

**GEORGIA
STATE DIVISION OF CONSERVATION
DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director**

**THE GEOLOGICAL SURVEY
Bulletin Number 73**

**EFFECT OF A SEVERE DROUGHT (1954)
ON STREAMFLOW IN GEORGIA**

by

**M. T. Thomson and R. F. Carter
United States Geological Survey**



Prepared cooperatively by the U. S. Geological Survey

**ATLANTA
1963**

ERRATA

TABLE 1. Wherever a zero appears in the column headed "Minimum 12-Month Flow", all data for that site were intended to be omitted, and should be disregarded except for the zero in the column headed "1-Day". The zeros in the column headed "1-Day" represent factual information and are believed to be correct in all cases.

For example: Data for site 1078, page 96, should read as follows:

Map No.	Drainage Area	Stream	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow
			1-Day	7-Day	Monthly	June	July	August	
1078	41	Turkey Creek	0						

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LETTER OF TRANSMITTAL
Department of Mines, Mining and Geology

October 2, 1962

His Excellency, S. Ernest Vandiver
Governor of Georgia and
Commissioner Ex-Officio
State Division of Conservation
Atlanta, Georgia

Dear Governor Vandiver,

I have the honor to submit herewith Georgia Geological Survey Bulletin No. 73, "Effect of a Severe Drought (1954) on Streamflow in Georgia" by M. T. Thomson and R. F. Carter of the U.S. Geological Survey, in cooperation with the Department of Mines, Mining and Geology.

This report is published to provide a comprehensive analysis of the effect of an outstanding drought on the surface water resources of the State. The observed flow data on which this report is based were published early in 1955 as Information Circular 17 in order to make those data immediately available to the public.

Streamflow during the drought of 1954 was observed and recorded more completely than in any previous drought in Georgia. This extensive documentation was performed at a time when much of the streamflow in the State was still free from man-made regulation and modification. The data in Information Circular 17 and the analyses of those data in this report will provide a basis for evaluation and comparison of the effect of future measures undertaken for protection against droughts and for control of surface-water resources.

The technical evaluation and appraisal in this report of the effect of a severe drought on streamflow will be of continuing benefit to the people of Georgia, serving as a guide to wise use and development of the streams of the State.

Very respectfully yours,



Garland Peyton,
Director

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ABSTRACT

This report contains an analysis of streamflow conditions in Georgia during the severe drought of 1954, based on streamflow data collected during 1954 and subsequent years. Derived values of drought flows are presented, including minimum average flows for one day and for longer periods of time. Methods are presented for estimating the volume of supplemental storage that would be required to maintain various rates of flow during a drought such as that of 1954. The probable accuracy of the derived drought data and of the storage requirement data is discussed. The probable frequency of recurrence of the 1954 drought is delineated for various areas of the State. This report provides the most thorough appraisal ever made in Georgia of a severe drought on a statewide basis.

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA

by

M. T. Thomson and R. F. Carter

INTRODUCTION

Purpose and Scope

This report presents the results of analyses of streamflow information collected by the U. S. Geological Survey in Georgia during the drought of 1954 and during the period of low flow that persisted in the years following 1954.

Observed data collected during 1954 were published by the Department of Mines, Mining and Geology in January, 1955, as Information Circular 17, to make these data available as quickly as possible because of the many urgent measures then under consideration to provide protection against drought damages.

At the time that Information Circular 17 was prepared, it was planned to present the analyses of the data in that publication in a subsequent Information Circular. However, because the information is expected to have a long period of usefulness—at least until some future drought surpasses in severity that of 1954—the report is published as a Bulletin.

The low streamflows in Georgia during the drought of 1954 in Georgia deserve special attention. They were probably the outstanding climatic event of the decade of the 1950's. If not the lowest streamflows ever known in most of the State, they were among the lowest. Because of the great number of low-flow measurements made, the low flows of 1954 were not only better defined, quantitatively, than any drought flows up to that time, but they provide a rare opportunity to appraise a drought on a statewide basis.

The measurements of low flows made during the drought of 1954 are important because on many small streams they are probably the only such measurements that will ever be made under predominantly natural flow conditions during an extreme drought. Since 1954, the flows of streams in Georgia have become more and more affected by manmade regulation from innumerable small ponds and by diversions for water supplies and irrigation.

Intensive surveys and studies of the drought of 1954 would not be warranted unless the information could be made applicable to future droughts. This is done in this report by establishing frequency relationships for the minimum flows of 1954, and by providing means of relating future low flows to those measured in 1954.

Most of the people of Georgia will remember the low flows of the streams during the drought of 1954 for many years to come, and will prefer to plan their use of the streams and to design their measures for protection against future droughts on the basis of that event. Probably they will continue to do so until another, more severe, drought event occurs. When such an event does occur, the competitive demands on Georgia's water resources may be great enough to warrant economic evaluation of the measures to avoid losses from low streamflows. The economic evaluation should be on the primary basis of frequency considerations, rather than on the basis of an important, isolated, historical event.

The computed minimum flows that occurred at the measuring sites for several duration periods are presented, as well as information for the design of storage reservoirs, based on the low flows of 1954 and the replenishment period of 1955. All of the information presented is based on studies and interpretations of the observed field data collected under drought conditions and represents the authors' concepts of what type of information is most likely to be needed by water-resources specialists, consulting engineers, and the public, for practical application to the water problems that can be anticipated in future droughts.

The report explores the severity of the drought in terms of the frequency of extreme low streamflows, examines the accuracy of drought information and presents information to assist in the design of storage reservoirs that will provide a sufficient supply of water during future droughts. It also explains the methods of determining minimum flows and storage requirements at localities other than those at which streamflow measurements have been made.

Administration and Acknowledgments

Most of the streamflow data at the continuous-record gaging stations in Georgia and the low-flow measurements at the partial-record gaging stations were collected under a cooperative agreement between the Department of Mines, Mining and Geology,

Georgia State Division of Conservation, and the U. S. Geological Survey. The agreement also provided for the analysis of the drought flows and the preparation of this report. Many of the drainage areas listed in this report were obtained under a co-operative agreement with the Georgia State Highway Department.

The report was prepared in the Atlanta District of the Surface Water Branch, U. S. Geological Survey, under the direction of A. N. Cameron, district engineer. R. F. Carter, hydraulic engineer in charge of special investigations, directed the analysis and compilation of the data.

Data for the gaging stations on the Savannah River, St. Mary's River, Withlacoochee River, and the tributaries of the Tennessee River were furnished by district offices of the U. S. Geological Survey in States adjacent to Georgia.

MINIMUM FLOWS DURING THE DROUGHT OF 1954

The minimum flows during 1954 for all the sites on the streams in Georgia for which field data are available are listed in table 1. The locations of the sites are shown on the map in figure 1, which also shows by means of symbols the approximate minimum monthly flows per square mile.

Explanation of Minimum-Flow Information Units of Flow

Streamflows are expressed in this report as cubic feet per second (cfs). A cubic foot per second is the rate of flow of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second. That unit of flow is used most commonly by those concerned mostly with rivers and streams. Others concerned mostly with wells and conduits use units of gallons per minute, and million gallons per day; still others, concerned mostly with irrigation, use units of acre-inches per hour, or acre-feet per day.

To avoid confusion in presenting the information, only the one unit of flow (cfs) is given in the tables and text. The reader who prefers to use other units can easily compute them—one cubic foot per second is approximately equal to 450 gallons per minute, two-thirds of a million gallons per day, 1 acre-inch per hour, or 2 acre-feet per day. The rounded equivalents are well within the usual limits of accuracy of streamflow information.

Use of Significant Figures

Care has been taken in presenting the flow information in this report to show streamflows only to the degree justified by their probable accuracy. Measured flows and records at gaging stations are generally given to three significant figures for flows greater than 100 cfs and to two significant figures for flows less than 100 cfs. Flows computed for sites other than those where measured or recorded data are available are frequently shown only as being within a given range—as on the map in figure 1.

The limits of accuracy should be recognized when converting cubic feet per second to other units, and conversions should not be carried out to more significant figures than are given herein.

Streamflows smaller than 0.05 cfs are considered to be too small and too much subject to error to report and consequently are given as zero flow.

Cubic Feet Per Second Per Square Mile

Sometimes minimum flows are expressed as cubic feet per second per square mile (cfsm). This term represents the average number of cubic feet per second flowing from each square mile of the area drained by the stream, assuming that the runoff is distributed evenly in time and area. This concept is useful when comparing the flows of stream drainage areas of different sizes. However, the basic assumption that the runoff is distributed evenly over an entire drainage area is rarely valid when used for low streamflows as will be amply demonstrated by the information in this report. Consequently, the authors do not recommend the computation of low flows of a stream solely on the basis of the flows per square mile of another stream.

Map-Numbering System

The map numbers by which most of the sites are identified in column 1 of table 1 and on the map in figure 1 are those used in Information Circular 17. Where information at additional sites is given, the additional sites are identified by letter suffixes, and the information is inserted in the table in the proper place in downstream order. For example, site numbered 12A is downstream from site 12 and upstream from 13. If a site were numbered 12B it would be downstream from 12A and upstream from site 13.

