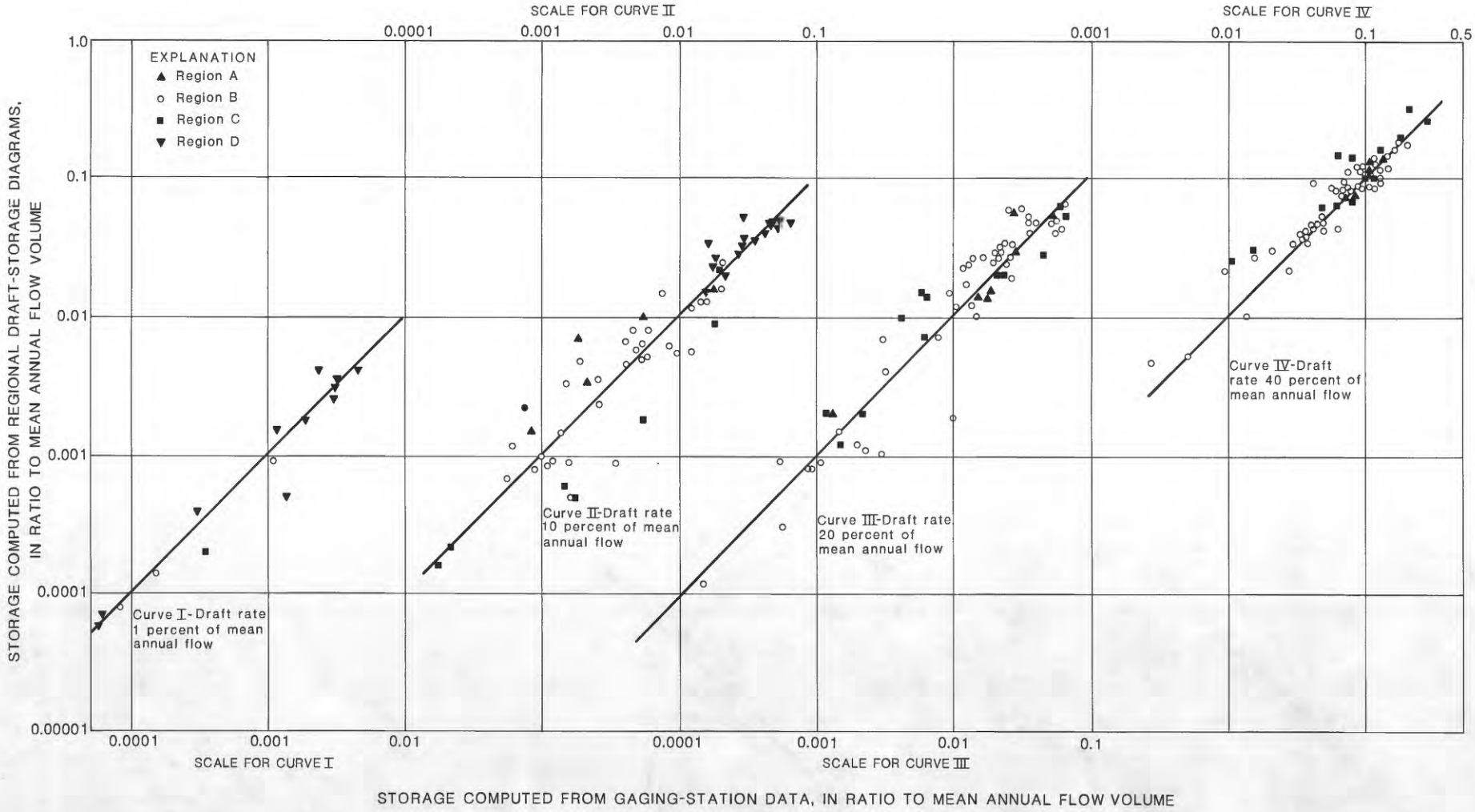

Figure 8.— Relation between storage requirements computed from gaging-station data and from regional draft-storage diagrams for various draft rates for a 20-year frequency.

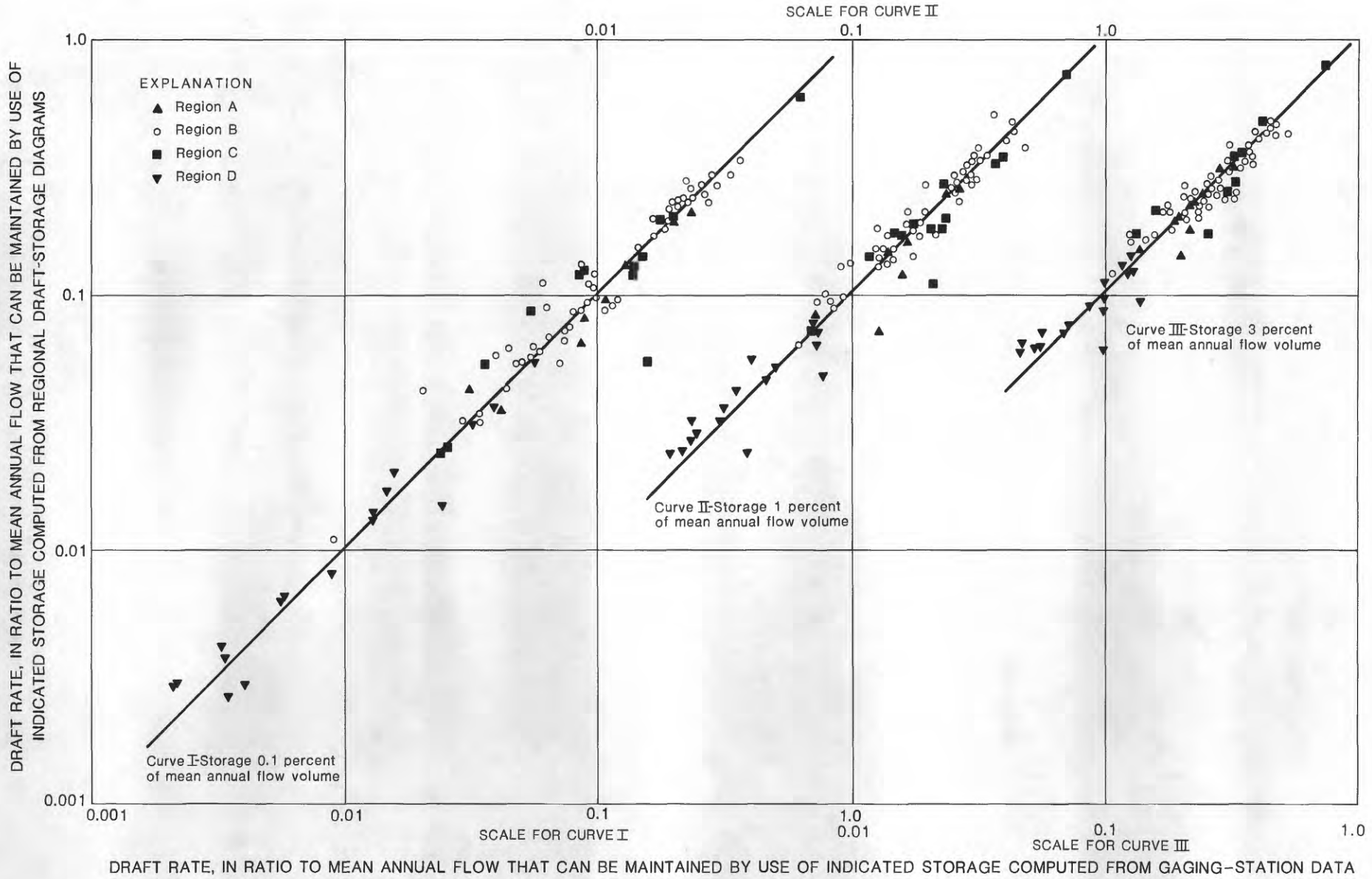

Figure 9.— Relation between draft rates that can be maintained by use of various volumes of storage computed from gaging-station data and from regional draft-storage diagrams for a 20-year frequency.

Figure 10.— Average annual lake evaporation for the period 1946-55. From National Weather Service (1959).

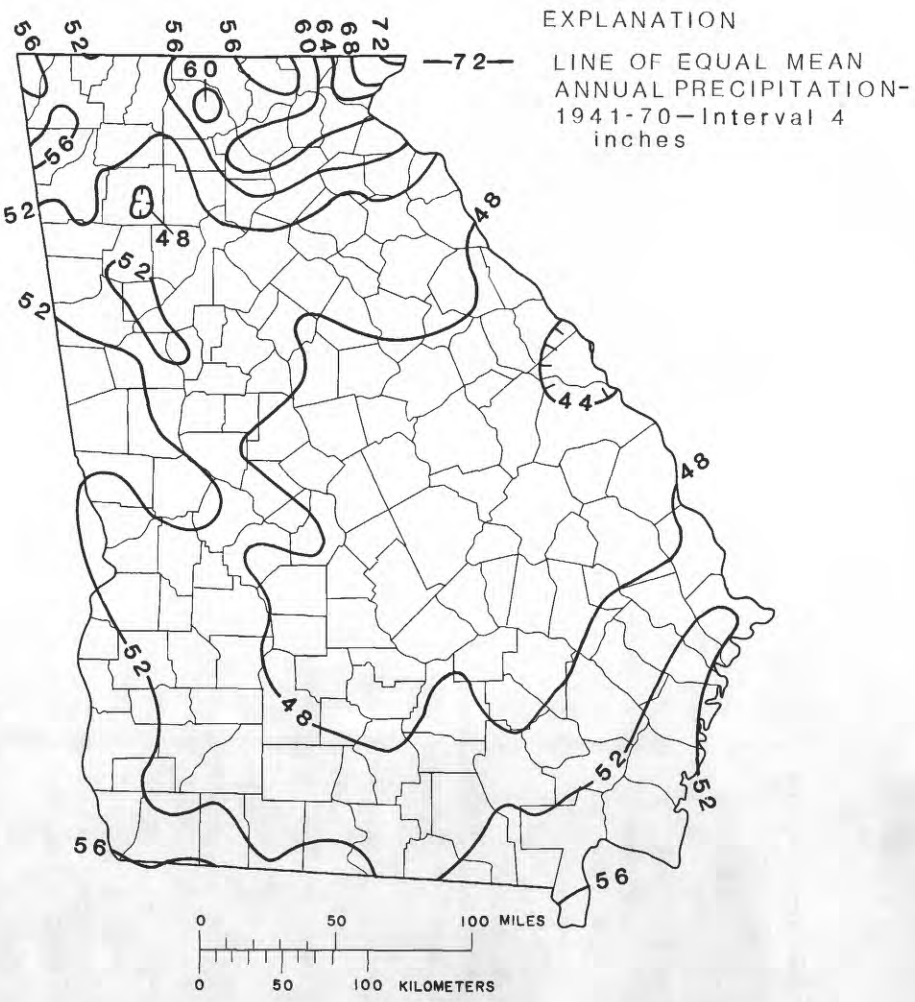

Figure 11.— Average annual rainfall in Georgia, 1941-70. (Data furnished and map reviewed by National Weather Service.)

Determination of Storage Required at Potential Reservoir Sites

If a reservoir is built on a stream at or near one of the continuous-record gaging stations for which data are shown in table 3, the station data are directly applicable to the reservoir design without use of the draft-storage diagrams. Adjustments can be made on a drainage-area basis, if the drainage area is not greatly different from that at the gaging station. At other potential sites, the diagrams in figures 4-7 should be used, and the designer should determine or estimate (1) the draft-storage region in which the site is located, (2) the size of the drainage area above the site, (3) the mean annual discharge, (4) the value of the low-flow index at the site, and (5) the chance he is willing to take of storage being deficient.

Plate 1 shows the delineation of the State into draft-storage Regions A, B, C, and D. The locations of the 99 continuous-record gaging stations used in the analyses and the 102 partial-record gaging stations listed in table 2 are also shown. Plate 1 shows the average annual discharge for the State. Average annual discharge may be estimated by using the lines of equal runoff on this map for stream sites having drainage areas up to about 800 mi^2. Table 2 lists drainage areas, 7-day, 10-year flows, average annual discharge, and draft-storage regions for the 201 gaging stations. Average annual discharge for each of the 102 partial-record gaging stations was determined by use of plate 1. Table 3 lists draft-storage relations for the 99 continuous-record gaging stations.

If the reservoir site is not at or near a continuous-record gaging station, the low-flow indices can be estimated on the basis of a few measurements of base flow (flow during rainless periods when there is no storm runoff) at the reservoir site. The measured base flow is correlated with concurrent daily discharge at a gaging station for which the low-flow index has been determined, as in the following example. The storage requirements for the site can then be computed by using the following procedure.

Assume that a draft-storage study is needed for a reservoir site on Apalachee River near Bethlehem at State Highway 11, 2.5 miles south of Bethlehem. (See outline on pl. 1.) Although this is a partial-record site (station 02218700, table 2), assume that a low-flow index has not been determined.

1. The site is in Region B (pl. 1).

2. Using a topographic map, the drainage area above the site is determined to be 54 mi^2.

3. The mean annual discharge is determined to be 1.30 $(ft^3/s)mi^2$ (pl. 1), or 70 ft^3/s (1.30 x 54), which is equivalent to 50,700 acre-ft/yr (724 x 70). The mean annual discharge can be determined for any site by outlining the drainage area on plate 1 and then estimating the discharge visually or computing a weighted average of discharge based on areas between lines of equal value.

4. The low-flow index (abscissa in figs. 4a, b, c, d, e through 7a, b, c, d, e) is determined by several discharge measurements made during different periods of base flow. Plotting discharges for these measurements against concurrent daily mean discharges at nearby continuous-record

gaging stations shows a good correlation (fig. 12). The continuous-record station used is Yellow River near Snellville (station 02206500).

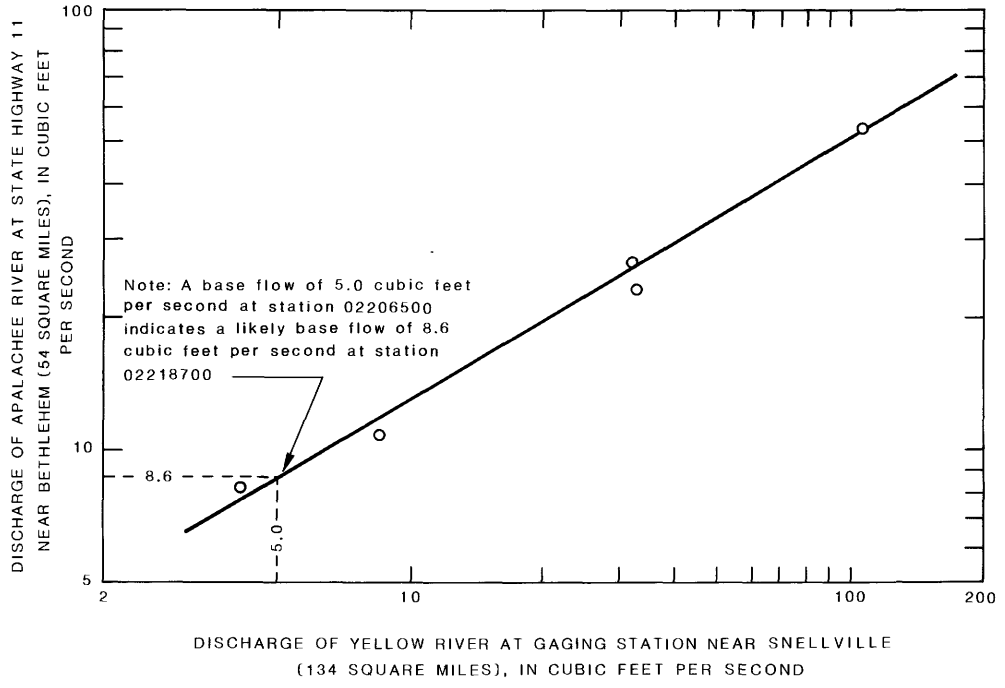

Figure 12.— Relation of concurrent base flows for Apalachee River near Bethlehem and Yellow River near Snellville showing method for estimating low-flow index (7-day minimum flow with a 10-year recurrence interval).