Drainage Areas

The drainage areas in square miles are given in the second column in table 1. Many drainage areas had not been determined when Information Circular 17 was published. They are all given in this report. Some drainage areas are revised. When discrepancies appear in the drainage areas given in Information Circular 17 and in this report, the areas given in this report are considered more accurate. The drainage areas listed in table 1 were carefully measured on the best maps available according to the standards prepared under the supervision of the Subcommittee on Hydrology of the Federal Inter-Agency River Basin Committee and were included in a report.¹

¹Carter, R. F., 1959, Drainage Area Data for Georgia Streams: U. S. Geol. Survey Open File Report.

Location of Site Where Flow Data Apply

The name of the stream is given in the third column of table 1 if it is known. To assist in the identification of the stream, the

name of the stream to which it is tributary is given in the fourth column. A brief description of the location is given in the fifth column. The highway designation given in the description is generally that which was in effect in 1954.

Precaution is needed in identifying a location in future years from a highway designation, as the highway may be relocated or its designation changed. Even a slight error in the location may seriously affect the usefulness of the information given here, when used in future years. For example, a sizable tributary or spring may enter the stream just upstream or downstream from the location and alter the flow considerably. Thus, the latitude and longitude of the site is often more reliable for identifying the correct location than is the highway designation.

Minimum Daily Flow

The minimum daily flow, as used in this report, is the mean flow for the minimum 1-day period from midnight to midnight. Generally, the minimum daily flow in 1954 occurred sometime in September or October. For most practical purposes, the flow given in column 6 of table 1 can be assumed to be the absolute minimum that occurred during 1954, even though the flow during the day may have varied somewhat. Some variation in flow occurs even under natural flow conditions because of diurnal evaporation from the water surfaces and transpiration from riparian vegetation. More pronounced fluctuation during the day occurs on streams that are regulated by the operations of mills and hydroelectric power plants.

Minimum 7-Day Flow

The minimum 7-day flow given in column 7 is the smallest arithmetic average of the daily flows for seven consecutive days during 1954. Generally, the minimum 7-day flow occurred in September or October, and on unregulated streams was not much greater than the minimum daily flow. On streams that are regulated by hydroelectric plants, the minimum 7-day flow may greatly exceed the minimum daily flow because such plants characteristically release large quantities of water for five days a week—Monday through Friday—and small quantities for the remaining two days—the “weekend holdover”. The differences between the minimum daily and 7-day flows are greatest just downstream from the hydroelectric power plants and tend to diminish with distance downstream.

Because many of the larger streams are regulated, it is generally more convenient to study the minimum 7-day flows than the minimum daily flows. Also, State agencies tend to regulate weekly operations rather than daily operations at water works and waste-treatment plants.

Minimum Monthly Flow

The minimum monthly flow, given in column 8, is the mean flow for the calendar month having the smallest mean flow during 1954. Generally, the minimum monthly flow was that for September or October. On most unregulated streams minimum monthly flows are appreciably greater than the minimum 7-day and daily flow, but on regulated streams that are affected by seasonal storage operations at reservoirs they may not differ much from the minimum 7-day flows.

Minimum monthly flows are convenient for studies of large, regulated streams because the records of storage and diversions are generally available only on a monthly basis. Monthly flows are also useful for studies of the relations of streamflows to rainfall and other weather features.

Some hydrologists prefer to use the minimum mean flow for a 30-day period instead of that for a calendar month. The former is generally somewhat smaller and tends to be related somewhat more consistently to the minimum mean flows for shorter and longer periods. However, for most purposes either quantity will serve with approximately equal accuracy. Both quantities were used in the analyses of the drought data, but the minimum mean monthly flow was chosen for presenting the results.

Possible Severity of Water Shortages

The minimum flows for the three periods provide an opportunity to evaluate the possible severity of water shortages for short periods. For example, a community or industry may require, most of the time, a flow equal to that of the minimum monthly flow that occurred in 1954. Yet no great harm would result if the flow were somewhat less for a few days.

Ordinarily, the flow for about half the month would average less than the monthly mean. The minimum 7-day flow indicates how much less the flow would be for the lowest consecutive 7-day period within the month. The minimum daily flow indicates how much less the flow would be for the lowest day within the month.

After considering the low-flow data, the community or industry could decide whether to accept the possibility of a deficiency, or take measures to insure a more dependable supply.

The minimum flows given in columns 6 to 8 of table 1 are especially significant for municipal or industrial water-supply purposes for which water demands are uniform throughout the year or at their seasonal peak in the normal low flow period of September or October.

Minimum Flows in Summer Months

Minimum streamflows during the summer months may be of considerable concern, because water demands are not uniform throughout the year nor do they necessarily reach their seasonal peak in September and October. Irrigation demands in Georgia may be greater in the months of July and August when the crops naturally suited to the climate of the State normally require the most water. Recreational needs for water facilities are likely to be greatest in June, July and August rather than in September and October. Oxygen demands for aquatic life and the reduction of wastes may be at a peak in the hot months of July and August when the natural supply of dissolved oxygen in the water is smaller in proportion to the flow than in September and October when the water is cooler.

For such reasons, competition for the use of water during the months of June, July and August in future droughts may be more severe than during the common low-flow months of September and October. Therefore, the minimum daily flows of June, July, and August are shown in columns 9, 10 and 11. These data provide an indication of water-supply in the summer months. The inclusion of more summer-time flow data is not considered to be warranted. Should a problem involving water shortages in the summer months arise, more detailed information would probably be required.

Minimum 12-Month Flow, 1954-55

The remaining minimum flow statistic, shown in column 12 of table 1, is the minimum 12-month flow, 1954-55, which is the mean flow of the minimum 12-month period that occurred in 1954 and 1955. This is a much greater amount than those for the other minimum periods. It is given primarily because of its significance with respect to storage requirements. The minimum

12-month flow represents the flow that could be made available uniformly for the 12-month period by storage operations of a reservoir that is assumed to be full at the beginning of the period, emptied sometime during the period, and then refilled by the end of the period.

Perfect operation of such a reservoir in 1954 and 1955 (which would have been only theoretically possible) would have made the discharge of the reservoir uniform over one complete annual cycle of streamflow without the need of storage capacity in the reservoir to carry over water for more than one annual cycle.

Minimum Flows per Square Mile

Limitations of Minimum Flows Per Square Mile

The subject of minimum flows per square mile is discussed here primarily to emphasize that the concept has limited usefulness. The concept that minimum flows of streams are directly related to their drainage areas may be dangerously misleading. Yet, for some practical purposes, mostly in a very generalized sense, the concept may be useful.

In some places, the average flows of large streams over periods of several years may be closely related to the average rainfall on the drainage areas. Therefore, it is quite logical to think of average flows per square mile as being a significant concept to apply to sites on streams for which the discharge was not determined by actual streamflow measurements but for which the average rainfall may be determined. For example, if it were known that a stream draining 1,000 square miles had an average flow of 1,000 cfs, the average flow per square mile would be 1.00 c fsm. Then if the area of a stream in the same vicinity, and having the same average rainfall were 500 square miles, which can be determined readily from maps, its average flow would be 500 square miles x 1.00 c fsm or 500 cfs. This areal relationship for average flows has been determined to be quite satisfactory for large streams in some parts of Georgia.

Unfortunately, this simple areal relationship is rarely accurate when applied to the minimum flows of even large streams in Georgia. One stream having a drainage area of 1,000 square miles may have a minimum flow of 10 cfs, or 0.01 c fsm, while the minimum flow of a stream draining 500 square miles in the vicinity and having the same average rainfall could be zero or even more than 10 cfs. Such discrepancies are common in Georgia on streams

draining areas of 100 square miles or less as shown on the map in figure 1.

Explanation of Symbols

The minimum flows per square miles shown on the map in figure 1 are for the monthly data. The data for the minimum 7-day and daily flows would show similar but somewhat more varied patterns. The data are presented as symbols to represent various rates of flow per square mile. The ranges of flow per square mile shown by each symbol are approximately the same percentage-wise except for those for zero flow and those for flows less than 0.01 cfsm. For example, the symbol that represents the class having the smallest range of flows per square mile, has a 1-to-3 range, 0.01 to 0.03. The symbol representing the next larger class has approximately the same 1-to-3 range, 0.03 to 0.1, which is approximately three times the magnitude of the range shown by the lesser symbol. The fourth symbol again has a 1-to-3 range, 0.1 to 0.3, which again is approximately three times the magnitude of the range shown by the third symbol.

Regional Generalizations

The map in figure 1 shows five broad hydrologic provinces, the Blue Ridge, the Valley and Ridge, the Piedmont, the upper Coastal Plain, and the lower Coastal Plain. Technically, the Coastal Plain is one physiographic province, but for clarity in this report the upper and lower parts of the Coastal Plain are treated as separate hydrologic provinces. The boundary between the Piedmont province and the Coastal Plain is called the Fall Line, or sometimes the Fall Zone because like a sea coast, it has "islands" of either Piedmont or Coastal-Plain formations and other irregularities for a width of 5 to 10 miles. Each of the five hydrologic provinces tends to have many streamflow characteristics common within the province and different from those in the other provinces. It is convenient to describe streamflow characteristics within each province separately, particularly the characteristics of low flows of the small streams and of the segments of the larger rivers that lie within two or more of the areas.

Examination of the map showing minimum flows per square mile in figure 1 will show that although differences occur on streams within local areas, some broad generalizations may be made, such as the prevalence of very low flows per square mile

on streams in the lower Coastal Plain, and relatively high flows per square mile on streams in the Blue Ridge province.

The following broad generalizations about the minimum monthly flow per square mile of streams in Georgia during the drought of 1954 are made from the data shown on the map in figure 1.

1. Streams in the lower Coastal Plain had either zero flows or very low flows per square mile, generally less than 0.01 cfsm.
2. Streams in the upper Coastal Plain had flows per square mile ranging from zero to more than 1.0 cfsm.
3. Streams in the Piedmont province had flows per square mile that varied locally, but having a distinct trend from predominantly zero near the Fall Line to as much as 1.0 cfsm near the mountains.
4. Streams in the Ridge and Valley province had flows per square mile that ranged from zero to 1.0 cfsm.
5. Streams in the Blue Ridge province had generally the highest flows per square mile in the State, ranging from 0.2 to 1.0 cfsm.

These broad generalizations have little relation to practical water problems. For example, a municipality or industry in the Piedmont province of Georgia that requires a flow of 1 cfs and depends on a stream draining 10 square miles would find little satisfaction in the information that the minimum flow during a drought like that of 1954 would be between zero and 10 cfs.

The minimum flow per square mile shown on the map in figure 1 may be used by the reader for some general broad evaluations of water supplies if the most adverse flows indicated are used. For example, in the example just mentioned, he might note that the available minimum flow of the stream might be as little as zero, and therefore conclude that further and better information on the minimum flow is necessary.

Better means of computing minimum flows of streams than those provided by areal comparisons are available and will be discussed in the following sections of this report.

COMPUTATION OF MINIMUM FLOWS

The minimum flows at 106 gaging stations in Georgia and at 1,082 additional sites during the 1954 drought are given in table 1 of this report. From these data, minimum flows can be computed for other sites where flow information is desired.

Three methods of computing minimum flows at ungaged sites on streams are described in this report as: (1) the drainage-area-ratio method, (2) the discharge-ratio method, and (3) the control point method. The diagram in figure 2 illustrates the three methods.

Drainage-Area-Ratio Method

The drainage-area-ratio method, illustrated by line A in figure 2, is based on the assumption that the low flows of streams are proportional to their drainage areas. The drainage area and the minimum flows at gaging stations are given in the Water Supply Papers of the Geological Survey.

To apply this information to ungaged sites, the user must first determine, from the best maps available, the drainage area of the stream at the ungaged site for which he wishes to know the minimum flows. He then divides the drainage area for the ungaged site by the drainage area of a suitable gaging station as given in the Water Supply Paper to obtain the drainage-area ratio. He merely applies this ratio to the known minimum flows at the gaging station to compute the minimum flows at the ungaged site.

This simple method may give quite satisfactory results on large unregulated streams at ungaged sites close to gaging stations, but the accuracy of the results diminishes as the drainage areas for the ungaged sites become smaller, and as the distance from the gaging stations increases. Furthermore the results may be grossly in error, even on adjacent streams, as shown by the many disparities in minimum monthly flows per square mile on the map in figure 1.

The drainage-area-ratio method is not recommended for anything but the most general type of estimates. However, the other two methods require that the flow at the ungaged site be measured under certain low-flow conditions. The user may not be equipped to measure the flow, or he may not be able to wait until the required flow conditions occur. In such circumstances, he has little choice but to use the drainage-area-ratio method, for which

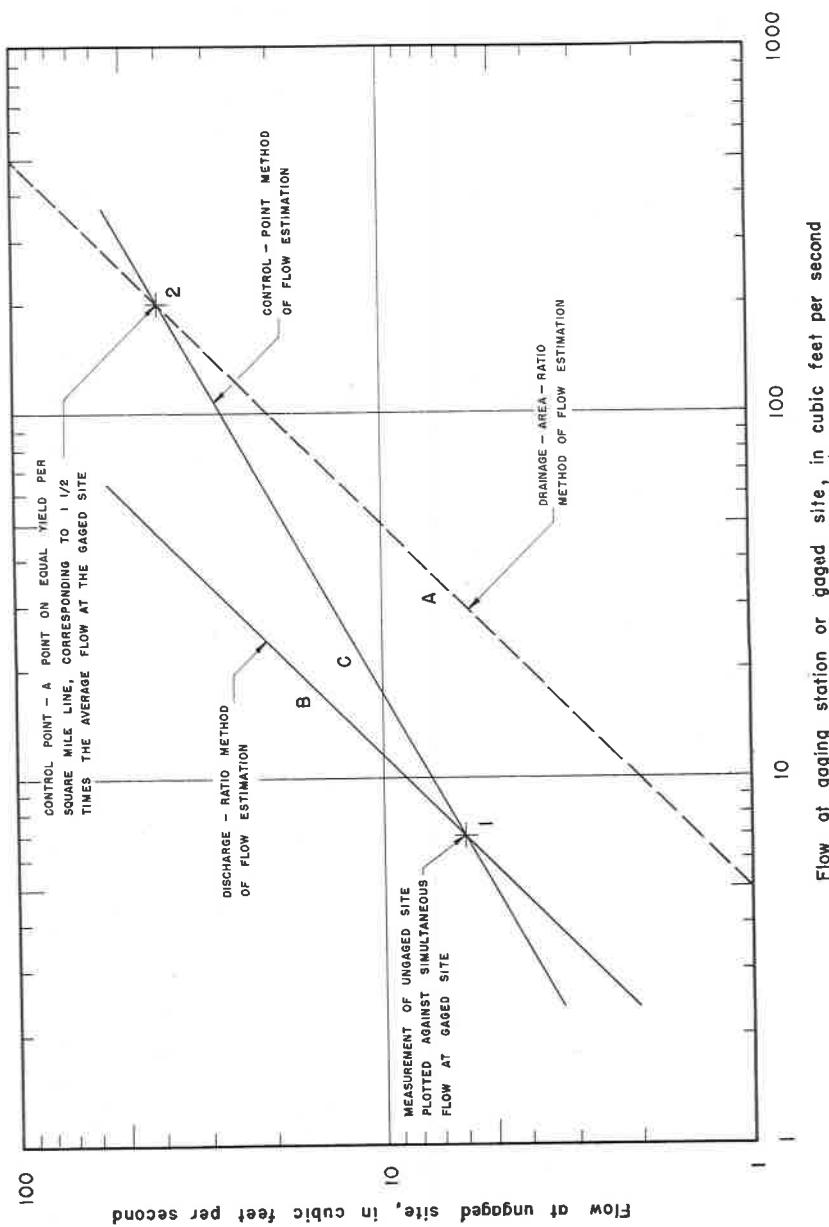


Figure 2. Illustration of three methods of estimating curves of relation between the flow of gaged and ungaged streams.

the information in figure 1 of this report should be of considerable help.

To use the information in this report, the user must first determine the drainage area at the ungaged site as best he can from the best maps available. He should then locate the nearest sites for which minimum flow data are given in this report, from figure 1. The sites must be on unregulated streams within the same province. They should be on streams having approximately the same size drainage area as the ungaged site. To be prudent, the user should not assume that he can compute the flows per square mile by interpolating the ranges shown by the symbols on the map, but he should select the smallest range of flow per square mile shown in the appropriate vicinity. He should then multiply the drainage area at the ungaged site by the range of flows per square mile at the gaged site to obtain the range of flow at the ungaged site. This procedure will provide an estimate of the range of minimum monthly flows at the ungaged site. He can then estimate storage requirements and the probabilities of recurrence in the future from the information given later in this report.

Discharge-Ratio Method

The discharge-ratio method, illustrated by line B in figure 2, is based on the assumption that the low flows of streams vary proportionally so long as the flows are not affected by storm runoff or regulation. Such flows are called base flows. They are derived from the gradual draining of water stored in the ground or in swamps, ponds, and stream channels. Under ordinary base-flow conditions, the low flows at nearby sites on a stream or on adjacent streams within a province tend to vary proportionally. Proportional variation means that if the base flow of one of two nearby streams were to decrease 10 percent in a few days, the base flow of the other stream would be expected to decrease 10 percent in the same period also. Simultaneous discharges of such streams, when plotted to a logarithmic scale like that in figure 2, would plot close to a line with a 45° slope (such as line B in that figure) for a relatively small range of discharges.

Using this principle to compute the minimum flow at an ungaged site on a stream, the drainage area at the ungaged site is not necessarily required, but an accurate measurement of the low flow is required at a time when no storm water is in the stream. Generally this condition will occur only after several days without

rain anywhere in the drainage basin—a condition which is rare in Georgia except during late September and most of October. Low-flow measurements at any other period are generally unreliable for use in computing minimum flows.

Having made a satisfactory base-flow measurement at the ungaged site, a reliable computation of minimum flows at the site may then be computed.