5. 7Q10 for station 02206500 is 5 ft^3/s, which is used to enter the regression in figure 12 and from it, the low-flow index for Apalachee River is determined to be 8.6 ft^3/s, which is 8.6/70 or 0.123 of the mean annual discharge.

6. By entering a 7Q10 of 0.123 of mean annual flow on the abscissa scale of the draft-storage diagrams for Region B (figs. 5a, b, c, d, e), draft rates for various storage values can be read from the ordinate scale for frequencies of 2, 5, 10, 20, and 30 years. A summary of these data for a 10-year frequency follows:

Draft rate		Storage required	
(1)	(2)	(3)	(4)
Ratio to mean annual flow	Cubic feet per second (1) x 70	Ratio to mean annual runoff	Acre-feet (3) x 50,700
0.15	10.5	0.0009	45
.18	12.6	.0078	142
.2	14	.0042	212
.3	21	.023	1,170
.4	28	.052	2,640
.5	35	.11	5,580
.6	42	.18	9,130

These data can be plotted and curves drawn similar to those in figure 3. By knowing the draft rate required, the storage capabilities of the site, and the frequency of deficiency of storage that can be tolerated, a detailed analysis can be made. For instance, if computations are based on data for a 10-year frequency, storage will be inadequate to maintain the design draft rate on the average of once in 10 years. Estimates should also be made of seepage and evaporation losses and sediment accumulation that would reduce storage capacity, so that adjustments can be made to provide the required storage capacity.

Procedures outlined above are not applicable to streams where flow is materially affected by regulation or diversion.

If very few base-flow measurements are available, they may still be compared with a nearby continuous-record gaging station. If concurrent base flow per square mile is the same or nearly the same at the two sites, one may infer that low-flow characteristics (per square mile) are nearly the same. On the other hand, if flow per square mile is significantly different, one can assume that the ratio between the two flows will be maintained at some characteristic rate of flow, such as the minimum 7-day flow with a 10-year frequency. This method has been called the flow-ratio method (Thomson and Carter, 1963). Caution should be used in applying this method to avoid extending the relation too far. Estimates of 10-year frequency flow events are not likely to be reliable if determined by use of high base flows.

Base-flow measurements have been obtained at more than 1,500 stream sites in Georgia. Data for these sites are not included in this report, but they have been published in data reports of the U.S. Geological Survey and are available for reference in U.S. Geological Survey files.

Rough estimates of 7-day, 10-year low flows may be made on the basis of characteristics of nearby gaged sites. The 7-day, 10-year low-flow data for many sites are listed in table 2, and they are plotted on plate 1. These will provide a range of probable rates of 7-day average flow at the ungaged site for a 10-year recurrence interval. However, if this method is used, estimates should be based on nearby gaging stations that represent local streamflow conditions. The use of gaging stations on large streams should be avoided because they represent the integrated result of runoff from a large area.

A special problem related to storage arises where many of the streams used for wastewater disposal frequently diminish to little or no flow. This situation is fairly common in Region D, in south Georgia. Under these circumstances, if the draft-storage diagrams are used as an aid for design of a lagoon for temporary storage of wastewater during droughts, it is obvious that because the receiving stream is frequently dry, the low-flow index of that stream is likely to be zero. A figure of zero cannot be entered on the logarithmic abscissa scales of the draft-storage diagrams. However, it may be noted on the draft-storage diagrams of Region D (figs. 7a, b, c, d, e) that for small values of the flow-index (abscissa scale) the storage curves are very nearly horizontal. This means that, in this range, the storage requirement is, for practical purposes, independent of the low-flow index.

The volume of storage required to maintain a given draft rate may be estimated simply by noting the value of the storage curve intersecting the left ordinate axis, the draft-rate axis, of the diagram at the desired draft rate. A storage estimate by this method is the best that can be obtained for such streams using the regional data available.

General Utility of the Data

Data and methods of application, as presented in this report, are expected to be useful for development of small and medium streams having less than 1,000 mi^2 of drainage area. This report is intended for reconnaissance-type studies to determine the suitability of a given stream site, or the relative merits of several alternative stream sites. The curves herein provide the best available estimate of the volume of storage that will be required on an ungaged stream. Flows of very large streams are, generally, not amenable to regional analysis methods. Also, most of the large rivers in Georgia have already been extensively developed by construction of storage reservoirs. Any additional projects on large streams will likely be complex and costly and will require an intensive engineering study.

Increasing demands for water supplies on small and medium size streams and the resulting requirements for low-flow augmentation are the most obvious source of demands for draft-storage analyses. However, this is not the only type of need that such analyses can supply. At present, many operators of municipal and industrial wastewater treatment facilities on streams having insufficient flows during droughts are likely to consider alternatives to the considerable expense of high levels of waste treatment. One alternative is low-flow augmentation provided from a storage reservoir on the stream. A more likely solution is to build an off-channel wastewater storage lagoon in which all or part of the treated wastewater would be stored during periods when streamflow is inadequate to provide the dilution required to meet water-quality standards. In this situation, draft-storage curves could also be helpful. This application is an extension and modification of a method previously proposed by G. G. Goddard (U.S. Geological Survey, written commun., 1970).

Consider this example:

Water-quality standards are to be maintained in a stream below a wastewater outfall during droughts having recurrence intervals up to 10 years. The statistics are:

A. Drainage area of receiving stream, 54 mi^2.

B. Index flow (7Q10) of stream, 8.6 ft^3/s.

C. Average rate of effluent flow, 3.5 ft^3/s.

D. Desired dilution factor, 3 parts streamflow to 1 part wastewater flow.

E. Streamflow required to maintain dilution, 10.5 ft^3/s.

From draft-storage curves, the storage required to augment low flow and maintain the desired dilution rate is 45 acre-ft (plus allowance for evaporation and seepage losses). The computation of this storage estimate is demonstrated in the section, "Determination of Storage Required at Potential Reservoir Sites."

If, instead of using low-flow augmentation, off-channel storage of the effluent was the preferred method, then the volume of storage required would be 15 acre-ft, one-third of the flow rate required for dilution because only the wastewater for which dilution water was not available in the stream would have to be stored.

The latter method is the one most likely to be selected because it requires a smaller reservoir, eliminates the need for a flood spillway, and eliminates other costs associated with construction of a reservoir on a flowing stream.

This example is simplified because it was assumed that the dilution factor was constant. In practice, the dilution factor would vary depending on stream temperature and other wastewater assimilation factors. This complication does not diminish the need for the draft-storage curves in seeking a solution. Probable ranges of stream temperature during the low-flow season and probable frequencies of occurrence of various temperatures could be estimated by statistical analyses of existing records. The final solution would likely involve joint-probability analyses of rates of streamflow and stream temperatures. Such analyses, while more complex than the example given here, would not differ greatly in principle.

A third alternative is disposal of treated wastewater by "land treatment," spraying wastewater on land, which is under consideration in some areas and in use in others. The total amount of land required and total cost of this method would be minimized if the amount of wastewater disposed of on land was only that which could not be immediately discharged to a receiving stream during time of low flow. If this method is used, the volume of water that would be sprayed on land is the same as the volume that would be temporarily impounded in an off-channel storage facility in the example described above. As far as streamflow and storage volume are concerned, the only difference between the land-treatment method and the off-channel-storage method is that in land treatment there is no stored effluent to be discharged to the receiving stream during high-flow periods.

Clearly, the problem of computing the total volume of wastewater to be disposed of by the land-treatment method during a drought is essentially the same as the problem of computing reservoir volume needed to store the wastewater temporarily. This computation method is described in the section, "Determination of Storage Required at Potential Reservoir Sites." Draft-storage curves are highly useful in making preliminary computations to determine a solution.

SUMMARY

The storage required for a specified draft rate not exceeding 60 percent of the mean annual flow can be estimated by use of draft-storage relations presented in this report except for areas where physical limitations of available storage sites require the use of lower draft rates. Diverse hydrologic conditions necessitated separate storage analyses of streamflow

data in each of four regions in the State, conforming, in part, to physiographic provinces. These analyses supersede previously available draft-storage analyses which were not on a frequency basis, or were applicable only to limited areas.

This report describes previously unpublicized methods for using draft-storage curves in the design process of off-channel storage or land-treatment facilities for effluents from wastewater treatment plants. This significantly extends the usefulness of draft-storage analyses to include wastewater treatment plant design as well as water-supply problems. The report also presents a method for making estimates of storage requirements in problem areas, such as in much of south Georgia, where wastewater receiving streams are frequently in a condition of no flow and, therefore, do not have a low-flow index for use in the conventional method for making storage-requirement estimates.

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Table 2.— Flow characteristics at selected sites on Georgia streams

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Savannah River Basin									
02177000	Chattooga River near Clayton	Lat 34°48'50", long 83°18'22", Oconee County, S.C., on left bank 150 ft downstream from bridge on U.S. Highway 76, 2.8 mi upstream from Stekoa Creek, 7 mi southeast of Clayton, 9 mi downstream from War Woman Creek, and 9 mi upstream from confluence with Tallulah River.	D	207	630	3.04	120	0.19	B
02178400	Tallulah River near Clayton	Lat 34°53'25", long 83°31'50", Rabun County, on right bank 100 ft downstream from county highway bridge, 120 ft downstream from Persimmon Creek, 8 mi upstream from Burton Dam, and 10.3 mi west of Clayton.	D	56.5	181	3.20	54	.30	B
02180400	Tiger Creek at Lakemont	Lat 34°47'04", long 83°24'58", Rabun County, on county highway bridge, at Lakemont.	P	a26	(70.2)	(2.70)	12	.17	B
02182000	Panther Creek near Toccoa	Lat 34°40'40", long 83°20'43", Stephens County, on left bank at Yonah Settlement, 0.2 mi upstream from mouth, and 7 mi north of Toccoa.	D	32.5	67.7	2.08	14	.21	B
02188500	South Beaverdam Creek at Dewy Rose	Lat 34°10'52", long 82°56'38", Elbert County, on left bank 50 ft upstream from highway bridge, 1 mi northeast of Dewy Rose, and 3 mi upstream from confluence with North Beaverdam Creek.	D	35.8	50.5	1.41	5.4	.11	B
02191200	Hudson River at Homer	Lat 34°20'15", long 83°29'17", Banks County, on downstream side of center pier of bridge on State Highway 15 at Homer, 3.6 mi upstream from Webb Creek, and 10.8 mi upstream from Grove Creek.	D	61.1	105	1.72	28	.27	B
02191300	Broad River above Carlton	Lat 34°04'24", long 83°00'12", Madison County, at State Highway 72, 2.8 mi northeast of Carlton.	P	760	(1,100)	(1.45)	180	.16	B
02191700	South Fork Broad River near Comer	Lat 34°03'40", long 83°09'22", Madison County, at State Highway 72, 2 mi west of Comer.	P	a89	(120)	(1.35)	11	.085	B
02191800	Falling Creek near Fortsonia	Lat 34°00'14", long 82°48'32", Elbert County, at county road 1.8 mi southwest of Fortsonia.	P	a44	(48.4)	(1.10)	1.9	.039	B
02191900	Long Creek near Lexington	Lat 33°50'30", long 83°03'50", Oglethorpe County, at State Highway 10, 3.5 mi southeast of Lexington.	P	a31	(34.1)	(1.10)	3.6	.11	B
02192000	Broad River near Bell	Lat 33°58'27", long 82°46'12", Elbert County, at downstream side of main channel pier of bridge on State Highway 17, 0.5 mi downstream from Long Creek, 1 mi south of Bells Crossroads, and 12 mi southeast of Elberton.	D	a1,430	1,740	1.22	200	.11	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Savannah River Basin--Continued									
02193500	Little River near Washington	Lat 33°36'40", long 82°44'40", Wilkes County, near left bank on downstream side of highway bridge pier, 700 ft downstream from Brady Creek, 4 mi downstream from Georgia Railroad bridge, 6 mi upstream from Williams Creek, and 9 mi south of Washington.	D	291	269	0.92	5.2	0.019	B
02195300	Greenbrier Creek near Appling	Lat 33°34'30", long 82°19'02", Columbia County, at State Highway 47, 2 mi north of Appling.	P	33.3	(30.0)	(.90)	.83	.028	B
02196900	Butler Creek near Augusta	Lat 33°23'06", long 82°01'35", Richmond County, at State Highway 21, 6 mi south of Augusta.	P	29.4	(25.6)	(.87)	9.4	.37	C
02197200	McBean Creek at McBean	Lat 33°14'31", long 81°56'51", Richmond County, at state Highway 56, at McBean.	P	70	(59.5)	(.85)	31	.52	C
02197530	Sweetwater Creek near Bonesville	Lat 33°26'17", long 82°27'04", McDuffie County, at State Highway 10, 0.8 mi northwest of Bonesville.	P	7.46	(7.1)	(.95)	.21	.030	C
02197560	Sandy Run Creek near Blythe	Lat 33°17'56", long 82°15'13", Richmond County, at State Highway 4, 3 mi west of Blythe.	P	33.2	(28.5)	(.86)	12	.42	C
02197600	Brushy Creek near Wrens	Lat 33°10'37", 82°18'20", Jefferson County, at right bank on downstream side of bridge on State Highway 80, 5 mi southeast of Wrens, and 5.5 mi upstream from Little Brushy Creek.	D	28.0	25.2	.90	6.6	.26	C
02198000	Brier Creek at Millhaven	Lat 32°56'00", long 81°39'05", Screven County, near right bank on downstream side of pier of highway bridge at Millhaven, 8.5 mi upstream from Beaver Dam Creek.	D	646	628	.97	120	.19	C
Ogeechee River Basin									
02199700	South Fork Ogeechee River near Crawfordville	Lat 33°31'00", long 82°54'22", Taliaferro County, at State Highway 22, 2.8 mi south of Crawfordville.	P	a33	(31.6)	(.96)	1.2	.038	C
02200000	Ogeechee River at Jewell	Lat 33°17'48", long 82°46'40", Warren County, at State Highway 16, at Jewell.	P	242	(235)	(.97)	4.8	.020	C
02200500	Ogeechee River near Louisville	Lat 32°58'03", long 82°23'26", Jefferson County, at bridge on U.S. Highway 1, 1 mi downstream from Louisville and Wadley Railroad bridge, and 2 mi south of Louisville.	D	a800	844	1.06	98	.12	C
02201300	Chew Mill Creek near Herndon	Lat 32°49'28", long 82°05'30", Jenkins County, at State Highway 17, 2.25 mi northeast of Herndon.	P	a23	(20.5)	(.89)	.86	.042	C