Until the information in Information Circular 17 became available in 1955, the next step in the computation was to obtain the streamflows at a gaging station in the vicinity, from the nearest office of the U. S. Geological Survey. That may still be desirable in the future. When requesting streamflow information from the Geological Survey, certain details should be given about the place, time, and amount of flow that was measured at the ungaged site. Those details enable the Survey to give the best available information. The place is important, because the Survey may already have available some observed flow data at that place, or the Survey may have information about regulation at the site or other conditions that may be pertinent. The Geological Survey makes measurements at additional sites on the small streams in Georgia whenever the base-flow conditions are favorable.

The exact date and time of the measurement at the ungaged site are important because there might be diurnal fluctuations in flow that are serious enough to be considered in the computation of the minimum flows. The measured discharge is important because the experienced hydrologists of the Survey may be able to judge whether the discharge appears to be reliable, and if not, call attention to possible errors.

If the need for results is urgent, the information from the U. S. Geological Survey may be expedited by visiting the nearest gaging station on an unregulated stream in as short a time as possible before or after measuring the flow at the site. Most gaging stations are equipped with a gage in the water on which the gage height of the water surface can be observed. Then the Survey office can be called, giving that gage height, and the corresponding discharge can be immediately obtained.

It may be even better to measure not only the flow at the ungaged site, but also to measure the flow, as nearly simultaneously as possible, at one of the sites in the same hydrologic province at which measurements have been made by the Survey and for which the location and minimum flow data are given in table 1

of this report. Using the site selected from table 1 as a gaged site, minimum flows at the ungaged site can then be computed.

Preferably, the gaged site selected from table 1 should be one of several possible sites in the vicinity of the ungaged site. To choose an acceptable gaged site, the flow per square mile of drainage area for a specific period should be compared for all the possible sites and any sites with flows that differ grossly from the general average for the area should be eliminated from consideration. Of the acceptable gaged sites with flows that compare reasonably well with each other, one should be selected that has a drainage area of about the same size as the ungaged site and is fairly near.

The computations of the minimum flows at the ungaged site by the discharge-ratio-method can be made graphically on logarithmic cross section paper like that in figure 2, or by simple arithmetic. By simple arithmetic, the computation is done by dividing the flow measured at the ungaged site by the simultaneous flow at the gaged site listed in table 1 to obtain the discharge ratio. The minimum flows listed for the site in table 1 are then multiplied by the discharge ratio to obtain the corresponding minimum flows at the ungaged site during the drought of 1954. The results should be rounded off to correspond with those given in table 1 to avoid the implication of unwarranted accuracy.

The accuracy of low flows computed by the discharge-ratio method is nearly as good as those computed by the third method, the control-point method, if the minimum flows are not too much less than the flows actually measured. The limitations of accuracy are discussed more fully in the following description of the control-point method.

Control-Point Method

The control-point method was developed by C. H. Hardison of the U. S. Geological Survey (oral communication). In his studies of correlation of simultaneous natural flows at gaging stations within short distances of each other in the Southeastern States, he observed that, when plotted on logarithmic coordinates, correlation curves tend to be straight lines which intersect the equal yield line at a discharge about 1.5 times the average discharge at the independent station. Above that point, called the "control-point" in this report, the correlation curves tend to assume a 45° slope indicating that storm runoff, which dominates the higher flows of streams, tends to be relatively uniform.

Below the control point the correlation curves assume a variety of slopes reflecting the difference in base flows caused by geological characteristics such as the presence or absence of substantial contributions of ground water.

Mr. Hardison's discovery is remarkably useful because the lower part of the correlation curve can be so consistently approximated by a straight line on a logarithmic plot. This makes it possible to project a correlation downward from the control point to minimum flows with considerable confidence, provided the position of some point on the correlation curve is defined by a sufficient number of simultaneous flow measurements.

For most Georgia streams only one or two simultaneous flow measurements are available for the drought of 1954. Consequently the correlations used in this report are subject to considerable inaccuracy due to the lack of observed data.

The control-point method of estimating minimum flows has considerable advantage over the discharge-ratio method. Both methods require the same simultaneous base-flow measurements, but the correlations by the two methods give progressively different results as the extension of the correlation curve below the measured flows to the minimum flows become greater, and as the disparities in the measured flows per square mile become greater.

On figure 2, point 1 represents the plotting of the simultaneous flow at two sites. The correlation by the discharge-ratio method is the 45° line, B, and the correlation by the control-point method is the line C from point 1 to the control point 2. Line B, when extended upward misses the control point and flows estimated in that range will generally be in error. Line B, when extended downward to the range of minimum flows, will again be in error.

When the measured flows of both streams are nearly proportional to the respective drainage areas and point 1 is therefore on or close to the 45° line that represents equal flows per square mile, the differences between the correlation curves by the two methods will be negligible. When the measured flows of the two streams differ radically from equal flows per square mile and point 1 is therefore far from the 45° line representing equal flows per square mile, the differences between the correlation curves by the two methods will be considerable. In the latter case, the correlation by the control-point method is usually more nearly correct than that by the discharge-ratio method.

A slight error in the control-point method is engendered by possible errors in the use of the control point at 1.5 times the average flow. No theoretical explanation supports the choice of this flow value for the control point. The choice is purely empirical based on the examination of many correlation curves not only for streams in Georgia, but for streams in many other States. Many correlations intersect the equal yield line at other discharges. However, even if the position of the control point should vary considerably, this has a minor effect on the slope of the correlation line from the control point downward to the range of minimum flows when the simultaneous measurements are reasonably low, unless the flows per square mile at the two sites are radically different.

The control-point method of computing minimum flows was used for the determination of the minimum flows shown in table 1 for the sites other than gaging stations. The use of that method is strongly recommended for computing minimum flows for other sites for which no record of streamflow is available.

In using the control-point method, a measurement of the flow at the ungaged site is required as already described for the discharge-ratio method. However, instead of computing the simple discharge ratio, a correlation curve should be plotted, like that shown in figure 2 as line C. The drainage area of the ungaged site will be needed to do this. From table 1, a site on a gaged stream nearest to the ungaged site should be selected, using a stream that lies wholly, or mostly within the same province as the ungaged stream. The streams reported in table 1 were not regulated, except as indicated by footnotes, and, when making an investigation of minimum flows in future years, it should be made certain that the stream selected for correlation is still unregulated.

No great error will ensue by using for the control point 1.1 cfsm in the lower Coastal Plain, 1.4 cfsm in the upper Coastal Plain, 1.7 in the Piedmont province, 2.4 in the Valley and Ridge province, and 3.5 cfsm in the Blue Ridge province. These values are 1.5 times the average of the flows per square mile for the gaging stations in the respective provinces. The drainage area of the chosen site for which the minimum flow is given in table 1 and that of the ungaged site are multiplied by the value given above for the province in which the sites are located to obtain the coordinates of the control point.

The simultaneously measured flows at the two sites are then plotted to obtain the point marked "1" on figure 2. A line drawn

between the points is the correlation curve. The curve is entered with the minimum flows for the site given in table 1 on the proper axis and the corresponding minimum flows for the un-gaged site read on the other axis.

ACCURACY OF MINIMUM-FLOW DETERMINATIONS

The accuracy of minimum-flow determinations for the drought of 1954 is generally best at gaging stations. The accuracy is less at the sites where one or two base-flow measurements were made during the drought of 1954 and still less at the ungaged sites where future determinations may be based on base flow measurements made during other years using the methods described in this report. To evaluate the probable accuracy of the information given herein and of the determinations which may be made in the future (based on that information and actual measurements at ungaged sites) a study was made of the probable accuracy of the determinations of the minimum flows during 1954 at the sites reported in table 1.

Accuracy on Perennial Streams

To make the accuracy study for perennial streams, a group of sites at which the 1954 low flow was known was selected as a sample, and the low flow at these sites was then estimated by both the control point method, using a higher base flow measurement made in 1954, and by the drainage-area-ratio method.

The comparison of accuracy of the determinations by the two methods showed the control-point method to be much superior to the drainage-area-ratio method for most of the minimum flows of perennial streams that were determined during the 1954 drought. Furthermore, the accuracy by the drainage-area-ratio method is fixed because no other information is used. On the other hand, the accuracy by the control-point method may be improved by making more base-flow measurements. The study also indicated that the relative accuracy of the flow determinations depends largely on the magnitude of the flow determinations per square mile of drainage area. Flow determinations which are high per square mile of drainage area tend to have smaller proportional errors than flow determinations which are low per square mile of drainage area.

Accuracy on Non-perennial Streams

The preceding discussion has applied to streams that are considered perennial, i.e., streams that have some flow practically all the time. For practical purposes, as already indicated, the authors do not consider a stream perennial when the flow is less

than 0.05 cfs. There are many such streams in Georgia which are referred to here as non-perennial streams.

North of the Fall Line, non-perennial streams rarely have drainage areas exceeding 5 or 10 square miles. In the Coastal Plain, however, many streams draining several hundred square miles may have zero flows under drought conditions such as those of 1954. The map in figure 1 shows that most of the streams lying entirely within the lower Coastal Plain had zero flows, as did many of the smaller streams in the upper Coastal Plain.

It is easy to compute the minimum flows of streams which have been seen to have no flow. The minimum flow is zero. However, unless there is a gaging station at the site, it is not so easy to determine for how long the flow was zero, nor whether there may have been some storm run-off from showers during an extended dry period. Thus, there is some question as to the accuracy of zero flows for periods of a month or more. Prudence dictates that the flow of South Georgia streams should be assumed to be zero for at least a month unless there is some local evidence to the contrary.

There may be evidence obtainable from local residents about dry streams, even though the residents cannot indicate how much flow there was for a perennial stream. If evidence indicates that a stream ceased to flow but that water stood in the pools, it may be safe to assume that the flow was zero for less than a month. On the other hand, if evidence indicates that the pools dried up, the flow was probably zero for longer than a month. There is no practical way to attach reliability to evidence obtained from local residents except to estimate the credibility of the witnesses.

Some evidence of the length of the periods of zero flows on the streams of south Georgia might be derived from intensive studies and research based on observations of streams during the recurring drought conditions in that area. Successful research in the future might, in turn, make it possible to reconstruct the probable duration of zero flows during the drought of 1954. Inasmuch as some evidence (to be discussed later) indicates that the drought of 1954 in southern Georgia was a rare event—in some places possibly not exceeded in severity for a century—such studies and research may well be justified in the near future.

COMPUTATION OF STORAGE REQUIREMENTS

The suitability of a stream as a source of water supply or for waste disposal use may be severely limited by low flow during short periods, especially if the prospective user cannot afford to suspend operations during the most severe part of the drought. If the minimum flow is insufficient for his needs, the user may be forced to turn to an alternate source or to provide storage facilities to supplement the natural flow.

Information on the minimum flow may be all that the user needs if this flow is adequate for his requirements. If this flow is less than is required, then additional data is needed in order to estimate the cost of providing supplemental storage.

For sites on streams where complete-record gaging stations are located, the storage that would have been required to maintain various rates of flow during the drought of 1954 can be computed by analyses of the published streamflow records. Such storage analyses have been made of 1954 records for all complete-record gaging stations operated by the U. S. Geological Survey in Georgia on streams with little or no flow regulation. These analyses of the storage requirements at complete-record gaging stations were used to develop regional storage curves which may be used to compute estimates of storage requirements at other sites. These estimates will enable the prospective user of streamflow to make a more thorough appraisal of the cost of developing a given stream as a source of water supply or to make a comparison of the relative costs of developing alternative streams.

In studying the storage requirement characteristics at the gaging stations, it was found that storage data for the stations could be fitted into consistent areal patterns for three regions which embrace the five physiographic provinces used in the minimum flow analysis. The storage data for streams in a given region define a family of mean curves for that region very well, but differ significantly from data for other regions.

The regional storage curves are presented in figure 3 for the Piedmont and Blue Ridge provinces, in figure 4 for the Coastal Plain, and in figure 5 for the Valley and Ridge province. In these curves the minimum monthly flow, in cfsm, is shown on the abscissa, and the storage required to maintain a given rate of flow is shown on the parametric family of curves.

The reader who wishes to estimate the storage required to maintain a required minimum rate of flow at one of the sites

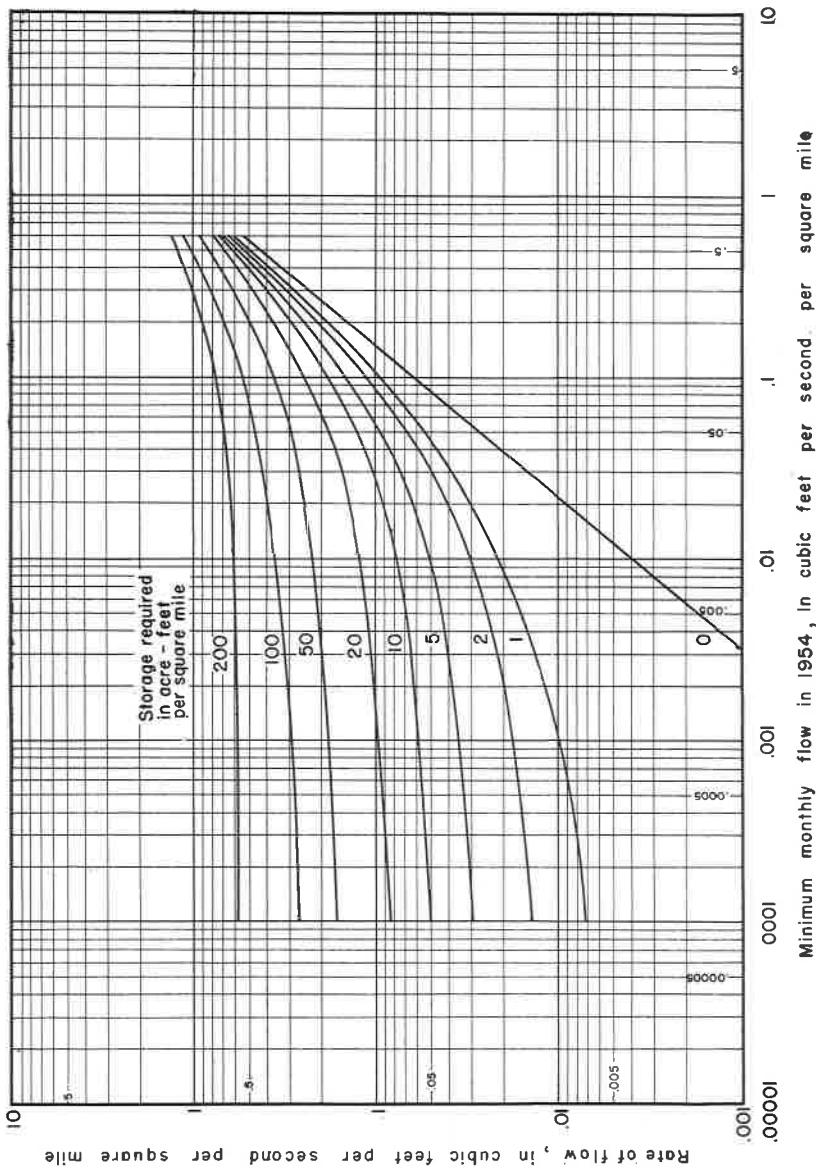


Figure 3. Storage required for various rates of continuous, regulated flow in streams of the Piedmont and Blue Ridge Provinces during the drought of 1954.

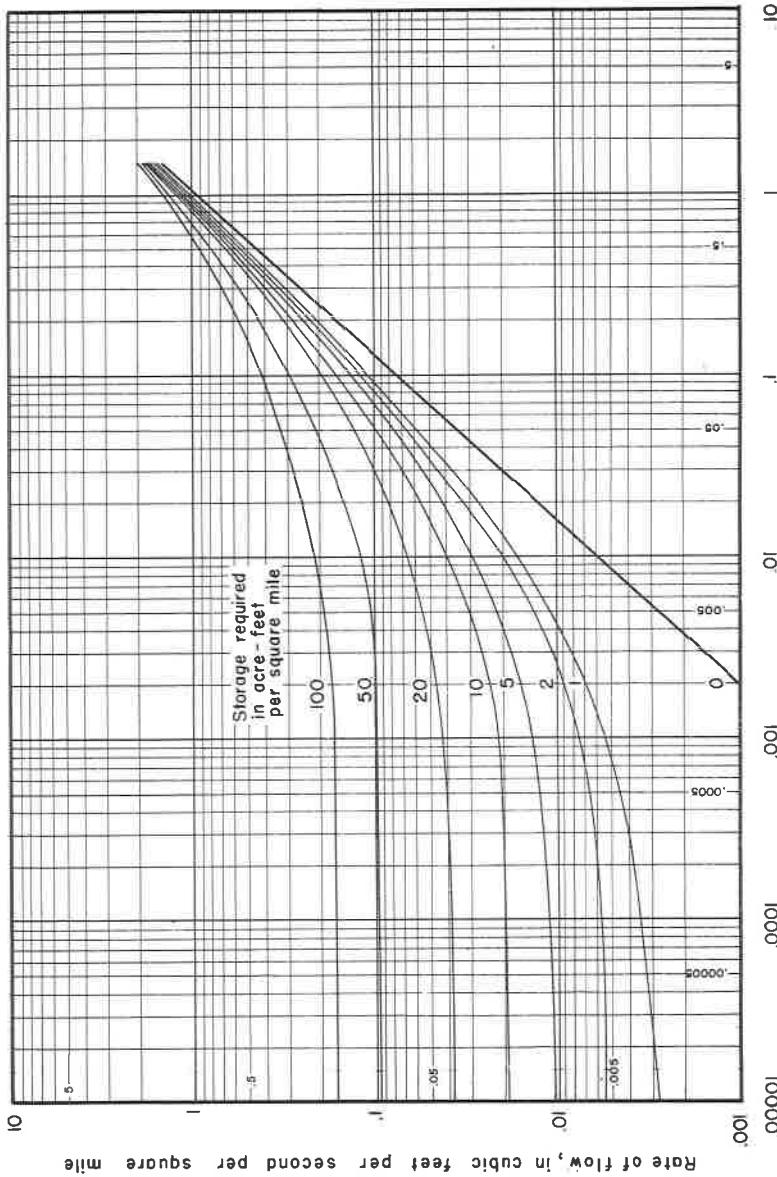


Figure 4. Storage required for various rates of continuous, regulated flow in streams of the Coastal Plain during the drought of 1954.