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Ogeechee River Basin--Continued									
02202000	Ogeechee River at Scarboro	Lat 32°42'38", long 81°52'46", Jenkins County, on left bank 15 ft downstream from abandoned highway bridge at Scarboro, 3.5 mi downstream from Sculls Creek, 6.5 mi upstream from Horse Creek and 7.5 mi southeast of Millen.	D	a1,940	1,780	0.91	180	0.10	C
02202500	Ogeechee River near Eden	Lat 32°11'29", long 81°24'58", Effingham County, on right bank 600 ft downstream from bridge on U.S. Highways 25, 80, and 280, 2 mi west of Eden, 2 mi upstream from Seaboard Coast Line Railroad bridge, and 3 mi upstream from Black Creek.	D	a2,650	2,380	.89	240	.10	C
02202800	Canoochee Creek near Swainsboro	Lat 32°36'19", long 82°15'21", Emanuel County, at U.S. Highway 80, 4.75 mi east of Swainsboro.	P	a55	(49.5)	(.90)	0	--	D
02203000	Canoochee River near Claxton	Lat 32°11'05", long 81°53'20", Evans County, on right bank 400 ft upstream from bridge on State Highway 73, 2 mi northeast of Claxton, and 10 mi upstream from Lotts Creek.	D	a555	467	.84	1.6	.0034	D
Altamaha River Basin									
02204300	Little Cotton Indian Creek near Stockbridge	Lat 33°31'26", long 84°11'21", Henry County, at State Highway 42, 2.5 mi southeast of Stockbridge.	P	a50	(57.5)	(1.15)	5.1	.089	B
0220500	Wildcat Creek near Lawrenceville	Lat 34°00'08", long 84°00'18", Gwinnett County, on left bank 75 ft upstream from highway bridge, 0.7 mi upstream from mouth, 1.1 mi east of State Highway 20, and 3.2 mi north of Lawrenceville.	D	1.59	2.1	1.32	.04	.019	B
02205500	Pew Creek near Lawrenceville	Lat 33°56'05", long 84°01'00", Gwinnett County, on right bank 20 ft upstream from highway bridge, 1 mi upstream from Redland Creek, and 2.2 mi southwest of Lawrenceville.	D	2.23	3.3	1.48	.20	.061	B
02206000	Shetley Creek near Norcross	Lat 33°57'20", long 84°09'50", Gwinnett County, on right bank 150 ft upstream from highway bridge, 1 mi upstream from mouth, and 2.8 mi northeast of Norcross.	D	.98	1.3	1.34	.038	.029	B
02206500	Yellow River near Snellville	Lat 33°51'11", long 84°04'45", Gwinnett County, on left bank at downstream side of county highway bridge, 3.2 mi west of Snellville, 4 mi downstream from Sweetwater Creek, 6.5 mi northeast of town of Stone Mountain, and 7.5 mi upstream from Stone Mountain Creek.	D	134	166	1.23	5.0	.030	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Altamaha River Basin--Continued									
02207000	Garner Creek near Snellville	Lat 33°51'45", long 84°05'50", Gwinnett County, on left bank 100 ft downstream from highway culvert, 0.9 mi upstream from mouth, and 4.5 mi west of Snellville.	D	5.54	7.6	1.37	0.76	0.10	B
02207500	Yellow River near Covington	Lat 33°36'52", long 83°54'55", Newton County, near left bank at downstream end of pier of bridge on State Highway 12, 3.5 mi northwest of Covington.	D	378	468	1.24	21	.045	B
02208300	Alcovy River near Monroe	Lat 33°48'20", long 83°45'34", Walton County, at State Highway 10, 2.8 mi west of Monroe.	P	a99	(128)	(1.30)	8.9	.069	B
02211200	Big Sandy Creek near Flovilla	Lat 33°11'16", long 83°50'09", Butts-Monroe Counties, at State Highway 87, 5.8 mi southeast of Flovilla.	P	a57	(63.8)	(1.12)	4.4	.069	B
02211300	Towaliga River near Jackson	Lat 33°15'50", long 84°04'17", Butts County, at downstream end of right bank pier of bridge on State Highway 16, 3 mi upstream from Cabin Creek, and 6.5 mi west of Jackson.	D	a105	118	1.12	12	.10	B
02212600	Falling Creek near Juliette	Lat 33°05'59", long 83°43'25", Jones County, on left bank 100 ft upstream from highway bridge, 4 mi upstream from Caney Creek, and 5.1 mi east of Juliette.	D	72.2	79.1	1.09	.25	.0032	B
02212700	Falling Creek near Dames Ferry	Lat 33°02'12", long 83°42'34", Jones County, at county road, 1.5 mi northeast of Dames Ferry.	P	108	(119)	(1.10)	.42	.0035	B
02213050	Walnut Creek near Gray	Lat 32°58'20", long 83°37'08", Jones County, on downstream side of right bank pier of abandoned bridge, 500 ft downstream from bridge on State Highway 18, 1.4 mi upstream from Bonner Creek, and 5.5 mi southeast of Gray.	D	a29	32.0	1.10	.71	.022	B
02213100	Walnut Creek near Macon	Lat 32°52'46", long 83°36'42", Bibb County, at old bridge, 1,100 ft upstream from bridge on U.S. Highway 129, 1.5 mi north of Macon city limits.	P	a79	79.0	1.00	.40	.0051	C
02213200	Swift Creek near Macon	Lat 32°48'06", long 83°33'55", Bibb County, at crossing of Macon, Dublin, and Savannah Railroad, 4.2 mi southeast of Macon.	P	a11	(8.8)	(.80)	3.2	.36	C
02213300	Tobesofkee Creek near Forsyth	Lat 33°01'03", long 84°01'08", Monroe County, at county road, about 4 mi southwest of Forsyth.	P	27.7	(33.2)	(1.20)	2.7	.081	B
02213400	Little Tobesofkee Creek near Forsyth	Lat 32°57'09", long 84°02'35", Monroe County, at State Highway 83, 8.2 mi southwest of Forsyth.	P	16.8	(20.2)	(1.20)	1.0	.050	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Altamaha River Basin--Continued									
02213500	Tobesofkee Creek near Macon	Lat 32°48'32", long 83°45'30", Bibb County, on right bank at downstream end of pier of bridge on U.S. Highway 80, 8 mi west of Macon, and 14 mi upstream from mouth.	D	182	196	1.07	8.5	0.043	B
02214000	Echeconee Creek near Macon	Lat 32°45'54", long 83°50'42", Crawford-Bibb Counties, at county road, 13 mi southwest of Macon.	P	147	(154)	(1.05)	3.0	.019	C
02214500	Big Indian Creek at Perry	Lat 32°27'20", long 83°44'21", Houston County, at municipal waterworks at Perry, on left bank 300 ft downstream from bridge on U.S. Highway 41, 1 mi downstream from Bay Creek, and 3.2 mi upstream from Flat Creek.	D	108	85.3	.79	21	.25	C
02215100	Big Creek near Hawkinsville	Lat 32°14'23", long 83°30'04", Pulaski County, at State Highway 27, 3.5 mi southwest of Hawkinsville.	P	a155	(163)	(1.05)	5.5	.034	C
02216000	Little Ocmulgee River at Towns	Lat 32°00'28", long 82°45'10", Telfair County, at bridge on State Highway 134 at Towns, and 9 mi upstream from mouth.	D	325	365	1.11	2.6	.0071	D
02217000	Allen Creek at Talmo	Lat 34°11'34", long 83°43'11", Jackson County, 400 ft upstream from bridge on State Highway 11, 0.5 mi north of Talmo, and 5 mi upstream from confluence with Pond Fork.	D	17.3	26.9	1.56	2.4	.089	B
02217200	Middle Oconee River near Jefferson	Lat 34°05'42", long 83°36'21", Jackson County, at State Highway 11, 2.2 mi southwest of Jefferson.	P	128	(181)	(1.42)	12	.066	B
02217300	Cedar Creek near Winder	Lat 34°00'43", long 83°44'19", Barrow County, at county road, 1.8 mi west of Winder.	P	a9.9	(13.4)	(1.35)	.21	.016	B
02217500	Middle Oconee River near Athens	Lat 33°56'48", long 83°25'22", Clarke County, on left bank 0.5 mi upstream from U.S. Highway 29, 2 mi west of Athens, and 5 mi upstream from Barber Creek.	D	398	505.0	1.27	45	.089	B
02217600	North Oconee River near Maysville	Lat 34°13'49", long 83°34'07", Jackson County, at county road, 1.5 mi south of Maysville.	P	a70	(105)	(1.50)	16	.15	B
02217700	Sandy Creek at Athens	Lat 33°59'10", long 83°22'38", Clarke County, at State Highway 24, near Athens.	P	a61	(82.4)	(1.35)	3.8	.046	B
02218500	Oconee River near Greensboro	Lat 33°34'52", long 83°16'22", Greene County, on right bank 300 ft downstream from bridge on State Highway 12, 1 mi downstream from Town Creek, 5 mi upstream from Apalachee River, 5 mi west of Greensboro, and 12 mi downstream from Barnett Shoals Dam.	D	a1,090	1,310	1.20	150	.11	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Altamaha River Basin--Continued									
02218700	Apalachee River near Bethlehem	Lat 33°54'02", long 83°43'25", Barrow County, at State Highway 11, 2.5 mi south of Bethlehem.	P	a54	(70.2)	(1.30)	8.6	0.12	B
02219400	Big Sandy Creek near Apalachee	Lat 33°40'04", long 83°26'40", Morgan County, at State Highway 24, 1.5 mi southwest of Apalachee.	P	a61	(70.2)	(1.15)	6.5	.093	B
02219500	Apalachee River near Buckhead	Lat 33°36'31", long 83°20'58", Morgan County, at downstream side of right bank pier of bridge on State Highway 12, 2 mi downstream from Hard Labor Creek, 3 mi northeast of Buckhead, and 9 mi upstream from mouth.	D	436	549	1.26	52	.095	B
02220400	Beaverdam Creek near Greensboro	Lat 33°28'36", long 83°10'56", Greene County, at county road, 6.8 mi south of Greensboro.	P	a44	(42.7)	(.97)	0	--	B
02220550	Whitten Creek near Sparta	Lat 33°23'13", long 83°01'29", Hancock County, in right bank 100 ft upstream from bridge on State Highway 15, 5 mi upstream from mouth, and 8.5 mi northwest of Sparta.	D	a15	13.7	.91	.88	.064	B
02220900	Little River near Eatonton	Lat 33°18'47", long 83°26'17", Putnam County, at State Highway 16, 3 mi west of Eatonton.	P	262	(283)	(1.08)	13	.046	B
02221000	Murder Creek near Monticello	Lat 33°24'56", long 83°39'43", Jasper County, on left bank 350 ft upstream from bridge on State Highway 229, 0.8 mi upstream from Pittman Creek, 1.8 mi downstream from confluence of Robinson and Sheppard Creeks, and 8 mi north of Monticello.	D	a24	25.0	1.04	2.1	.084	B
02221300	Pearson Creek near Monticello	Lat 33°19'18", long 83°41'57", Jasper County, at State Highway 11, 1.5 mi northwest of Monticello.	P	a5.5	(5.8)	(1.03)	.42	.072	B
02223020	Fishing Creek near Milledgeville	Lat 33°04'50", long 83°16'11", Baldwin County, at county road, 2.5 mi west of Milledgeville.	P	a60	(59.4)	(.99)	1.7	.029	C
02223300	Big Sandy Creek near Jeffersonville	Lat 32°48'15", long 83°24'58", Twiggs County, on downstream side of highway bridge on county road, 2.9 mi upstream from Myricks Mill, and 9 mi northwest of Jeffersonville.	D	a31	23.8	.77	3.2	.13	C
02224000	Rocky Creek near Dudley	Lat 32°29'38", long 83°08'49", Laurens County, on downstream side of highway bridge, 3.2 mi upstream from Buckhorn Branch, and 5 mi southwest of Dudley.	D	62.9	60.0	.94	.62	.010	C
02224100	Turkey Creek at Garretta	Lat 32°27'16", long 82°56'35", Laurens County, at State Highway 31, at Garretta.	P	316	(350)	(1.11)	4.4	.013	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Altamaha River Basin--Continued									
02225100	Cobb Creek near Lyons	Lat 32°02'06", long 82°22'44", Toombs County, at State Highway 56, 1.8 mi northeast of Cedar Crossing, and 13 mi northeast of Lyons.	P	a69	(62.1)	(0.90)	0	--	D
02225300	Ohoopee River near Oak Park	Lat 32°23'26", long 82°18'46", Emanuel County, at U.S. Highway 1, 2.5 mi north of Oak Park.	P	a620	(552)	(.89)	10	.018	D
02225500	Ohoopee River near Reidsville	Lat 32°04'42", long 82°10'39", Tattnall County, on downstream side of pier near center of span of bridge on State Highway 56, 0.5 mi downstream from Brazells Creek, 1.5 mi downstream from Rocky Creek, 3.5 mi west of Reidsville, 6 mi downstream from Pendleton Creek, and 14 mi upstream from mouth.	D	a1,110	996	.89	34	.034	D
02226100	Penholoway Creek near Jesup	Lat 31°34'00", long 81°50'18", Wayne County, on downstream side of bridge on U.S. Highway 341, 4 mi southeast of Jesup, and about 9.5 mi upstream from mouth.	D	a210	206	.98	0	--	D
Satilla River Basin									
02226200	Satilla River near Douglas	Lat 31°24'45", long 82°51'01", Coffee County, at U.S. Highway 441, 6.5 mi south of Douglas.	P	a235	(204)	(.87)	0	--	D
02226500	Satilla River near Waycross	Lat 31°14'17", long 82°19'29", Ware County, on downstream side of pier near center of span of bridge on State Highway 38, 3 mi northeast of Waycross, and 16 mi upstream from Alabaha River.	D	a1,200	989.0	.82	13	.013	D
02227000	Hurricane Creek near Alma	Lat 31°34'00", long 82°27'50", Bacon County, near center of span on downstream side of highway bridge on U.S. Highway 1, 1.5 mi north of Alma, and 11 mi upstream from Ten Mile Creek.	D	a150	139	.92	0	--	D
02227100	Little Hurricane Creek near Alma	Lat 31°29'47", long 82°31'45", Bacon County, at State Highway 64, 5 mi southwest of Alma.	P	a61	(51.8)	(.85)	0	--	D
02227200	Little Hurricane Creek below Alma	Lat 31°25'25", long 82°25'59", Bacon County, at State Highway 4, 8.5 mi south of Alma.	P	111	(93.2)	(.84)	0	--	D
02227300	Alabaha River near Blackshear	Lat 31°19'00", long 82°13'36", Pierce County, at State Highway 38, 1 mi northeast of Blackshear.	P	438	(372)	(.85)	1.7	.0046	D
02227400	Big Satilla Creek near Alma	Lat 31°39'24", long 82°25'55", Bacon County, at State Highway 4, 8.2 mi north of Alma.	P	112	(100)	(.90)	0	--	D
02227430	Little Satilla Creek at Odum	Lat 31°40'00", long 82°02'23" Wayne County, at State Highway 27 at Odum, 10 mi northwest of Jesup.	P	a49	(39.2)	(.80)	0	--	D

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Satilla River Basin--Continued									
02227470	Little Satilla Creek near Jesup	Lat 31°33'44", long 81°59'15", Wayne County, at State Highway 99, 7 mi southwest of Jesup.	P	a83	(70.5)	(0.85)	0	--	D
02227500	Little Satilla River near Offerman	Lat 31°27'04", long 82°03'17", Pierce County, at right bank pier of steel truss span of Seaboard Coast Line Railroad bridge, 1,500 ft downstream from bridge on State Highway 38, 4 mi northeast of Offerman, and 16 mi upstream from mouth.	D	646	469	.73	.23	0.00049	D
02228000	Satilla River at Atkinson	Lat 31°13'16", long 81°52'03", Brantley County, on left bank piling 25 ft upstream from bridge on U.S. Highway 84, 400 ft downstream from Seaboard Coast Line Railroad bridge, and 1 mi west of Atkinson.	D	a2,790	2,310	.82	38	.016	D
St. Marys River Basin									
02228500	North Prong St. Marys River at Moniac	Lat 30°31'03", long 82°13'50", in NW quarter sec.8, T.1 N., R.21 E., Baker County, Fla., near right bank at upstream side of bridge on State Highway 2 and 94, 0.2 mi upstream from Georgia Southern & Florida Railway bridge, 0.4 mi west of Moniac, 1.0 mi downstream from Moccasin Creek, and 122 mi upstream from mouth of St. Marys River.	D	*a160	165	1.03	0	--	D
Suwannee River Basin									
02314500	Suwannee River at Fargo	Lat 30°40'50", long 82°33'38", Clinch County, on downstream side of right bank pier of bridge on U.S. Highway 441 at Fargo, 4 mi upstream from Suwanoochee Creek, and 12 mi downstream from Mixons Ferry damsite.	D	*a1,260	1,060	.84	1.2	.0011	D
02314600	Suwanoochee Creek at DuPont	Lat 30°59'09", long 82°52'50", Clinch County, at U.S. Highway 84, at DuPont.	P	143	(122)	(.85)	0	--	D
02315700	Alapaha River at Rebecca	Lat 31°48'55", long 83°28'26", Ben Hill County, at State Highway 90, 1 mi east of Rebecca.	P	112	(106)	(.95)	0	--	D
02315900	Deep Creek near Ashburn	Lat 31°43'49", long 83°35'00", Turner County, at State Highway 112, 4.5 mi east of Ashburn.	P	137	(123)	(.90)	0	--	D
02316000	Alapaha River near Alapaha	Lat 31°23'03", long 83°11'33", Berrien County, near right bank on downstream side of bridge on State Highway 50, 2 mi east of Alapaha, and 6 mi upstream from Willacoochee River.	D	663	526	.79	.10	.00019	D