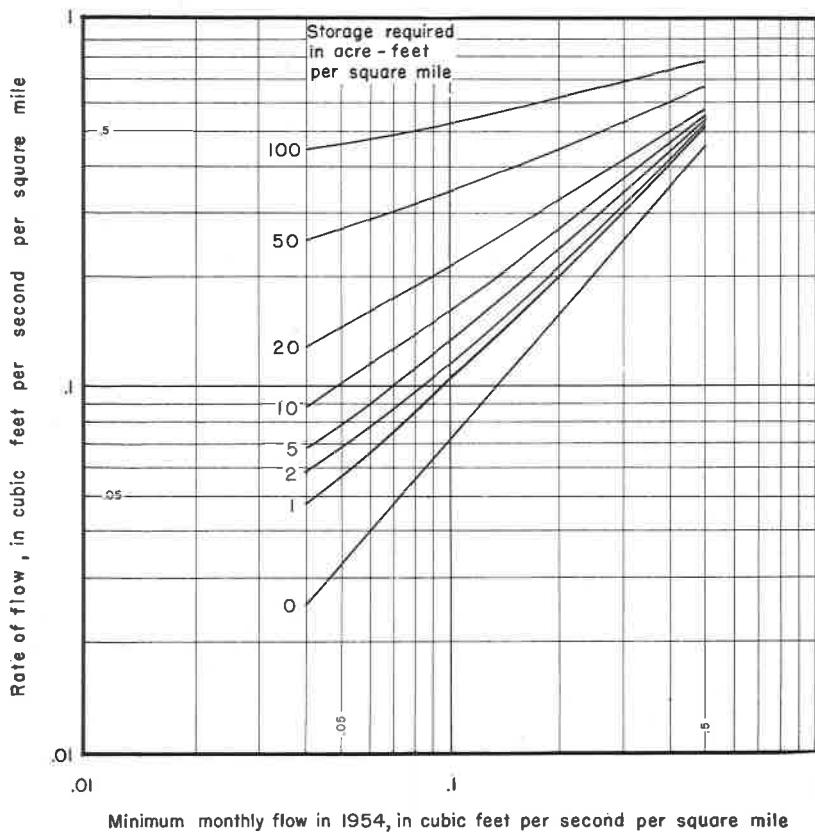


Figure 5. Storage required for various rates of continuous, regulated flow in streams of the Valley and Ridge Provinces during the drought of 1954.

listed in table 1 may do so as follows: Determine the minimum monthly flow and the drainage area at the site from table 1. Determine the physiographic province in which the site is located from figure 1. Using the storage curve which refers to that physiographic province, figure 3, 4, or 5, enter the figure with the minimum monthly flow and read off the required storage opposite the required flow, as read on the ordinate, interpolating, if necessary between the storage requirement curves.

The line for zero storage shows a flow rate which is less than the minimum monthly flow because, with no storage, the rate of flow is the same as the minimum daily flow.

The probable accuracy of storage estimates made in this manner depends on two factors: the probable accuracy of the estimate

of minimum monthly flow and the probable accuracy of the regional storage curve itself. The standard error of estimate of the regional storage may be judged from the accuracy with which the data for gaging stations check these curves. For the Piedmont and Blue Ridge regions, figure 3, data for two out of three stations with minimum monthly flows less than 0.1 cfsm check the storage curves within 8 percent and data for two out of three stations with minimum monthly flows greater than 0.1 cfsm check the storage curves within 5 percent. For the Coastal Plain, figure 4, data for two out of three stations with minimum monthly flows less than 0.1 cfsm check the storage curves within 15 percent and data for two out of three stations with minimum monthly flows greater than 0.1 cfsm check the storage curves within 6 percent. For the Valley and Ridge region, figure 5, data for two out of three stations check the storage curves within 5 percent.

Storage estimates made by this method do not allow for losses due to evaporation and seepage. Such losses are a function of conditions at an individual site and are not subject to areal analysis. Proper allowance for such losses would have to be made in the design of any reservoir.

The user of these storage requirement curves may be in some doubt as to which set of curves to use for sites on streams on or close to the border between two of the regions. In such a case, a safe procedure would be for him to compute the storage requirements by use of curves for each of the adjacent regions and to use the largest storage requirement value thus obtained.

FREQUENCY OF DROUGHT OF 1954

The expected frequency of recurrence of drought flows is a measure of the severity of the drought. The severity is perhaps as important in the use of the minimum-flow data in this report as is the accuracy of the data. The frequency with which the conditions of 1954 may be expected in future years can only be judged by what has happened in the past.

Data for the gaging stations in Georgia with long records that include the 1954 drought indicate that the relative severity of this hydrologic event varied considerably over the State. These gaging station records provide the best index of the frequency with which such conditions may be expected in the future.

To evaluate the relative severity of the 1954 drought on an areal basis, drought flows at some of the shorter term gaging stations were correlated with concurrent drought flows at the long term gaging stations. The relative severity of the 1954 drought at these shorter term gaging stations was estimated and generalized areas were delineated in which the severity of the 1954 drought was indicated to be fairly uniform. The relative magnitude of the minimum 30-day average flow was used to compare droughts. These generalized areas and the relative severity of the 1954 drought in each area are shown on the map in figure 6, to range from the sixth most severe in 60 years to the most severe in 61 years.

The areas are described below with a brief discussion of the long term gaging stations used as a basis for estimating the severity of the 1954 drought in each area.

Coosa River basin, Chattahoochee River basin above Norcross and Tugaloo River basin above Toccoa (area "A" in figure 6) : The 1954 drought in this area was the fourth to sixth most severe in 60 years. Drought flows in this area were correlated with flows observed at Chattahoochee River near Norcross for which records are available since 1903 and with Oostanaula River at Resaca for which records are available since 1893. The most severe drought observed at these two gaging stations occurred in 1925.

Tennessee River tributaries in Northeast Georgia (area "B" in figure 6) : The 1954 drought in this area was the second most severe in 57 years on the basis of correlation of drought flows with records for Hiwassee River above Murphy, N. C., for which records are available from 1898 to 1941 (with records of flow subject to artificial regulation available since 1941) and with

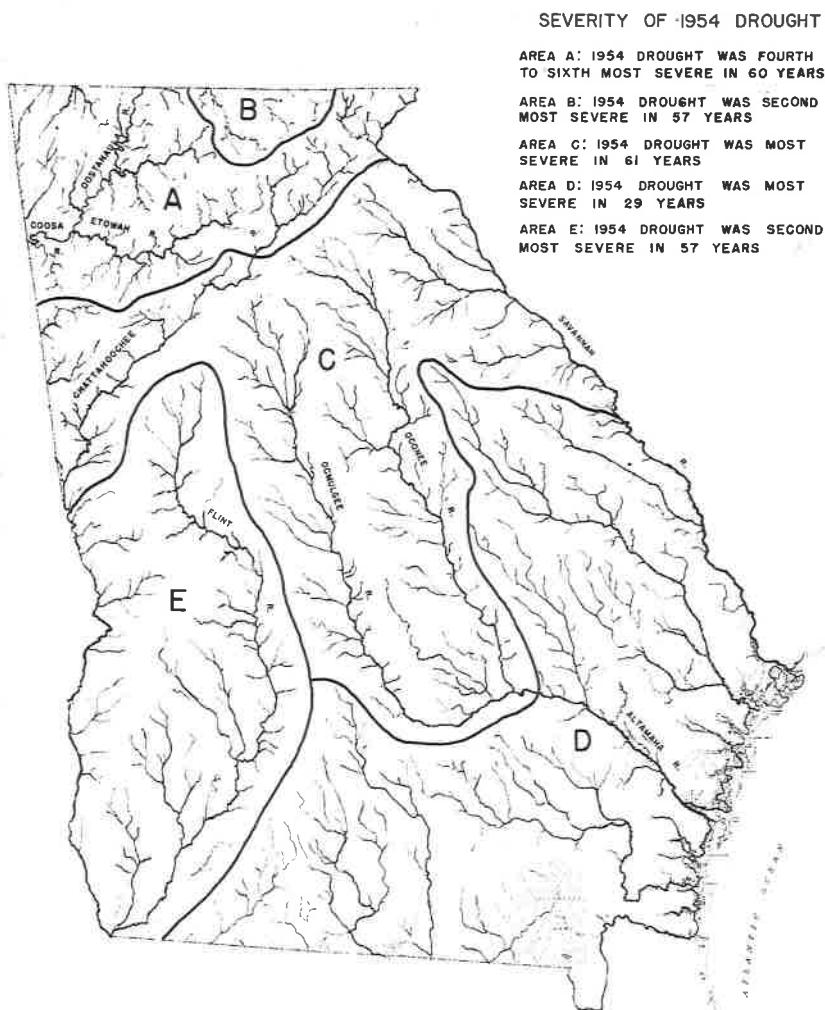


Figure 6. Map showing variation of the relative severity of the 1954 drought in Georgia by generalized areas.

Toccoa River near Dial, Ga., for which records are available since 1899. The most severe drought observed at these two gaging stations occurred in 1925.

Savannah River basin from Toccoa to Augusta, Altamaha River basin above the confluence of Ocmulgee and Oconee Rivers, Chattahoochee River basin from Norcross to West Point and Tallapoosa River basin (area "C" in figure 6): The 1954 drought in this area was the most severe in 61 years on the basis of cor-

relation of drought flows with records for Oconee River near Greensboro for which records are available since 1894.

Savannah River basin below Augusta, Altamaha River basin below confluence of Ocmulgee and Oconee Rivers, Ogeechee, Satilla, Suwannee and Ochlockonee River basins (area "D" in figure 6): No gaging stations are operated in this area which have records that go back as far as the 1925 drought. However, the available gaging station records in this area when correlated with long term gaging stations in other areas, indicate that the 1954 drought was the most severe since 1925 and was therefore, the most severe in at least 29 years.

Chattahoochee River basin below West Point and Flint River basin (area "E" in figure 6): The 1954 drought was the second most severe in this area in 57 years on the basis of correlation of drought flows with records for Chattahoochee River at West Point for which records are available since 1898 and on the basis of correlation with several other gaging stations in the area with intermittent periods of record. The most severe drought observed at the gaging station at West Point occurred in 1925.

SUMMARY

Streamflows in Georgia during the drought of 1954 were observed and recorded more extensively than in any previous drought. The high density of flow measurements made during this significant climatic event makes it possible to define regional flow characteristics and to delineate some local areas of fairly uniform flow characteristics.

Careful analysis of the data has indicated that regional generalizations are too broad to be of much value in solving practical water problems. Recognizable patterns of flow may be found in a few local areas. Some areas have generally high flow, some have generally low flow, and other areas have generally intermediate flows. However, even within these local areas there is still a large range of flow, so much so as to prohibit the effective application of areal low flow coefficients or factors in estimating low flow characteristics of specific streams. A streamflow measurement is needed at or near the site of a proposed use of a stream in order to make reliable estimates of the probable flow to be expected during times of severe droughts.

Sites for which data are presented in this report are sites where at least one streamflow measurement was made. The derived low flow figures were determined by the method considered to be the best now available. It is recommended that drought flow estimates at any additional site be based on at least one measurement at the site and a concurrent determination of flow at a suitable index gaging station or a gaged site. The control-point method or discharge-ratio method is recommended for use in making such flow estimates. The drainage area-ratio method is not recommended for anything but general preliminary type of estimates.

The volume of storage that would be required to provide for increased flows during a drought such as 1954 may be determined graphically from curves in this report. If the storage curves indicate that supplemental storage is required, then it is not necessary to estimate the absolute minimum flow. The estimate of storage requirement is likely to be more accurate than is the estimate of minimum flow, if the increased flow provided by the storage is substantially greater than the natural minimum flow.

The flow data in this report have value for use during future droughts, but some important limitations should be considered

in applying these data to the problem of preparing for future drought emergencies.

The degree of severity of the drought of 1954 was not uniform throughout the State and its probability of recurrence is not well determined. Many streams listed in this report will be affected by artificial regulation in the future, and the low flow characteristics of many streams may be affected to varying degrees by changes in land use.

The data presented in this report should be used with care and good judgment. The services of competent consulting engineers should be obtained on problems of considerable economic importance.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954
SAVANNAH RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)				Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly	June		
1	207	Chattooga River	Tugaloo River	USGS Complete-Record Gaging Station 1907-8, 1939-7; Chattooga River near Clayton, Ga., Rabun County, lat 34°17', long 83°18', at State Highway 2, 7 miles southeast of Clayton;	.88	.90	.99	.276	.138	373
1A	7.3	Steakoa Creek	Chattooga River	Rabun County, lat 34°17', long 83°24', at State Highway 2, at Clayton;	2.0	2.0	2.2	7.9	5.3	3.4
1B	26	Tiger Creek	Talulah River	Rabun County, lat 34°17', long 83°25', at county road, 3½ miles northwest of Tallulah Falls;	8.4	8.4	9.3	30	21	14
1C	5.20	Panther Creek	Tugaloo River	Habersham County, lat 34°02', long 83°26', at State Highway 15, 3 miles south of Tallulah Falls;	.76	.81	.86	4.6	2.5	1.5
2	32.5	Panther Creek	Tugaloo River	USGS Complete-Record Gaging Station 1943-7; Panther Creek near Toccoa, Ga., Stephens County, lat 34°14', long 83°21', a quarter of a mile upstream from mouth, and 7 miles north of Toccoa Highway 17, at Toccoa;	12	13	15	.41	.31	36
2A	7.3	Toocoo Creek	Tugaloo River	Stephens County, lat 34°38', long 83°20', at State Highway 17, at Toccoa;	.82	.93	1.2	5.5	3.5	1.8
2B	10	Eastatoolee Creek	Tugaloo River	Stephens County, lat 34°32', long 83°15', at State Highway 17, ¾ miles southeast of Toccoa;	3.1	3.4	4.1	12	8.8	5.5
2C	3.6	Shoal Creek	Tugaloo River	Hart County, lat 34°24', long 83°04', at county road, 7½ miles west of Hartwell;	.14	.19	.27	1.1	.81	.34
2D	1.0	Wrights Branch	Poolees	Franklin County, lat 34°26', long 83°06', at county road at Lavonia;	.33	.39	.46	.86	.76	.52
3	909	Tugaloo River	Savannah Creek	USGS Complete-Record Gaging Station 1925-27, 1940-7; Tugaloo River near Hartwell, Ga., Hart County, lat 34°22', long 83°56', 5 miles upstream from confluence with Suwanee River and 10 miles north of Hartwell;	188e	307e	420e			
4	14	Lightwood Log Creek	Savannah River	Hart County, lat 34°22', long 83°57', at State Highway 77, 1½ miles west of Hartwell;	1.4	1.7	2.4	6.7	5.3	2.9
5	7.2	Flat Shoals Creek	Lidwood Log Creek	Hart County, lat 34°23', long 83°57', at county road 1¾ miles northwest of Hartwell;	1.7	1.8	2.1	4.1	3.0	2.2
6	2,231	Savannah River	Atlantic Ocean	USGS Complete-Record Gaging Station 1936-7; Savannah River near Iva, S. C., lat 34°15', long 82°45', at State Highway 82, 5½ miles southeast of Iva, S. C.	540e	718e	886e			6.3

7	13	Coldwater Creek Boyd's Creek	Savannah River Little Creek	Hart County, lat 34°16', long 82°56', at county road 5½ miles northeast of Bowman Hart County, lat 34°17', long 82°57', at State Highway 172, 4 miles south of Hartwell, Elbert County, lat 34°17', long 82°48', at State Highway way 82, 8 miles northwest of Elberton, Elbert County, lat 34°17', long 82°44', at county road, 8 miles northeast of Elberton Elbert County, lat 34°17', long 82°44', at State Highway 8, 2½ miles east of Royston USGS Complete-Record Gaging Station 1942; South Beaverdam Creek and Dewey Rose, Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	1.1	1.4	2.0	5.8	4.6	2.4	11				
8	2.2	Coldwater Creek Van Creek	Savannah River South Beaver- dam Creek	Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	44	.53	66	1.5	1.2	.78	2.4				
9	67	Coldwater Creek	Savannah River	Elbert County, lat 34°17', long 82°47', at State Highway way 82, 8 miles northwest of Elberton, Elbert County, lat 34°17', long 82°44', at county road, 8 miles northeast of Elberton Elbert County, lat 34°17', long 82°44', at State Highway 8, 2½ miles east of Royston USGS Complete-Record Gaging Station 1942; South Beaverdam Creek and Dewey Rose, Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	3.1	4.3	6.0	22	17	7.9	49				
9A	18	Morea Creek	Savannah River	Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	15	.23	.38	2.5	1.7	.58	7.9				
10	10	South Beaver- dam Creek	South Beaver- dam Creek	Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	.23	.31	.48	2.2	1.6	.66	5.9				
11	35.8			Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	1.0	1.4	2.1	9.3	6.8	2.8	22				
11A	107	Beaverdam Creek	Savannah River	Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	1.7	2.4	3.8	20	14	7.2	57				
12	2,876	Savannah River	Savannah River Atlantic Ocean	Elbert County, lat 34°17', long 82°47', 1 mile north- east of Dewey Rose and 3 miles upstream from con- fluence with North Beaverdam Creek Elbert County, lat 34°17', long 82°45', at county road, 6½ miles east of Elberton USGS Complete-Record Gaging Station 1886-1900, 1903, 1930-32, 1938; Savannah River near Calhoun Falls, S.C.	638*	808*	978*								
13	.95	Dennmans Creek	North Fork Broad River	Stephens County, lat 34°23', long 82°22', about ½ mile downstream from SCS dam #2 in N. Fork Broad River Pilot Watershed Stephens County, lat 34°23', long 82°22', at State Highway 184, 3½ miles southwest of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°23', long 82°20', at SCS Dam Site #3, 2 miles south of Toccoa, in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	.36	.37	.41	.77	.62	.47					
14	7.57	North Fork Bread River	Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	3.0	3.0	3.3	6.3	5.0	3.8	6.9				
15	1.38	Carnes Creek	North Fork Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	.79	.81	.87	1.4	1.2	.97	1.5				
16	19.3	North Fork Broad River	Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	6.2	6.3	7.1	14	11	8.2	16				
17	2.33	Unnamed Tributary	North Fork Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	1.1	1.1	1.2	2.1	1.7	1.4	2.4				
18	24.7	North Fork Broad River	Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	7.9	8.2	9.0	18	14	10	20				
19	4.53	Bear Creek	North Fork Broad River	Stephens County, lat 34°23', long 82°19', at State Highway 106, 5 miles south of Toccoa, in N. Fork Broad River Pilot Watershed Stephens County, lat 34°22', long 82°18', at SCS dam Site #3, 4 miles southeast of Toccoa in N. Fork Broad River Pilot Watershed USGS Complete-Record Gaging Station 1854; North Fork Broad River near Toccoa, Ga.	1.3	1.3	1.5	3.1	2.4	1.7	3.5				

* Flow regulated by reservoir above station.