* Includes part of watershed in Okefenokee Swamp, which is indeterminate.
a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams —Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Suwannee River Basin--Continued									
02316200	Willacoochee Creek near Ocilla	Lat 31°30'06", long 83°09'43", Irwin County, at State Highway 90, 8 mi southeast of Ocilla.	P	a90	(80.1)	(0.89)	0	--	D
02317500	Alapaha River at Statenville	Lat 30°42'14", long 82°02'00", Echols County, at downstream side of left bank pier of bridge on State Highway 94, 0.2 mi west of Statenville.	D	a1,400	1,070	.76	25	0.023	D
02317600	Little River near Statenville	Lat 30°42'12", long 83°07'21", Echols County, at county road, 5.5 mi west of Statenville.	P	199	(179)	(.90)	2.1	.012	D
02317700	Withlacoochee River near Nashville	Lat 31°11'54", long 83°16'21", Berrien County, at State Highway 76, 1.5 mi southwest of Nashville.	P	132	(112)	(.85)	0	--	D
02317800	Little River near Tifton	Lat 31°26'21", long 83°33'39", Tift County, at U.S. Highway 82, 3 mi west of Tifton.	P	a145	(126)	(.87)	0	--	D
02317900	Ty Ty Creek at Ty Ty	Lat 31°28'22", long 83°39'47", Tift County, at U.S. Highway 82, 1 mi west of Ty Ty.	P	a47	(40.0)	(.85)	0	--	D
02318000	Little River near Adel	Lat 31°09'18", long 83°32'38", Cook County, on right bank 500 ft downstream from bridge on State Highway 37, 0.5 mi downstream from Georgia & Florida Railroad bridge, 5.5 mi upstream from Bear Creek, 6 mi downstream from Warrior Creek, and 7 mi west of Adel.	D	577	496	.86	1.2	.0024	D
02318500	Withlacoochee River near Quitman	Lat 30°47'36", long 83°27'13", Brooks County, at bridge on U.S. Highway 84, 800 ft downstream from Seaboard Coast Line Railroad bridge, 6 mi east of Quitman.	D	a1,480	1,140	.77	8.0	.0070	D
02319000	Withlacoochee River near Pinetta, Fla.	Lat 30°35'43", long 83°15'35", in NW quarter sec.7, T.2N., R.11E., Madison County, on right bank 30 ft downstream from highway bridge, 0.1 mi downstream from small tributary, 0.3 mi west of Bellville, 5.6 mi east of Pinetta, and 22 mi upstream from mouth.	D	a2,120	1,700	.80	90	.053	D
Ochlockonee River Basin									
02327200	Ochlockonee River at Moultrie	Lat 31°10'58", long 83°48'32", Colquitt County, at State Highway 37, at Moultrie.	P	a96	(85.4)	(.89)	0	--	D
02327500	Ochlockonee River near Thomasville	Lat 30°52'32", long 84°02'44", Thomas County, on downstream side of left bank pier of bridge on U.S. Highway 84, 2 mi upstream from Seaboard Coast Line Railroad bridge, 4 mi upstream from Barnetts Creek, 5 mi northwest of Thomasville, and 6 mi downstream from Little Ochlockonee River.	D	a550	522	.95	4.9	.0094	D

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Ochlockonee River Basin--Continued									
02327700	Barnetts Creek near Thomasville	Lat 30°54'18", long 84°04'34", Grady County, at county road, 7.5 mi northwest of Thomasville.	P	104	(106)	(1.02)	0.26	0.0025	D
02327900	Wolf Creek near Whigham	Lat 30°53'36", long 84°17'26", Grady County, at U.S. Highway 84, 2.2 mi northeast of Whigham.	P	a19	(19.2)	(1.10)	.72	.038	D
02328000	Tired Creek near Cairo	Lat 30°51'54", long 84°15'46", Grady County, on left bank 140 ft upstream from highway bridge, 0.2 mi downstream from Wolf Creek, 1 mi downstream from Seaboard Coast Line Railroad bridge, and 3 mi west of Cairo.	D	a60	67.8	1.13	.76	.011	C
02329000	Ochlockonee River near Havana, Fla.	Lat 30°33'14", long 84°23'03", in SE quarter sec.24, T.2N., R.2W., Leon County, near left bank on downstream side of downstream bridge on divided U.S. Highway 27, 0.8 mi upstream from Seaboard Coast Line Railroad bridge, 4 mi downstream from Mill Creek, 5 mi southeast of Havana, and 94 mi upstream from mouth.	D	†a1,140	1,020	.89	28	.027	D
Apalachicola River Basin									
02331000	Chattahoochee River near Leaf	Lat 34°34'37", long 83°38'09", Habersham County, on left bank 700 ft upstream from bridge on State Highway 115, 1.5 mi east of Leaf, 2.5 mi downstream from Blue Creek, 3 mi upstream from Soque River, 7.5 mi southwest of Cleveland, and at mile 405.6.	D	a150	407	2.71	90	.22	B
02331300	Sutton Mill Creek near Clarkesville	Lat 34°37'37", long 83°32'23", Habersham County, at county road, 1 mi northwest of Clarkesville.	P	a3.1	(6.2)	(2.00)	26	.42	B
02331600	Chattahoochee River near Cornelia	Lat 34°32'27", long 83°37'14", White County, on downstream side of Duncan Bridge, 1 mi downstream from Soque River, 6 mi northwest of Cornelia, and at mile 401.4.	D	315	766	2.43	260	.34	B
02332200	Flat Creek near Clermont	Lat 34°26'57", long 83°45'51", Hall County, at State Highway 52, 2 mi southeast of Clermont.	P	a9.0	(18.0)	(2.00)	2.0	.11	B
02333000	Chattahoochee River near Gainesville	Lat 34°19'37", long 83°52'30", Hall County, 1,100 ft upstream from State Highway 53, and 4 mi northwest of Gainesville. Now in Lake Sidney Lanier.	D	559	1,240	2.22	280	.23	B
02333500	Chestatee River near Dahlonega	Lat 34°31'41", long 83°56'23", Lumpkin County, on left bank 250 ft upstream from Bearden Bridge on State Highway 52, 2 mi downstream from Ballplay Creek, 2.5 mi east of Dahlonega, and 3.5 mi upstream from Yahoola Creek.	D	153	360	2.35	69	.19	B

† At site used prior to January 1929.
a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Apalachicola River Basin--Continued									
02333600	Yahoola Creek at Dahlonega	Lat 34°32'41", long 83°58'08", Lumpkin County, at State Highway 52, at Dahlonega.	P	31.3	(71.9)	(2.30)	18	0.25	B
02335700	Big Creek near Alpharetta	Lat 34°03'02", long 84°16'10", Fulton County, on left bank at downstream side of county highway bridge, 2.6 mi southeast of Alpharetta, and 9.4 mi upstream from mouth.	D	a72	101	1.39	14	.14	B
02335900	Rottenwoood Creek near Marietta	Lat 33°54'41", long 84°28'43", Cobb County, at Terrell Mill Road, near Marietta.	P	a15	(19.5)	(1.30)	3.6	.18	B
02336100	North Fork Peachtree Creek at Atlanta	Lat 33°50'28", long 84°18'46", DeKalb County, at Clairmont Road, near Atlanta.	P	27.8	(36.7)	(1.32)	.85	.023	B
02336300	Peachtree Creek at Atlanta	Lat 33°49'10", long 84°24'28", Fulton County, on downstream side of bridge on Northside Drive at Atlanta, 0.4 mi downstream from Tanyard Branch, and 4 mi upstream from mouth.	D	86.8	120	1.38	11	.092	B
02336400	Nancy Creek at Atlanta	Lat 33°50'54", long 84°25'58", Fulton County, at West Paces Ferry Road, at Atlanta.	P	38.2	(49.6)	(1.30)	3.7	.075	B
02336800	Sweetwater Creek near Hiram	Lat 33°48'17", long 84°47'10", Paulding County, at county road, 5.5 mi southwest of Hiram.	P	a50	(72.5)	(1.45)	1.5	.021	B
02337000	Sweetwater Creek near Austell	Lat 33°46'22", long 84°36'53", Douglas County, on right bank 100 ft upstream from bridge on Interstate Highway 20, 400 ft upstream from Blair Bridge, 3 mi southeast of Austell, and 5.5 mi upstream from mouth.	D	246	310	1.26	15	.048	B
02337200	Anneewakee Creek near Campbellton	Lat 33°39'55", long 84°41'02", Douglas County, at State Highway 166, 1 mi upstream from mouth.	P	a29	37.7	1.30	3.6	.095	B
02337400	Dog River near Douglasville	Lat 33°39'36", long 84°51'41", Douglas County, at county road, 2.2 mi north of Fair Play.	P	a43	(62.4)	(1.45)	5.8	.093	B
02337500	Snake Creek near Whitesburg	Lat 33°31'46", long 84°55'42", Carroll County, at downstream end of left bank pier of highway bridge at Banning Mills, 1.5 mi north of State Highway 16, 3 mi northwest of Whitesburg, 4 mi downstream from Little Snake Creek, and 7 mi upstream from mouth.	D	a37	55.8	1.51	9.2	.16	B
02338100	Wahoo Creek near Sargent	Lat 33°25'20", long 84°50'27", Coweta County, at county road, 2 mi southeast of Sargent.	P	a16	(20.2)	(1.26)	2.3	.11	B
02338400	Centralhatchee Creek near Franklin	Lat 33°18'58", long 85°06'19", Heard County, at U.S. Highway 27, north of Franklin.	P	a57	(87.8)	(1.54)	13	.15	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Apalachicola River Basin--Continued									
02339000	Yellowjacket Creek near LaGrange	Lat 33°05'27", long 85°03'40", Troup County, at downstream end of right bank pier of bridge on State Highway 219, 1.2 mi downstream from Beech Creek, 2 mi upstream from Jackson Creek, 4.2 mi northwest of LaGrange.	D	182	228	1.25	12	0.053	B
02340100	White Sulphur Springs at White Sulphur Springs	Lat 32°54'47", long 84°48'05", Meriwether County, at State Highway 18, at White Sulphur Springs.	P	22.2	(27.8)	(1.25)	1.2	.043	B
02340500	Mountain Oak Creek near Hamilton	Lat 32°44'28", long 85°04'08", Harris County, on right bank 300 ft upstream from bridge on State Highway 103, 5 mi upstream from mouth, and 11 mi west of Hamilton.	D	61.7	80.0	1.30	68	.085	B
02341200	Ossahatchee Creek near Hamilton	Lat 32°41'18", long 84°51'24", Harris County, at U.S. Highway 27 south of Hamilton.	P	42.6	(55.4)	(1.30)	.14	.0025	B
02341700	Kendall Creek near Upatoi	Lat 32°32'45", long 84°42'54", Muscogee County, at State Highway 22, 1.5 mi east of Upatoi.	P	17.1	(24.0)	(1.40)	.15	.0062	C
02343200	Pataula Creek near Lumpkin	Lat 31°56'03", long 84°48'12", Stewart County, near right bank on downstream side of bridge on U.S. Highway 27, 1.3 mi upstream from Brier Creek, and 8 mi south of Lumpkin.	D	a70	110	1.57	15	.14	C
02344200	Camp Creek near Riverdale	Lat 33°33'50", long 84°25'45", Clayton County, at county road, 1.25 mi southwest of Riverdale.	P	a6.0	(7.2)	(1.20)	1.7	.24	B
02344300	Camp Creek near Fayetteville	Lat 33°31'00", long 84°25'39", Fayette County, on downstream side of bridge on State Highway 85, 3.5 mi upstream from mouth, and 5.2 mi north of Fayetteville.	D	17.2	21.0	1.22	4.2	.20	B
02344400	Flint River above Griffin	Lat 33°18'33", long 84°23'36", Spalding County, at State Highway 92, 3.8 mi south of Woolsey.	P	194	(223)	(1.15)	14	.063	B
02344500	Flint River near Griffin	Lat 33°14'39", long 84°25'45", Spalding County, at downstream side of pier of bridge on State Highway 16, 1.5 mi downstream from Shoal Creek, 5.5 mi upstream from Line Creek, 10 mi west of Griffin, and at mile 304.4.	D	272	353	1.29	15	.042	B
02344600	Line Creek near Aberdeen	Lat 33°23'52", long 84°36'40", Fayette County, at State Highway 54, 1 mi southwest of Aberdeen.	P	a38	(45.6)	(1.20)	1.5	.033	B
02344700	Line Creek near Senoia	Lat 33°19'10", long 84°31'25", Coweta County, on downstream side of bridge on State Highway 85, 2.2 mi northeast of Senoia, 4.1 mi upstream from Whitewater Creek, and 11.2 mi upstream from mouth.	D	a101	121	1.20	6.6	.055	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Apalachicola River Basin--Continued									
02344900	Walnut Creek near Greenville	Lat 33°00'44", long 84°42'34", Meriwether County, at State Highway 41, 1 mi south of Greenville.	P	a4.5	(5.6)	(1.24)	0.50	0.089	B
02345400	Elkins Creek near Molena	Lat 32°58'15", long 84°30'56", Pike County, at county road, 3 mi south of Molena, and 1 mi upstream from mouth.	P	101	(126)	(1.25)	3.6	.029	B
02346400	Potato Creek near Piedmont	Lat 33°01'10", long 84°15'33", Lamar County, at county road, at Piedmont.	P	a96	(120)	(1.25)	2.6	.021	B
02346500	Potato Creek near Thomaston	Lat 32°54'15", long 84°21'45", Upson County, on right bank 300 ft downstream from State Highway 74, 600 ft downstream from Basin Creek, 1,000 ft downstream from Central of Georgia Railway bridge, 1 mi downstream from Ten Mile Creek, and 2.5 mi northeast of Thomaston.	D	186	231	1.24	11	.048	B
02347500	Flint River near Culloden	Lat 32°43'17", long 84°13'57", Upson County, on left bank underneath bridge on U.S. Highway 19, 4 mi upstream from Auchumpkee Creek, 5 mi downstream from Swift Creek, 13 mi southwest of Culloden, and at mile 238.4.	D	a1,850	2,300	1.24	180	.078	B
02348300	Patsiliga Creek at Reynolds	Lat 32°34'20", long 84°05'27", Taylor County, at State Highway 128, 1 mi north of Reynolds.	P	139	(215)	(1.55)	31	.14	C
02349000	Whitewater Creek below Rambulette Creek near Butler	Lat 32°28'02", long 84°15'59", Taylor County, at bridge on U.S. Highway 19 and 6.5 mi south of Butler.	D	93.4	169	1.81	110	.65	C
02349300	Shoal Creek at Tazewell	Lat 32°22'40", long 84°26'46", Marion County, at State Highway 137, at Tazewell.	P	a44	(72.6)	(1.65)	30	.41	C
02349600	Beaver Creek at Montezuma	Lat 32°17'48", long 84°01'50", Macon County, at State Highway 26, at Montezuma.	P	a39	(46.8)	(1.20)	16	.34	C
02349900	Turkey Creek at Byromville	Lat 32°11'44", long 83°54'03", Dooly County, on downstream side of bridge on State Highway 90, 0.5 mi southwest of Byromville, and 11 mi upstream from mouth.	D	a45	49.0	1.08	3.5	.071	C
02349960	Little Pennahatchee Creek near Lilly	Lat 32°06'58", long 83°51'43", Dooly County, at State Highway 90, 2.2 mi southeast of Lilly.	P	a24	(24.5	(1.02)	0	--	C
02350600	Kinchafoonee Creek at Preston	Lat 32°03'09", long 84°32'54", Webster County, near right bank on downstream side of bridge on State Highway 41, 1 mi southwest of Preston, and 1 mi upstream from Harrel Mill Creek.	D	197	216	1.09	25	.12	C

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams —Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Apalachicola River Basin--Continued									
02350900	Kinchafoonee Creek near Dawson	Lat 31°46'03", long 84°15'02", Lee County, at State Highway 32, 5.2 mi northwest of Leesburg.	P	527	(643)	(1.22)	90	0.14	C
02351700	Muckalee Creek near Smithville	Lat 31°53'43", long 84°11'52", Lee County, at State Highway 118, 3 mi east of Smithville.	P	a265	(310)	(1.17)	38	.12	C
02351900	Muckalee Creek near Leesburg	Lat 31°44'07", long 84°07'23", Lee County, at State Highway 32, 2.8 mi east of Leesburg.	P	a405	(437)	(1.08)	89	.20	C
02353200	Nochaway Creek near Shellman	Lat 31°46'39", long 84°36'18", Randolph County, at State Highway 41, 1.5 mi north of Shellman.	P	a52	(71.7)	(1.38)	16	.22	C
02353400	Pachitla Creek near Edison	Lat 31°33'17", long 84°40'43", Calhoun County, on downstream side of bridge on State Highway 37, 2.2 mi upstream from Neals Creek, 3.6 mi east of Edison, and 8.5 mi upstream from mouth.	D	188	242	1.28	42	.17	C
02353500	Ichawaynochaway Creek at Milford	Lat 31°22'58", long 84°32'52", Baker County, on downstream end of left bank pier of bridge on State Highway 216 at Milford, 2.2 mi upstream from Alligator Creek, and 5.5 mi upstream from Chickasawhatchee Creek.	D	a620	763	1.23	140	.18	C
02354300	Chickasawhatchee Creek near Dawson	Lat 31°39'08", long 84°25'47", Terrell County, at county road, 7 mi south of Dawson.	P	a63	(69.9)	(1.11)	5.8	.083	C
02354500	Chickasawhatchee Creek at Elmodel	Lat 31°28'09", long 84°20'10", Baker County, at bridge on State Highway 37 at Elmodel.	D	a320	292	.91	5.7	.020	C
02355000	Ichawaynochaway Creek near Newton	Lat 31°16'22", long 84°29'24", Baker County, at State Highway 200, 9 mi southeast of Newton.	P	a1,020	(1,140)	(1.12)	200	0.18	C
02356100	Spring Creek near Arlington	Lat 31°24'48", long 84°46'30", Early County, at State Highway 62, 3.5 mi southwest of Arlington.	P	a49	(56.4)	(1.15)	0	--	C
02357000	Spring Creek near Iron City	Lat 31°02'23", long 84°44'18", Seminole County, on right bank 125 ft downstream from highway bridge, 1.5 mi downstream from Aycock Creek, 1.5 mi upstream from Dry Creek, 5 mi north of Brinson, and 5.5 mi northeast of Iron City.	D	485	480	.99	18	.038	C
Mobile River Basin									
02379500	Cartecay River near Ellijay	Lat 34°40'53", long 84°27'20", Gilmer County, on right bank adjacent to State Highway 52, 0.8 mi downstream from Owltown Creek, 2 mi southeast of Ellijay, and 2 mi upstream from confluence with Ellijay River.	D	135	279	2.07	82	.29	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams —Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Mobile River Basin--Continued									
02380000	Ellijay River at Ellijay	Lat 34°41'06", long 84°28'40", Gilmer County, on left bank at downstream side of bridge on State Highway 5 at Ellijay, 1 mi upstream from confluence with Cartecay River.	D	a90	201	2.23	35	0.17	B
02380500	Coosawattee River near Ellijay	Lat 34°40'18", long 84°30'31", Gilmer County, on right bank 0.5 mi downstream from State Highway 5, 2 mi southwest of Ellijay, and 2.2 mi downstream from confluence of Cartecay and Ellijay Rivers.	D	238	496	2.10	120	.24	B
02382000	Scarecorn Creek at Hinton	Lat 34°28'04", long 84°35'30", Pickens County, on left bank 100 ft upstream from bridge on State Highway 53, 0.2 mi west of Hinton, 1 mi upstream from Dean's Mill, and 5 mi upstream from mouth.	D	21.1	26.7	1.27	1.8	.067	B
02383000	Rock Creek near Fairmount	Lat 34°21'32", long 84°46'46", Bartow County, on right upstream wingwall of culvert on State Highway 140, 2.8 mi upstream from mouth, and 7 mi southwest of Fairmount.	D	5.61	7.0	1.23	.40	.057	B
02383500	Coosawattee River at Pine Chapel	Lat 34°34'37", long 84°51'35", Gordon County, at downstream edge of highway bridge at Pine Chapel, 4 mi downstream from Sallacoa Creek, 5 mi east of Resaca, and 6 mi upstream from confluence with Conasauga River.	D	856	1,470	1.71	275	.19	B
02384000	Conasauga River near Tennga	Lat 35°00'34", long 84°44'02", Polk County, Tenn., at U.S. Highway 411, 1.5 mi north of Tennga.	P	108	(200)	(1.85)	25	.12	A
02385500	Mill Creek at Dalton	Lat 34°47'18", long 84°58'30", Whitfield County, 1,000 ft upstream from city pumping plant, and 1.5 mi upstream from Southern Railway bridge at Dalton.	D	38.4	67.5	1.76	14	.21	A
02385800	Holly Creek near Chatsworth	Lat 34°43'00", long 84°46'12", Murray County, on right bank 100 ft upstream from bridge on county road, 3 mi upstream from Rock Creek, and 3.3 mi south of Chatsworth.	D	54.9	109	1.68	3.3	.030	B
02387000	Conasauga River at Tilton	Lat 34°40'00", long 84°55'42", Murray County, on left bank 250 ft downstream from highway bridge, 0.2 mi downstream from Swamp Creek, 0.5 mi northeast of Tilton, and 12 mi upstream from confluence with Coosawattee River.	D	682	1,170	1.72	89	.076	A
02387600	Oothkalooga Creek near Calhoun	Lat 34°29'44", long 84°57'55", Gordon County, at county road, 1.2 mi south of Calhoun.	P	66.0	(82.5)	(1.25)	22	.27	A

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Mobile River Basin--Continued									
02388000	West Armuchee Creek near Subligna	Lat 34°34'04", long 85°09'16", Chattooga County, on left bank 500 ft downstream from bridge on county road, 1 mi upstream from Ruff Creek, and 2 mi east of Subligna.	D	34.5	61.2	1.77	5.5	0.090	A
02388500	Oostanaula River near Rome	Lat 34°18'02", long 85°08'30", Floyd County, on left bank 1.2 mi upstream from Dry Creek, 4.5 mi north of Rome, 4.5 mi upstream from confluence with Etowah River, and 6.5 mi downstream from Armuchee Creek.	D	a2,120	3,530	1.67	510	.14	A
02389000	Etowah River near Dawsonville	Lat 34°22'57", long 84°03'21", Dawson County, on left bank 0.4 mi upstream from Palmer Creek, 0.5 mi upstream from bridge on State Highway 53, 1.2 mi downstream from Russell Creek, 4 mi southeast of Dawsonville, and 7.5 mi upstream from Shoal Creek.	D	103	258	2.50	62	.24	B
02389300	Shoal Creek near Dawsonville	Lat 34°25'13", long 84°06'47", Dawson County, on left bank at downstream side of relocated bridge on State Highway 53, 650 ft upstream from Flat Creek, 1 mi west of Dawsonville, and 6.5 mi upstream from mouth.	D	20.5	44.4	2.17	12	.27	B
02390000	Amicalola Creek near Dawsonville	Lat 34°25'32", long 84°12'43", Dawson County, at State Highway 53, 5.5 mi west of Dawsonville.	D	84.7	226	2.67	.56	.25	B
02391500	Sharp Mountain Creek near Ball Ground	Lat 34°20'14", long 84°24'19", Cherokee County, at county road, 1.8 mi west of Ball Ground.	P	64.0	(90.0)	(1.40)	15	.17	B
02392000	Etowah River at Canton	Lat 34°14'23", long 84°29'47", Cherokee County, on left bank 100 ft downstream from bridge on State Highways 5 spur and 140 at Canton, 0.8 mi upstream from Canton Creek, and 1.8 mi downstream from Hickory Log Creek.	D	605	1,170	1.93	250	.21	B
02392100	Canton Creek at Canton	Lat 34°13'45", long 84°29'26", Cherokee County, at State Highway 20, at Canton.	P	a22	(30.0)	(1.35)	2.4	.08	B
02392500	Little River near Roswell	Lat 34°07'09", long 84°23'18", Fulton County, on upstream side of bridge on State Highway 140, 1 mi downstream from Cooper Sandy Creek, and 7 mi north of Roswell.	D	60.5	83.7	1.38	4.7	.056	B
02394400	Pumpkinvine Creek below Dallas	Lat 33°54'57", long 84°52'40", Paulding County, at State Highway 6, 2.2 mi west of Dallas.	P	a40	(54.0)	(1.35)	1.4	.026	B
02394600	Pettit Creek near Atco	Lat 34°10'43", long 84°48'44", Bartow County, at State Highway 3, 1.2 mi northwest of Cartersville.	P	37.8	(43.8)	(1.15)	4.2	.096	A

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Mobile River Basin--Continued									
02394900	Euharlee Creek at Taylorsville	Lat 34°05'42", long 84°59'28", Bartow County, at county road, at Taylorsville.	P	a95	(114)	(1.20)	0.38	0.33	A
02394950	Hills Creek near Taylorsville	Lat 34°04'27", long 84°57'02", Polk County, on left bank on downstream side of highway bridge on county road, 2 mi southeast of Taylorsville, and 2 mi upstream from mouth.	D	a26	27.2	1.05	1.2	.055	B
02395500	Dykes Creek near Rome	Lat 34°15'31", long 85°05'00", Floyd County, 0.5 mi upstream from bridge on State Highway 20, and 5 mi east of Rome.	P	14.8	(19.2)	(1.30)	2.3	.12	A
02396300	Silver Creek near Lindale	Lat 34°10'38", long 85°09'39", Floyd County, at county road, southeast of Lindale.	P	a17.9	(22.0)	(1.22)	7.3	.33	A
02397500	Cedar Creek near Cedartown	Lat 34°03'38", long 85°18'41", Polk County, on left bank 700 ft downstream from bridge on State Highway 161, 4.5 mi upstream from Lake Creek, and 4.5 mi northwest of Cedartown.	D	109	152	1.39	32	.21	A
02397900	Cane Creek near Trion	Lat 34°34'20", long 85°18'24", Chattooga County, at county road 1.8 mi north of Trion.	P	a36	(67.3)	(1.87)	.47	.070	A
02398000	Chattooga River at Summerville	Lat 34°28'03", long 85°20'19", Chattooga County, on left bank 600 ft downstream from bridge on U.S. Highway 27, 1 mi southeast of Summerville, and 4 mi upstream from Raccoon Creek.	D	193	347	1.79	63	.18	A
02411800	Little River near Buchanan	Lat 33°47'51", long 85°07'03", Haralson County, on right bank 150 ft upstream from county highway bridge, 4.3 mi east of Buchanan, and 7 mi upstream from mouth.	D	a18	27.5	1.53	2.3	.084	B
02411900	Tallapoosa River at Tallapoosa	Lat 33°46'27", long 85°18'00", Haralson County, at State Highway 100, 2 mi south of Tallapoosa.	P	237	(344)	(1.45)	17	.049	B
02413000	Little Tallapoosa River at Carrollton	Lat 33°35'50", long 85°04'49", Carroll County, at city water-pumping plant 200 ft downstream from bridge on U.S. Highway 27 at Carrollton.	D	a89	141	1.58	6.8	.048	B
02413200	Little Tallapoosa River near Bowdon	Lat 33°30'46", long 85°14'03", Carroll County, at State Highway 5, 2.2 mi southeast of Bowdon.	P	a210	(326)	(1.55)	16	.049	B
Tennessee River Basin									
03545000	Hiwassee River at Presley	Lat 34°54'17", long 83°42'01", Towns County, on left bank 0.1 mi downstream from Cynth Creek, 0.5 mi southeast of Presley, 1.4 mi upstream from Hightower Creek, and at mile 133.9.	D	45.5	130	2.86	27	.21	B

a Approximately.

Table 2.— Flow characteristics at selected sites on Georgia streams — Continued

(Type of station: D, daily-discharge gaging station; P, partial-record gaging station. Mean annual discharges: values in parentheses were estimated from plate 1. Low-flow index: minimum 7-day flow having a recurrence interval of 10 years)

Station number	Name	Location	Type	Drainage area (mi^2)	Mean annual discharge, adjusted to period 1941-70		Low-flow index		Region
					Cubic feet per second	Cubic feet per second per square mile	Cubic feet per second	Ratio to mean	
Tennessee River Basin--Continued									
03545300	Scataway Creek near Hiwassee	Lat 34°55'33", long 83°40'37", Towns County, at U.S. Highway 76, near Hiwassee.	P	6.08	(78.2)	(3.00)	2.8	0.15	B
03550500	Nottely River near Blairsville	Lat 34°50'28", long 83°56'10", Union County, on left bank 250 ft upstream from county road bridge, 0.1 mi downstream from Arkaqua Creek, 0.2 mi upstream from Akins Creek, 2.7 mi southeast of Blairsville, and at mile 44.3.	D	74.8	173	2.31	34	.20	B
03550766	Butternut Creek near Blairsville	Lat 34°52'34", long 83°58'10", Union County, at bridge on U.S. Highway 19, 0.6 mi west of Blairsville.	P	11.1	(27.0)	(2.40)	3.8	.14	B
03558000	Toccoa River near Dial	Lat 34°47'24", long 84°14'24", Fannin County, on right bank 1.4 mi upstream from Shallowford Bridge, 1.8 mi upstream from Stanley Creek, 2.5 mi northwest of Dial, and at mile 69.1.	D	177	471	2.66	130	.28	B
03560000	Fightingtown Creek at McCaysville	Lat 34°58'53", long 84°23'12", Fannin County, on right bank 0.2 mi upstream from highway bridge, 0.9 mi upstream from mouth, and 0.9 mi west of McCaysville.	D	70.9	188	2.65	42	.22	B
03566700	South Chickamauga Creek at Ringgold	Lat 34°55'07", long 85°07'32", Catoosa County, at State Highway 3, at Ringgold.	P	169	(296)	(1.75)	36	.12	A
03567200	West Chickamauga Creek near Kensington	Lat 34°48'10", long 85°20'52", Walker County, at State Highway 2, 2.5 mi northeast of Kensington.	P	73.0	(135)	(1.85)	5.6	.041	A
03567500	South Chickamauga Creek near Chickamauga, Tenn.	Lat 35°00'50", long 85°12'27", Hamilton County, on right bank 0.3 mi upstream from bridge on U.S. Highway 11, 1.5 mi south of Chickamauga, 6.0 mi east of the city hall in Chattanooga.	D	428	685	1.60	88	.13	A
03568500	Chattanooga Creek near Flintstone	Lat 34°58'20", long 85°19'40", Walker County, on right bank 0.8 mi south of Georgia-Tennessee State line and 2.3 mi northeast of Flintstone, and at mile 10.3.	D	50.6	85.7	1.69	3.1	.036	A

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams

Station		Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
Number	Name			0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Savannah River Basin																		
02177000	Chattooga River near Clayton	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02178400	Tallulah River near Clayton	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02182000	Panther Creek near Toccoa	32.5	2	0	0	0	0	0	0	0	0	0	0	0.22	1.2	8.0	29	—
			5	0	0	0	0	0	0	0	0	.08	1.0	3.0	8.7	36	91	—
			10	0	0	0	0	0	0	0	.001	1.3	4.0	11	24	70	153	—
			20	0	0	0	0	0	0	0	1.3	3.5	8.7	23	44	106	213	—
			30	0	0	0	0	0	0	0	2.4	5.2	10	28	56	121	257	—
02188500	South Beaverdam Creek at Dewy Rose	35.8	2	0	0	0	0	0	0	0	0.95	5.3	17	35	58	—	—	—
			5	0	0	0	0	0	0	1.3	8.0	20	42	70	113	—	—	—
			10	0	0	0	0	.28	1.2	6.8	20	41	70	109	162	—	—	—
			20	0	0	0	.15	1.3	5.3	17	37	62	99	152	207	—	—	—
			30	0	0	0	.77	3.1	9.2	24	46	76	116	169	239	—	—	—
02191200	Hudson River at Homer	61.1	2	0	0	0	0	0	0	0	0	0	0.42	1.9	5.9	22	—	—
			5	0	0	0	0	0	0	0	0	.39	2.1	8.0	48	147	—	—
			10	0	0	0	0	0	0	0	0	.91	3.8	12	52	151	—	—
			20	0	0	0	0	0	0	0	.35	1.9	5.9	16	54	153	—	—
02192000	Broad River near Bell	1,430	2	0	0	0	0	0	0	0	1.6	7.8	22	41	67	—	—	—
			5	0	0	0	0	0	0	2.1	12	47	89	138	195	—	—	—
			10	0	0	0	0	.23	1.3	8.8	23	58	106	174	256	—	—	—
			20	0	0	0	.12	1.2	4.4	19	38	73	136	226	352	—	—	—
			30	0	0	0	.28	2.2	6.8	26	47	87	170	271	393	—	—	—
02193500	Little River near Washington	291	2	0	0	0.07	0.93	4.7	13	35	66	102	139	—	—	—	—	—
			5	0	0	.56	4.2	14	28	61	94	127	198	—	—	—	—	—
			10	0	.12	1.2	8.6	22	37	69	106	160	279	—	—	—	—	—
			20	.08	.42	2.5	12	28	44	80	130	236	—	—	—	—	—	—
			30	.33	.91	3.6	15	34	49	91	160	274	—	—	—	—	—	—
02197600	Brushy Creek near Wrens	28	2	0	0	0	0	0	0	0	1.1	6.2	25	—	—	—	—	—
			5	0	0	0	0	0	0	.39	5.5	19	98	—	—	—	—	—
			10	0	0	0	0	0	0	.80	9.4	31	143	—	—	—	—	—
			20	0	0	0	0	0	.13	2.0	12	35	216	—	—	—	—	—
			30	0	0	0	0	0	.37	2.9	14	42	241	—	—	—	—	—
02198000	Brier Creek at Millhaven	646	2	0	0	0	0	0	0	0.52	5.0	16	34	—	—	—	—	—
			5	0	0	0	0	0	.08	2.8	32	76	119	—	—	—	—	—
			10	0	0	0	0	0	.44	7.8	39	84	138	—	—	—	—	—
			20	0	0	0	0	.13	1.5	17	49	102	186	—	—	—	—	—
			30	0	0	0	0	.60	3.0	24	57	115	210	—	—	—	—	—
Ogeechee River Basin																		
02200500	Ogeechee River near Louisville	800	2	0	0	0	0	0	0.63	5.6	11	16	30	—	—	—	—	—
			5	0	0	0	0	.29	1.7	13	50	90	132	—	—	—	—	—
			10	0	0	0	0	.62	3.1	15	51	97	156	—	—	—	—	—
			20	0	0	0	.04	.98	4.1	16	52	122	231	—	—	—	—	—
02202000	Ogeechee River at Scarboro	1,940	2	0	0	0	0	0.08	1.0	9.7	24	43	58	—	—	—	—	—
			5	0	0	0	0	.82	5.0	24	61	106	189	—	—	—	—	—
			10	0	0	0	.33	2.6	10	39	81	144	269	—	—	—	—	—
			20	0	0	0	1.8	6.5	19	55	108	198	—	—	—	—	—	—
			30	0	0	0	3.7	12	27	66	126	240	—	—	—	—	—	—
02202500	Ogeechee River near Eden	2,650	2	0	0	0	0	0.31	2.5	14	26	43	61	—	—	—	—	—
			5	0	0	0	.03	1.8	7.3	28	63	108	192	—	—	—	—	—
			10	0	0	0	.35	3.9	13	42	83	142	265	—	—	—	—	—
			20	0	0	0	2.0	9.1	21	58	107	193	—	—	—	—	—	—
			30	0	0	0	3.2	12	28	70	127	236	—	—	—	—	—	—
02203000	Canoochee River near Claxton	555	2	0.48	0.33	1.7	7.6	15	24	—	—	—	—	—	—	—	—	—
			5	.33	1.05	5.2	15	30	45	—	—	—	—	—	—	—	—	—
			10	.56	2.2	9.2	22	39	53	—	—	—	—	—	—	—	—	—
			20	1.1	3.8	14	33	51	73	—	—	—	—	—	—	—	—	—
			30	1.4	5.0	17	39	55	82	—	—	—	—	—	—	—	—	—
Altamaha River Basin																		
02205000	Wildcat Creek near Lawrenceville	1.59	2	0	0	0	0.39	1.7	5.1	21	46	74	108	—	—	—	—	—
			5	0	0	.49	3.3	9.1	18	49	84	118	154	—	—	—	—	—
			10	0	.19	1.2	7.4	17	30	61	94	126	167	—	—	—	—	—
			20	.10	.35	1.6	10	22	39	72	105	139	202	—	—	—	—	—
			30	.15	.40	1.7	11	25	44	77	110	142	241	—	—	—	—	—
02205500	Pew Creek near Lawrenceville	2.23	2	0	0	0	0	0.31	0.94	8.0	25	48	76	112	150	228	—	—
			5	0	0	0	.23	1.8	6.0	26	60	94	129	163	197	289	—	—
			10	0	0	0	.48	3.7	11	35	69	102	136	169	203	358	—	—
			20	0	0	0	.71	5.4	14	42	74	108	146	184	233	451	—	—
02206000	Shetley Creek near Norcross	0.98	2	0	0	0	0.12	0.87	3.0	11	26	47	77	114	153	—	—	—
			5	0	0	.21	1.9	8.0	14	32	57	92	127	163	200	—	—	—
			10	0	0	1.5	7.1	16	26	49	73	106	140	174	226	—	—	—
			20	0	0	3.8	13	24	36	63	90	125	162	206	306	—	—	—

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station		Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
Number	Name			0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Altamaha River Basin																		
02206500	Yellow River near Snellville	134	2	0	0	0	0	0.10	.69	5.0	15	30	52	80	112	--	--	--
			5	0	0	0	.48	1.6	4.0	15	45	82	120	159	209	--	--	--
			10	0	0	.32	1.4	5.0	11	26	58	95	141	190	261	--	--	--
			20	0	0	.77	4.0	11	19	41	72	112	157	231	347	--	--	--
			30	0	.07	1.2	6.0	14	24	49	80	129	185	276	391	--	--	--
02207000	Garner Creek near Snellville	5.54	2	0	0	0	0	0	0.25	2.9	10	23	45	78	--	--	--	--
			5	0	0	0	0	.38	2.3	15	50	86	122	158	--	--	--	--
			10	0	0	0	0	.99	6.0	24	59	94	128	164	--	--	--	--
			20	0	0	0	0	1.7	8.1	34	68	102	144	185	--	--	--	--
02207500	Yellow River near Covington	378	2	0	0	0	0	0	0.51	4.9	16	29	49	75	107	--	--	--
			5	0	0	0	.45	1.4	3.9	12	28	67	106	146	191	--	--	--
			10	0	0	0.14	1.3	3.8	8.0	18	40	76	116	157	228	--	--	--
			20	0	0	.43	2.9	7.3	13	26	50	85	135	191	299	--	--	--
02211300	Towaliga River near Jackson	105	2	0	0	0	0	0	0	0.59	5.9	14	25	35	--	--	--	--
			5	0	0	0	0	0	.46	4.1	33	74	114	154	--	--	--	--
			10	0	0	0	.05	.60	3.0	11	40	80	120	161	--	--	--	--
			20	0	0	0	2.3	4.8	8.4	18	53	91	131	185	--	--	--	--
02212600	Falling Creek near Juliette	72.2	2	0	0	0.32	1.6	6.0	15	42	76	109	142	180	--	--	--	--
			5	.11	.42	1.9	7.1	17	32	64	96	130	165	216	--	--	--	--
			10	.39	.95	4.0	12	25	41	71	104	138	186	273	--	--	--	--
			20	.78	1.7	4.7	15	32	47	77	122	175	259	381	--	--	--	--
02213050	Walnut Creek near Gray	29	2	0	0	0	0.36	1.0	3.8	22	43	70	104	141	--	--	--	--
			5	0	0	.42	2.6	9.2	16	46	80	123	173	272	--	--	--	--
			10	0	.04	.84	5.2	14	24	54	92	152	248	383	--	--	--	--
			20	0	.15	1.8	8.0	16	29	58	129	220	348	--	--	--	--	--
02213500	Tobesofkee Creek near Macon	182	2	0	0	0	0	0.28	1.3	8.6	23	47	74	108	--	--	--	--
			5	0	0	0	.47	2.1	6.7	26	59	97	136	192	--	--	--	--
			10	0	0	.30	2.5	7.1	15	43	77	120	171	270	--	--	--	--
			20	0	0	.67	5.7	14	24	57	98	147	242	370	--	--	--	--
			30	0	.03	.77	7.1	16	29	62	110	174	287	--	--	--	--	--
02214500	Big Indian Creek at Perry	108	2	0	0	0	0	0	0	0	2.1	8.9	26	--	--	--	--	--
			5	0	0	0	0	0	.06	2.2	17	68	162	--	--	--	--	--
			10	0	0	0	0	0	.34	4.4	24	90	228	--	--	--	--	--
			20	0	0	0	0	.16	.55	6.9	28	126	--	--	--	--	--	--
			30	0	0	0	0	.23	.76	7.9	31	149	--	--	--	--	--	--
02216000	Little Ocmulgee River at Towns	329	2	0	0.39	3.5	14	27	40	74	110	147	--	--	--	--	--	--
			5	.12	1.1	7.3	23	37	52	82	112	142	--	--	--	--	--	--
			10	.30	1.6	10	27	41	56	86	122	157	--	--	--	--	--	--
02217000	Allen Creek at Talmo	17.3	2	0	0	0	0	0	0	0	0.67	2.3	8.5	19	37	100	--	--
			5	0	0	0	0	.15	.99	5.4	15	26	50	92	139	250	--	--
			10	0	0	0	0	.55	2.0	12	27	47	76	118	179	336	--	--
			20	0	0	0	0	.65	2.4	14	30	58	95	153	220	460	--	--
02217500	Middle Oconee River near Athens	398	2	0	0	0	0	0	0	0.20	1.5	8.1	21	39	63	--	--	--
			5	0	0	0	0	0	.27	2.6	9.6	36	79	127	178	--	--	--
			10	0	0	0	0	.79	4.3	14	28	57	106	165	246	--	--	--
			20	0	0	0	.56	2.5	7.7	24	48	83	141	221	342	--	--	--
			30	0	0	0	.74	3.8	9.7	29	58	97	176	274	395	--	--	--
02218500	Oconee River near Greensboro	1,090	2	0	0	0	0	0	0	0.14	2.0	8.1	17	32	50	--	--	--
			5	0	0	0	0	0	.38	3.3	13	29	63	117	177	--	--	--
			10	0	0	0	0	.70	2.3	12	28	50	85	164	250	--	--	--
			20	0	0	0	.66	2.9	7.9	22	45	75	134	230	357	--	--	--
			30	0	0	0	1.3	4.8	10	29	56	97	178	284	404	--	--	--
02219500	Apalachee River near Buckhead	436	2	0	0	0	0	0	0	0.77	11	18	34	55	81	--	--	--
			5	0	0	0	0	.02	.88	6.3	18	45	87	129	171	--	--	--
			10	0	0	0	0	.74	2.5	11	25	53	95	143	199	--	--	--
			20	0	0	0	.51	1.8	4.4	16	33	66	110	163	249	--	--	--
			30	0	0	0	.78	3.1	6.2	20	40	78	128	184	290	--	--	--
02220550	Whitten Creek near Sparta	15	2	0	0	0	0	0.41	2.9	16	38	63	93	--	--	--	--	--
			5	0	0	0	.75	4.9	12	36	74	115	171	--	--	--	--	--
			10	0	0	0	1.6	7.6	17	43	84	133	232	--	--	--	--	--
			20	0	0	.07	2.4	9.6	20	49	107	193	324	--	--	--	--	--
02221000	Murder Creek near Monticello	24	2	0	0	0	0	0.18	0.65	5.3	18	40	70	106	--	--	--	--
			5	0	0	0	0	1.6	4.7	18	54	101	161	250	--	--	--	--
			10	0	0	0	1.8	5.7	12	32	66	121	206	329	--	--	--	--
			20	0	0	0	3.9	11	19	43	77	150	248	365	--	--	--	--
02223300	Big Sandy Creek near Jeffersonville	31	2	0	0	0	0	0	0.03	1.4	3.1	--	--	--	--	--	--	--
			5	0	0	0	0	.89	3.3	26	71	--	--	--	--	--	--	--
			10	0	0	0	.10	1.6	6.3	31	90	--	--	--	--	--	--	--
			20	0	0	0	.20	2.0	7.6	52	150	--	--	--	--	--	--	--
02224000	Rocky Creek near Dudley	62.9	2	0	0	0.29	2.7	9.2	18	42	--	--	--	--	--	--	--	--
			5	0	.19	1.2	7.6	19	34	67	--	--	--	--	--	--	--	--
			10	.14	.40	2.5	12	26	42	76	--	--	--	--	--	--	--	--
			20	.26	.58	3.6	15	32	47	92	--	--	--	--	--	--	--	--
			30	.31	.62	4.1	16	34	52	115	--	--	--	--	--	--	--	--

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station Number	Station Name	Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
				0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Altamaha River Basin																		
02225500	Ohoopee River near Reidsville	1,110	2	0	0	0.10	1.9	2.3	2.7	3.6	—	—	—	—	—	—	—	—
			5	0	0	.48	6.8	16	31	63	—	—	—	—	—	—	—	—
			10	0	0	1.2	12	25	40	75	—	—	—	—	—	—	—	—
			20	0	0	2.9	17	36	53	102	—	—	—	—	—	—	—	—
			30	0	.02	4.7	23	43	67	104	—	—	—	—	—	—	—	—
02226100	Penholoway Creek near Jesup	210	2	0.76	1.6	4.6	11	18	25	40	—	—	—	—	—	—	—	—
			5	1.2	2.5	6.8	15	24	33	60	—	—	—	—	—	—	—	—
			10	1.5	3.0	8.1	17	28	40	74	—	—	—	—	—	—	—	—
			20	1.8	3.5	9.8	22	36	50	87	—	—	—	—	—	—	—	—
			30	1.9	3.9	11	26	41	60	94	—	—	—	—	—	—	—	—
Satilla River Basin																		
02226500	Satilla River near Waycross	1,200	2	0	0	1.1	1.4	1.7	2.2	4.2	—	—	—	—	—	—	—	—
			5	0	.34	4.0	13	29	44	76	—	—	—	—	—	—	—	—
			10	.002	.83	5.5	17	32	47	101	—	—	—	—	—	—	—	—
			20	.28	1.7	8.3	22	37	67	154	—	—	—	—	—	—	—	—
			30	.60	2.6	10	27	42	78	184	—	—	—	—	—	—	—	—
02227000	Hurricane Creek near Alma	150	2	0.49	1.2	4.0	11	20	30	54	—	—	—	—	—	—	—	—
			5	1.7	3.5	10	28	46	60	89	—	—	—	—	—	—	—	—
			10	2.6	5.6	17	40	60	77	108	—	—	—	—	—	—	—	—
			20	3.4	7.4	23	49	78	110	188	—	—	—	—	—	—	—	—
			30	3.6	8.1	24	53	104	174	269	—	—	—	—	—	—	—	—
02227500	Little Satilla River near Offerman	646	2	0.38	1.0	4.2	11	19	28	48	—	—	—	—	—	—	—	—
			5	.99	2.6	7.8	21	37	52	84	—	—	—	—	—	—	—	—
			10	1.6	4.0	11	26	41	57	103	—	—	—	—	—	—	—	—
			20	2.5	5.8	16	38	73	119	228	—	—	—	—	—	—	—	—
			30	3.2	7.2	19	62	148	198	—	—	—	—	—	—	—	—	—
02228000	Satilla River at Atkinson	2,790	2	0	0	0.67	5.3	11	20	38	—	—	—	—	—	—	—	—
			5	0	.08	2.4	11	27	42	74	—	—	—	—	—	—	—	—
			10	0	.20	4.0	15	30	46	101	—	—	—	—	—	—	—	—
			20	0	1.6	7.8	22	37	68	158	—	—	—	—	—	—	—	—
			30	.37	2.4	10	30	46	81	188	—	—	—	—	—	—	—	—
St. Marys River Basin																		
02228500	North Prong St. Marys River at Moniac	160	2	0.27	0.58	2.0	6.7	13	20	36	—	—	—	—	—	—	—	—
			5	1.2	2.5	7.7	21	36	50	80	—	—	—	—	—	—	—	—
			10	2.1	4.2	13	28	43	58	110	—	—	—	—	—	—	—	—
			20	3.3	6.6	19	36	53	71	161	—	—	—	—	—	—	—	—
			30	4.3	8.6	23	45	66	99	189	—	—	—	—	—	—	—	—
Suwannee River Basin																		
02314500	Suwannee River at Fargo	1,260	2	0	0	0	1.6	5.2	12	29	—	—	—	—	—	—	—	—
			5	.27	.83	4.7	19	34	49	80	—	—	—	—	—	—	—	—
			10	1.2	3.1	12	26	41	67	150	—	—	—	—	—	—	—	—
			20	2.5	6.0	19	36	57	102	219	—	—	—	—	—	—	—	—
			30	3.4	8.0	22	43	75	119	249	—	—	—	—	—	—	—	—
02316000	Alapaha River near Alapaha	663	2	0.31	0.83	4.4	14	26	38	66	—	—	—	—	—	—	—	—
			5	1.2	3.3	11	26	41	56	85	—	—	—	—	—	—	—	—
			10	1.9	4.6	15	33	47	66	128	—	—	—	—	—	—	—	—
			20	2.6	6.1	20	40	54	90	187	—	—	—	—	—	—	—	—
			30	3.1	7.2	22	44	59	102	216	—	—	—	—	—	—	—	—
02317500	Alapaha River at Statenville	1,400	2	0	0	0.41	5.9	14	23	48	—	—	—	—	—	—	—	—
			5	0	0	2.4	14	30	46	78	—	—	—	—	—	—	—	—
			10	0	.12	3.3	17	32	47	131	—	—	—	—	—	—	—	—
			20	0	.25	4.3	18	36	79	187	—	—	—	—	—	—	—	—
			30	0	.42	5.1	22	48	92	216	—	—	—	—	—	—	—	—
02318000	Little River near Adel	577	2	0.12	0.57	3.8	13	25	39	73	—	—	—	—	—	—	—	—
			5	.50	2.0	9.0	25	40	55	84	—	—	—	—	—	—	—	—
			10	.88	3.0	11	30	46	68	140	—	—	—	—	—	—	—	—
			20	1.6	4.4	16	38	55	95	204	—	—	—	—	—	—	—	—
			30	2.2	5.5	19	43	72	113	232	—	—	—	—	—	—	—	—
02318500	Withlacoochee River near Quitman	1,480	2	0.02	0.41	3.3	10	19	31	61	—	—	—	—	—	—	—	—
			5	.29	1.4	7.5	19	34	52	83	—	—	—	—	—	—	—	—
			10	.42	1.8	8.6	21	36	53	114	—	—	—	—	—	—	—	—
			20	.59	2.2	9.0	23	38	69	153	—	—	—	—	—	—	—	—
02319000	Withlacoochee River near Pinetta, Fla.	2,120	2	0	0	0	2.1	9.3	20	46	—	—	—	—	—	—	—	—
			5	0	0	.12	7.6	23	39	74	—	—	—	—	—	—	—	—
			10	0	0	.55	12	28	44	96	—	—	—	—	—	—	—	—
			20	0	0	1.3	17	80	187	—	—	—	—	—	—	—	—	—
			30	0	0	2.8	24	290	402	—	—	—	—	—	—	—	—	—
Ochlockonee River Basin																		
02327500	Ochlockonee River near Thomasville	550	2	0	0	0.81	6.0	14	20	45	—	—	—	—	—	—	—	—
			5	0	.45	4.2	14	29	45	79	—	—	—	—	—	—	—	—
			10	.13	.96	6.4	20	37	54	97	—	—	—	—	—	—	—	—
			20	.47	1.6	8.0	22	48	68	129	—	—	—	—	—	—	—	—
			30	.58	1.7	10	32	55	83	149	—	—	—	—	—	—	—	—

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station Number	Station Name	Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
				0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Ochlockonee River Basin																		
02328000	Tired Creek near Cairo	60	2	0	0	0	0.59	2.2	4.5	12	24	--	--	--	--	--	--	--
			5	0	0	.62	3.2	8.2	16	41	76	--	--	--	--	--	--	--
			10	0	.24	1.3	6.3	15	26	57	132	--	--	--	--	--	--	--
			20	.21	.53	2.0	11	24	30	105	223	--	--	--	--	--	--	--
			30	.33	.70	3.3	15	30	46	126	266	--	--	--	--	--	--	--
02329000	Ochlockonee River near Havana, Fla.	1,140	2	0	0	0	1.0	4.6	11	27	--	--	--	--	--	--	--	--
			5	0	0	.90	6.7	16	32	65	--	--	--	--	--	--	--	--
			10	0	0	2.2	11	23	39	90	--	--	--	--	--	--	--	--
			20	0	.05	3.3	15	31	59	151	--	--	--	--	--	--	--	--
			30	0	.22	4.1	17	36	68	178	--	--	--	--	--	--	--	--
Apalachicola River Basin																		
02331000	Chattahoochee River near Leaf	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02331600	Chattahoochee River near Cornelia	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02333000	Chattahoochee River near Gainesville	559	2	0	0	0	0	0	0	0	0	0	0	0.001	1.1	7.7	37	111
			5	0	0	0	0	0	0	0	0	0	0	.93	2.7	14	45	104	270
			10	0	0	0	0	0	0	0	0	1.0	4.0	12	30	71	130	333
			20	0	0	0	0	0	0	0	.33	2.0	12	28	47	89	150	402
02333500	Chestatee River near Dahlonega	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02335700	Big Creek near Alpharetta	72	2	0	0	0	0	0	0	0.10	1.6	11	21	33	49	94	--	--
			5	0	0	0	0	0	0	.86	5.8	41	82	122	162	246	--	--
			10	0	0	0	0	0	.35	2.0	10	46	86	126	166	268	--	--
			20	0	0	0	0	.33	.85	3.9	16	51	91	131	171	286	--	--
02336300	Peachtree Creek at Atlanta	86.8	2	0	0	0	0	0	0.16	1.4	4.5	10	20	30	40	65	--	--
			5	0	0	0	0	.28	.87	4.6	11	20	39	65	113	220	--	--
			10	0	0	0	0	.61	1.7	7.1	16	29	56	90	133	261	--	--
			20	0	0	0	.22	1.3	2.9	10	20	40	79	120	170	355	--	--
02337000	Sweetwater Creek near Austell	246	2	0	0	0	0	0	0.16	1.4	4.5	10	20	30	40	--	--	--
			5	0	0	0	.20	1.2	3.5	12	26	61	101	143	184	--	--	--
			10	0	0	0	.96	3.4	7.3	19	37	70	114	167	224	--	--	--
			20	0	0	.43	2.7	6.2	12	26	49	82	131	192	302	--	--	--
			30	0	0	.69	4.4	9.1	16	32	59	95	160	244	353	--	--	--
02337500	Snake Creek near Whitesburg	37	2	0	0	0	0	0	0	0	0.33	1.8	6.3	15	28	66	--	--
			5	0	0	0	0	0	0	.16	2.2	9.8	24	54	102	198	--	--
			10	0	0	0	0	0	0	1.5	6.7	20	39	72	118	222	--	--
			20	0	0	0	0	0	.43	3.9	14	30	58	96	149	309	--	--
			30	0	0	0	0	0	.61	5.9	20	43	72	123	191	394	--	--
02339000	Yellowjacket Creek near La Grange	182	2	0	0	0	0	0	0.37	3.9	15	31	52	78	108	--	--	--
			5	0	0	0	.35	1.4	4.3	16	38	73	113	155	123	--	--	--
			10	0	0	0	1.2	4.0	9.0	26	54	88	124	160	207	--	--	--
			20	0	0	.27	2.7	7.5	15	36	65	99	134	169	243	--	--	--
			30	0	0	.56	3.6	9.1	17	39	70	108	152	208	301	--	--	--
02340500	Mountain Oak Creek near Hamilton	61.7	2	0	0	0	0	0	0	0.93	6.0	15	33	59	92	--	--	--
			5	0	0	0	0	.21	1.3	8.6	23	60	100	143	186	--	--	--
			10	0	0	0	0	1.2	5.4	18	40	75	116	162	228	--	--	--
			20	0	0	0	.53	3.0	10	28	56	91	139	190	293	--	--	--
			30	0	0	0	.67	4.2	12	31	63	99	149	212	335	--	--	--
02343200	Pataula Creek near Lumpkin	70	2	0	0	0	0	0	0	0	0	0.92	5.3	15	--	--	--	--
			5	0	0	0	0	0	0	1.5	8.0	19	41	83	--	--	--	--
			10	0	0	0	0	0	.01	4.0	22	46	85	124	--	--	--	--
			20	0	0	0	0	0	.13	5.3	33	70	127	173	--	--	--	--
02344300	Camp Creek near Fayetteville	17.2	2	0	0	0	0	0	0	0	1.2	7.7	16	28	48	--	--	--
			5	0	0	0	0	0	0	.52	6.0	44	87	130	173	--	--	--
			10	0	0	0	0	0	0	2.0	12	49	91	133	175	--	--	--
			20	0	0	0	0	0	.61	4.3	16	54	94	139	186	--	--	--
02344500	Flint River near Griffin	272	2	0	0	0	0	0	0.52	4.2	13	26	44	67	95	--	--	--
			5	0	0	0	.20	.98	3.3	14	37	75	113	151	190	--	--	--
			10	0	0	.04	.88	3.3	8.1	23	50	87	123	160	212	--	--	--
			20	0	0	.64	3.3	7.8	16	37	67	105	150	204	305	--	--	--
			30	0	.17	1.6	6.2	13	22	46	79	120	167	256	379	--	--	--
02344700	Line Creek near Senoia	101	2	0	0	0	0	0.28	0.99	5.4	16	31	47	61	83	--	--	--
			5	0	0	0	.16	.87	3.5	15	50	88	125	162	202	--	--	--
			10	0	0	0	.59	2.2	5.5	18	54	91	128	164	214	--	--	--
			20	0	0	.30	1.1	4.0	8.0	23	58	94	130	167	221	--	--	--
02346500	Potato Creek near Thomaston	186	2	0	0	0	0	0.41	1.3	6.8	19	36	59	88	126	--	--	--
			5	0	0	0	.59	2.1	6.0	21	53	90	126	162	210	--	--	--
			10	0	0	.33	1.9	6.1	13	34	66	101	136	171	249	--	--	--
			20	0	.16	.92	4.8	13	21	46	78	117	159	230	348	--	--	--
			30	.06	.36	1.8	7.6	16	26	52	84	136	202	304	422	--	--	--

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station Number	Station Name	Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
				0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Apalachicola River Basin																		
02347500	Flint River near Culloden	1,850	2	0	0	0	0	0	0	1.9	8.6	19	38	64	96	--	--	--
			5	0	0	0	0	.52	2.1	10	30	50	84	135	200	--	--	--
			10	0	0	0	.22	1.5	5.3	19	42	67	110	183	266	--	--	--
			20	0	0	0	.86	4.4	10	28	54	90	146	231	358	--	--	--
			30	0	0	0	1.7	6.8	14	34	61	104	182	286	407	--	--	--
02349000	Whitewater Creek below Rambulette Creek, near Butler	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02349900	Turkey Creek at Byromville	45	2	0	0	0	0	0.82	5.4	28	51	76	--	--	--	--	--	--
			5	0	0	0	.48	4.2	16	50	84	118	--	--	--	--	--	--
			10	0	0	0	1.4	8.0	23	56	96	150	--	--	--	--	--	--
			20	0	0	.35	3.4	14	32	66	131	215	--	--	--	--	--	--
02350600	Kinchafoonee Creek at Preston	197	2	0	0	0	0	0	0	0.66	4.7	17	--	--	--	--	--	--
			5	0	0	0	0	.10	.75	8.5	23	51	--	--	--	--	--	--
			10	0	0	0	0	.50	2.3	13	34	69	--	--	--	--	--	--
			20	0	0	0	.05	.72	3.6	15	42	77	--	--	--	--	--	--
			30	0	0	0	.18	.89	4.1	16	43	104	--	--	--	--	--	--
02353400	Pachitla Creek near Edison	188	2	0	0	0	0	0	0	0	0.43	2.1	12	--	--	--	--	--
			5	0	0	0	0	0	0	.84	6.4	17	53	--	--	--	--	--
			10	0	0	0	0	0	0	3.4	16	40	79	--	--	--	--	--
			20	0	0	0	0	0	.38	7.0	27	66	130	--	--	--	--	--
02353500	Ichawaynochaway Creek at Milford	620	2	0	0	0	0	0	0	0	0.40	6.6	--	--	--	--	--	--
			5	0	0	0	0	0	0	.59	4.0	23	--	--	--	--	--	--
			10	0	0	0	0	0	0	2.0	10	33	--	--	--	--	--	--
			20	0	0	0	0	0	.13	4.8	19	51	--	--	--	--	--	--
			30	0	0	0	0	0	.27	6.8	26	63	--	--	--	--	--	--
02354500	Chickasawhatchee Creek at Elmodel	320	2	0	0	0	0.30	3.6	8.4	19	36	--	--	--	--	--	--	--
			5	0	0	.54	5.4	17	33	66	104	--	--	--	--	--	--	--
			10	0	.14	3.0	14	26	42	77	126	--	--	--	--	--	--	--
02357000	Spring Creek near Iron City	485	2	0	0	0	0	1.1	4.6	18	38	--	--	--	--	--	--	--
			5	0	0	0	2.0	10	24	57	100	--	--	--	--	--	--	--
			10	0	0	.54	7.0	19	34	69	138	--	--	--	--	--	--	--
			20	0	0	2.5	13	31	49	122	218	--	--	--	--	--	--	--
			30	0	.17	3.8	18	37	59	143	262	--	--	--	--	--	--	--
Mobile River Basin																		
02379500	Cartecay River near Ellijay	135	2	0	0	0	0	0	0	0	0	0	0	0	0.76	8.2	30	94
			5	0	0	0	0	0	0	0	0	0	0	.58	4.0	27	74	273
			10	0	0	0	0	0	0	0	0	0	.11	2.1	8.9	40	100	310
			20	0	0	0	0	0	0	0	0	0	1.7	7.3	18	56	122	425
			30	0	0	0	0	0	0	0	0	.30	4.0	12	25	64	140	512
02380000	Ellijay River at Ellijay	90	2	0	0	0	0	0	0	0	0	0	0.48	1.6	6.7	27	61	138
			5	0	0	0	0	0	0	0	0	.73	3.4	9.3	20	61	111	227
			10	0	0	0	0	0	0	0	1.0	6.0	14	25	38	87	148	262
			20	0	0	0	0	0	0	2.3	12	23	35	51	67	112	186	293
02380500	Coosawattee River near Ellijay	238	2	0	0	0	0	0	0	0	0	0	0	0.67	2.0	16	44	120
			5	0	0	0	0	0	0	0	0	0	1.1	5.1	14	49	128	307
			10	0	0	0	0	0	0	0	0	.54	2.8	10	23	61	143	372
			20	0	0	0	0	0	0	0	0	1.7	6.6	16	28	68	177	528
			30	0	0	0	0	0	0	0	0	2.7	10	19	30	72	234	634
02382000	Scarecorn Creek at Hinton	21.1	2	0	0	0	0	0	0.34	2.8	12.3	25	40	61	88	--	--	--
			5	0	0	0	0	.68	1.9	9.2	21	56	97	137	178	--	--	--
			10	0	0	0	.41	2.0	4.3	14	26	60	101	147	207	--	--	--
			20	0	0	0	.73	2.2	5.4	16	30	63	108	170	268	--	--	--
02383000	Rock Creek near Fairmount	5.61	2	0	0	0	0	0.40	2.0	14	33	58	92	131	170	--	--	--
			5	0	0	0	.30	1.8	6.8	26	56	93	129	164	211	--	--	--
			10	0	0	0	.66	2.6	8.1	30	61	97	133	168	237	--	--	--
			20	0	0	.10	.79	3.4	8.9	33	67	104	145	195	286	--	--	--
			30	0	0	.22	.89	3.7	9.6	36	70	108	152	215	325	--	--	--
02383500	Coosawattee River at Pine Chapel	856	2	0	0	0	0	0	0	0	0.3	2.0	7.8	19	34	76	136	--
			5	0	0	0	0	0	0	0	1.2	7.0	20	38	71	164	257	--
			10	0	0	0	0	0	0	0	2.9	12	29	52	88	177	290	--
			20	0	0	0	0	0	0	.65	6.0	20	39	62	101	206	374	--
			30	0	0	0	0	0	.20	1.2	10	27	46	70	106	233	460	--
02385500	Mill Creek at Dalton	38.4	2	0	0	0	0	0	0	0	0	1.4	10	25	43	88	165	--
			5	0	0	0	0	0	0	0	.56	7.4	26	62	104	189	232	--
			10	0	0	0	0	0	0	0	.86	13	41	77	118	205	321	--
			20	0	0	0	0	0	0	0	1.1	22	51	92	132	219	354	--
02385800	Holly Creek near Chatsworth	69.9	2	0	0	0	0.57	2.0	5.1	19	36	59	81	106	134	194	248	--
			5	0	0	.05	1.0	3.8	8.3	25	51	82	118	152	188	264	351	--
			10	0	0	.28	2.0	4.8	10	28	58	96	135	173	215	290	432	--
			20	0	0	.60	2.2	5.8	11	30	65	109	152	194	237	326	516	--

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station Number	Station Name	Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.													
				0.01	0.02	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	1.0	1.2	1.5
Mobile River Basin																		
02387000	Conasauga River at Tilton	682	2	0	0	0	0	0	0.80	6.1	18	33	48	65	102	173	244	--
			5	0	0	0	0	.33	2.3	15	35	61	96	132	168	239	343	--
			10	0	0	0	0	.80	3.7	20	43	72	106	141	176	246	358	--
			20	0	0	0	0	1.1	6.0	25	50	79	114	151	190	286	483	--
			30	0	0	0	0	2.0	7.2	29	52	83	117	159	203	337	559	--
02388000	West Armuchee Creek near Subligna	34.5	2	0	0	0	0	0	0	3.4	17	33	53	75	98	152	215	--
			5	0	0	0	0	0	.35	7.6	33	68	103	138	173	243	322	--
			10	0	0	0	0	0	.96	10	36	71	106	141	175	245	338	--
			20	0	0	0	0	.57	1.8	12	38	73	108	142	177	246	358	--
02388500	Oostanaula River near Rome	2,120	2	0	0	0	0	0	0	0.27	3.1	15	30	47	70	143	215	--
			5	0	0	0	0	0	0	1.3	11	36	74	112	151	227	329	--
			10	0	0	0	0	0	0	3.1	18	44	81	118	157	233	355	--
			20	0	0	0	0	0	.04	5.4	22	48	85	123	162	239	468	--
			30	0	0	0	0	0	.23	6.6	24	51	88	126	180	320	546	--
02389000	Etowah River near Dawsonville	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02389300	Shoal Creek near Dawsonville	20.5	2	0	0	0	0	0	0	0	0	0	0	0	0	1.3	7.1	89
			5	0	0	0	0	0	0	0	0	0	0	.48	1.2	8.9	29	210
			10	0	0	0	0	0	0	0	0	0	.41	1.1	2.3	15	44	242
			20	0	0	0	0	0	0	0	0	.12	1.1	2.2	4.0	22	68	271
02390000	Amicalola Creek near Dawsonville	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
02392000	Etowah River at Canton	605	2	0	0	0	0	0	0	0	0	0	0	1.5	5.1	30	71	--
			4	0	0	0	0	0	0	0	0	.72	3.8	11	25	92	194	--
			10	0	0	0	0	0	0	0	.35	2.8	10	24	44	114	222	--
			20	0	0	0	0	0	0	0	1.8	8.2	20	37	60	132	254	--
			30	0	0	0	0	0	0	0	4.0	13	27	47	71	149	287	--
02392500	Little River near Roswell	60.5	2	0	0	0	0	0	0.02	0.87	3.4	12	22	44	75	144	--	--
			5	0	0	0	0	.61	1.7	8.1	21	44	83	124	164	286	--	--
			10	0	0	0	.65	2.0	5.2	18	36	64	102	143	184	390	--	--
			20	0	0	.15	1.2	5.0	10	26	47	79	122	171	237	495	--	--
			30	0	0	.43	1.9	6.6	13	28	50	85	131	181	260	--	--	--
02394950	Hills Creek near Taylorsville	26	2	0	0	0	0.20	1.4	5.4	19	35	55	85	117	--	--	--	--
			5	0	0	.07	1.2	5.3	13	34	62	99	137	180	--	--	--	--
			10	0	0	.28	2.1	7.1	16	38	70	106	142	220	--	--	--	--
			20	0	0	.37	2.7	8.0	17	41	79	126	194	310	--	--	--	--
02397500	Cedar Creek near Cedartown	109	2	0	0	0	0	0	0	0	1.2	11	32	58	87	159	--	--
			5	0	0	0	0	0	0	.34	5.7	25	61	104	147	248	--	--
			10	0	0	0	0	0	0	.67	10	37	73	116	161	289	--	--
			20	0	0	0	0	0	0	1.4	17	46	81	124	171	332	--	--
			30	0	0	0	0	0	0	3.0	22	50	83	130	182	398	--	--
02398000	Chattooga River at Summerville	193	2	0	0	0	0	0	0	0	0.69	6.1	21	37	58	108	175	--
			5	0	0	0	0	0	0	.40	1.7	15	36	73	114	196	284	--
			10	0	0	0	0	0	0	.71	3.4	22	49	84	124	208	314	--
			20	0	0	0	0	0	0	.84	5.6	31	62	99	138	220	344	--
			30	0	0	0	0	0	.02	.88	7.1	37	70	108	149	240	405	--
02411800	Little River near Buchanan	18	2	0	0	0	0	0	0	0.94	4.0	10	16	22	32	58	--	--
			5	0	0	0	0	.19	.80	3.7	11	24	52	94	136	220	--	--
			10	0	0	0	0	.63	1.5	6.0	16	30	58	100	141	225	--	--
			20	0	0	0	0.21	.83	2.2	8.7	18	32	62	103	146	238	--	--
02413000	Little Tallapoosa River at Carrollton	89	2	0	0	0	0	0	0.40	2.0	9.8	21	33	54	77	133	--	--
			5	0	0	0	.67	2.4	5.2	13	26	43	70	110	150	228	--	--
			10	0	0	.17	2.0	6.7	12	25	44	64	93	131	169	267	--	--
			20	0	0	.63	3.3	12	20	39	64	89	120	160	201	335	--	--
Tennessee River Basin																		
03545000	Hiwassee River at Presley	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
03550500	Nottely River near Blairsville	74.8	2	0	0	0	0	0	0	0	0	0	0	1.3	4.0	18	47	112
			5	0	0	0	0	0	0	0	0	0	1.4	6.8	18	54	111	261
			10	0	0	0	0	0	0	0	0	.92	4.1	13	30	74	141	280
			20	0	0	0	0	0	0	0	0	2.8	10	23	42	9'	158	304
			30	0	0	0	0	0	0	0	.97	5.2	16	32	50	100	164	341
03558000	Toccoa River near Dial	Data for this station placed near end of table to facilitate good definition of draft-storage relation.																
03560000	Fightingtown Creek at McCaysville	Data for this station placed near end of table to facilitate good definiton of draft-storage relation.																
03567500	South Chickamauga Creek near Chickamauga	428	2	0	0	0	0	0	0	1.0	10	28	50	80	114	176	--	--
			5	0	0	0	0	0	0	4.9	22	49	86	124	163	244	--	--
			10	0	0	0	0	0	.30	9.0	28	58	95	135	179	287	--	--
			20	0	0	0	0	0	1.0	13	36	66	103	148	199	365	--	--
			30	0	0	0	0	0	1.1	15	39	71	106	159	219	419	--	--
03568500	Chattanooga Creek near Flintstone	50.6	2	0	0	0	0.03	1.1	6.1	25	46	69	98	130	165	234	308	--
			5	0	0	0	.80	4.3	12	34	66	99	132	164	197	270	360	--
			10	0	0	0	2.0	9.3	19	41	74	106	138	171	203	287	447	--
			20	0	0	.94	7.0	18	30	56	87	118	152	186	221	350	583	--
			30	0	0	2.2	12	26	39	65	96	127	165	203	240	407	--	--

Table 3.— Draft-storage relations at selected gaging stations on Georgia streams —Continued

Station Number	Station Name	Drainage area (mi^2)	Recurrence interval (years)	Storage required, in acre-feet per square mile, to maintain uniform draft rates, in cubic feet per second per square mile, indicated in column subheads (uncorrected for seepage or evaporation); dash leaders indicate physical limitation of storage sites.											
				0.50	0.60	0.70	0.80	1.0	1.1	1.2	1.4	1.5	1.6	1.7	2.0
NOTE: Data for these stations placed here to facilitate good definition of draft-storage relations.															
Savannah River Basin															
02177000	Chattooga River near Clayton	207	2	0	0	0	0	0.31	0.69	2.2	10	17	27	38	87
			5	0	0	.28	1.4	8.8	16	26	60	78	100	125	295
			10	0	.62	2.0	6.3	26	38	54	96	119	147	177	362
			20	.30	1.9	9.2	20	51	66	88	149	168	181	196	429
			30	1.4	7.2	19	32	63	88	113	181	214	253	295	592
02178400	Tallulah River near Clayton	56.5	2	0	0	0	0	0	0.15	1.0	7.9	13	22	32	66
			5	0	0	0	0	.67	1.4	3.8	17	26	43	98	264
			10	0	0	0	0	1.3	2.7	6.5	24	41	63	116	279
			20	0	0	0	0	1.8	4.3	9.9	33	61	90	141	299
Apalachicola River Basin															
02331000	Chattahoochee River near Leaf	150	2	0	0	0	0	1.8	4.5	10	38	47	56	77	—
			5	0	0	.50	2.2	17	30	46	110	162	214	265	—
			10	0	.28	2.0	8.2	34	54	78	146	195	244	303	—
			20	0	2.4	8.0	20	54	78	105	183	254	307	409	—
			30	.02	4.5	13	31	69	91	118	214	318	423	537	—
02331600	Chattahoochee River near Cornelia	315	2	0	0	0	0	0.21	1.0	6.0	17.6	25	32.1	—	—
			5	0	0	.37	.93	3.3	9.0	56	161	214	266	—	—
			10	0	.10	.64	1.2	5.7	14	62	167	219	271	—	—
			20	0	.24	.76	1.3	7.1	18	66	170	225	273	—	—
			30	0	.30	.80	1.3	7.4	20	68	172	228	275	—	—
02333500	Chestatee River near Dahlonega	153	2	0	0	0	1.0	7.4	15	28	59	88	117	—	—
			5	0	.97	4.1	11	42	62	87	158	219	271	—	—
			10	.96	3.4	10	25	69	93	124	198	258	315	—	—
			20	3.6	9.5	20	36	86	115	148	225	342	461	—	—
			30	6.1	15	28	45	95	123	159	323	452	566	—	—
02349000	Whitewater Creek below Rambulette Creek, near Butler	93.4	2	0	0	0	0	0	0	0	0.57	12	—	—	—
			5	0	0	0	0	0	0	.32	25	143	—	—	—
			10	0	0	0	0	0	.20	1.1	32	—	—	—	—
			20	0	0	0	0	0	.32	1.6	41	—	—	—	—
			30	0	0	0	0	0	.38	1.7	50	—	—	—	—
Mobile River Basin															
02389000	Etowah River near Dawsonville	103	2	0	0	0	0	0.94	3.0	7.7	25	37	62	—	—
			5	0	0	.18	1.8	16	29	47	54	128	191	—	—
			10	0	.26	3.4	8.3	32	50	76	126	173	254	—	—
			20	0	2.5	10	20	55	78	110	139	261	412	—	—
			30	.60	5.4	16	31	73	98	131	190	363	515	—	—
02390000	Amicalola Creek near Dawsonville	84.7	2	0	0	0	0	6.1	14	23	52	74	101	126	—
			5	0	0	.67	2.1	16	27	43	85	133	192	243	—
			10	0	0	1.2	3.4	21	32	50	99	147	207	303	—
			20	0	.14	2.0	4.2	22	34	54	108	181	274	398	—
Tennessee River Basin															
03545000	Hiwassee River at Presley	45.5	2	0	0	0	0.13	5.0	11	17	41	57	75	101	141
			5	0	0	.87	4.1	20	35	49	90	112	140	185	352
			10	0	.34	3.0	9.8	33	52	69	117	144	176	218	377
			20	0	2.0	8.0	18	48	71	91	147	179	211	255	422
			30	.26	4.7	12	24	59	81	107	164	199	230	269	518
03558000	Toccoa River near Dial	177	2	0	0	0	0	1.5	4.5	10	17	47	61	—	—
			5	0	0	0	2.0	15	28	46	88	116	151	—	—
			10	0	0	.68	5.1	30	48	71	120	152	190	—	—
			20	0	0	2.0	11	43	65	88	146	177	213	—	—
			30	0	.03	4.0	17	52	76	100	159	190	351	—	—
03560000	Fightingtown Creek at McCaysville	70.9	2	0	0	0	0.34	6.0	14	25	59	78	97	—	—
			5	0	0	.86	4.0	23	37	56	109	159	212	—	—
			10	0	.47	4.0	10	39	58	80	135	184	235	—	—
			20	0	1.6	7.4	18	55	74	96	148	195	244	—	—
			30	0	2.0	9.4	24	60	80	103	153	203	252	—	—