GEORGIA GEOLOGICAL SURVEY BULLETIN 73

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SAVANNAH RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly	June	July	August	
20	34.3	North Fork Broad River	Broad River	Franklin County, lat $34^{\circ}28'$, long $83^{\circ}16'$, at county road, $5\frac{1}{4}$ miles west of Martin in N. Fork Broad River Pilot Watershed	11	11	13	.86	1.5	1.2	.97
21	1.67	Unnamed Tributary	North Fork Broad River	Stephens County, lat $34^{\circ}28'$, long $83^{\circ}15'$, at SCS dam site #6, $\frac{1}{4}$ miles southwest of Martin in N. Fork Broad River Pilot Watershed	*77	.78					1.7
22	42.0	North Fork Broad River	Broad River	USGS Complete-Record Gaging Station 1954; North Fork Broad River near Laytonia, Ga., lat $34^{\circ}27'$, long $83^{\circ}14'$; Franklin County, lat $34^{\circ}27'$, long $83^{\circ}14'$, 2.1 miles upstream from Toms Creek in N. Fork Broad River Pilot Watershed	12	13	15	.27	21	15	35
23	3.11	Toms Creek	North Fork Broad River	Stephens County, lat $34^{\circ}30'$, long $83^{\circ}15'$, at county road upstream from SCS dam site #11, $3\frac{1}{2}$ miles west of Avalon in N. Fork Broad River Pilot Watershed	1.6	1.6	1.7	3.0	2.4	1.9	3.2
24	3.64	Unnamed Tributary	Toms Creek	Stephens County, lat $34^{\circ}29'$, long $83^{\circ}14'$, near mouth of stream and downstream from SCS dam #13, 14, and 15 in N. Fork Broad River Pilot Watershed	.34	.36	.44	1.3	.87	.53	1.6
25	10.3	Tome Creek	North Fork Broad River	USGS Complete-Record Gaging Station 1954; Tome Creek near Martin, Ga.	2.3	2.5	2.8	4.2	3.6	3.1	—
				Franklin County, lat $34^{\circ}28'$, long $83^{\circ}13'$, at county road, $1\frac{1}{2}$ miles upstream from mouth in N. Fork Broad River Pilot Watershed							
26	55.8	North Fork Broad River	Broad River	Franklin County, lat $34^{\circ}27'$, long $83^{\circ}13'$, at county road, $2\frac{1}{4}$ miles southwest of Martin in N. Fork Broad River Pilot Watershed	12	12	14	33	25	17	38
27	61.7	North Fork Bear Creek	Broad River	Franklin County, lat $34^{\circ}27'$, long $83^{\circ}11'$, at State Highway 51, 5 miles south of Martin	15	16	19	36	27	19	55
27A	6.9	North Fork Broad River	North Fork Broad River	Franklin County, lat $34^{\circ}22'$, long $83^{\circ}08'$, 5 miles northwest of Royston	*39	.51	.72	2.5	1.9	.92	5.2
28	119	North Fork Broad River	Broad River	USGS Complete-Record Gaging Station 1952-17, 1954; North Fork Broad River near Cartersville, Ga., Franklin County, lat $34^{\circ}19'$, long $82^{\circ}11'$, at State Highway 51, $\frac{1}{4}$ miles southeast of Cartersville Banks County, lat $34^{\circ}27'$, long $83^{\circ}28'$, at county road, $2\frac{1}{2}$ miles northeast of Hollingsworth, Banks County, lat $34^{\circ}27'$, long $83^{\circ}26'$, at State Highway 184, $4\frac{1}{2}$ miles east of Hollingsworth	17	19	23	51	36	25	85
28B	23	Middle Fork Broad River	Broad River		1.8	2.3	3.1	9.5	7.6	3.9	19
29	46	Middle Fork Broad River	Broad River		11	12	13	29	22	15	30

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 35

29A	29	Leatherwood Creek	Middle Fork Broad River	Stephens County, lat 34°30', long 83°20', at State Highway 184, $\frac{1}{4}$ miles southwest of Toccoa	.21	.26	.42	6.5	2.9	.90	4.6
29B	140	Middle Fork Mountain Creek	Broad River	Franklin County, lat 34°22', long 83°16', at State Highway 59, $\frac{1}{4}$ miles west of Carnesville	.21	.24	.30	120	81	44	100
30	9.0	Hudson River	Hudson River	Banks County, lat 34°25', long 83°31', at county road, 1½ miles south of Hallingsworth	5.7	5.8	6.2	9.9	8.5	6.9	11
31	46	Hudson River	Broad River	Banks County, lat 34°29', long 83°29', at State Highway 15, at Homer	8.3	8.7	14	29	21	16	43
32	13	Webb Creek	Hudson River	Banks County, lat 34°21', long 83°29', at State Highway 51, 1½ miles northeast of Homer	1.8	2.1	2.9	6.5	4.5	3.2	10
32A	76	Hudson River	Broad River	Banks County, lat 34°17', long 83°24', at State Highway 59, 6 miles southeast of Homer	5.2	6.8	9.3	30	24	12	61
32B	5.2	Grove Creek	Hudson River	Banks County, lat 34°22', long 83°37', at State Highway 11, 7 miles west of Homer	.33	.44	.60	2.0	1.6	.76	4.1
33	21	Grove Creek	Hudson River	Banks County, lat 34°19', long 83°37', at county road, 6 miles west of Homer	2.5	2.9	4.2	9.8	6.6	4.7	16
34	11	Hickory Level Creek	Grove Creek	Banks County, lat 34°17', long 83°32', at State Highway 98, 3½ miles southwest of Homer	1.9	2.2	3.0	6.3	4.4	3.3	9.6
34A	92	Grove Creek	Hudson River	Banks County, lat 34°16', long 83°29', at county road, 8 miles southeast of Homer	2.1	3.0	4.5	21	15	6.2	54
34B	17	Nails Creek	Hudson River	Franklin County, lat 34°29', long 83°20', at State Highway 59, 6½ miles southwest of Carnesville	3.9	4.4	5.4	18	13	7.5	15
35	7.8	Little Bluestone Creek	Bluestone Creek	Madison County, lat 34°10', long 83°11', at State Highway 101, 4 miles northeast of Danielsville	.66	.86	1.1	3.4	2.7	1.4	6.7
36	780	Broad River	Savannah River	Madison-Elbert Counties, lat 34°10', long 83°01', at State Highway 72, 2½ miles northeast of Carton	99	126	140	330	230	160	550
37	17	South Fork Broad River	Broad River	Madison County, lat 34°10', long 83°18', at State Highway 106, at Ila	.29	.42	.66	3.3	2.3	.88	9.3
38	44	South Fork Broad River	Broad River	Madison County, lat 34°06', long 83°19', at county road, 2½ miles southeast of Danielsville	1.3	1.9	2.7	11	8.2	3.6	28
38A	10	Brush Creek	South Fork Broad River	Madison County, lat 34°15', long 83°15', at State Highway 8, 3½ miles south of Danielsville	.29	.41	.61	2.6	1.9	.82	6.4
39	89	South Fork Broad River	Broad River	Madison County, lat 34°13', long 83°10', at State Highway 72, 2 miles west of Camer	2.4	3.4	5.1	22	16	6.8	55
39A	16	Big Clouds Creek	South Fork Broad River	Oglethorpe County, lat 33°57', long 83°10', at county road, ¾ mile east of Winterville	.26	.27	.32	2.6	2.1	.76	7.4
40	47	Big Clouds Creek	Broad River	Oglethorpe County, lat 34°02', long 83°14', at county road, 3 miles south of Carton	.70	1.0	1.6	8.7	6.0	2.3	25
41	20	Fork Creek	Broad River	Madison County, lat 34°03', long 83°02', at State Highway 72, ½ mile east of Carton	.24	.36	.58	3.3	2.2	.86	9.8
42	4.3	Little Dove Creek	Dove Creek	Elbert County, lat 33°56', long 83°58', at State Highway 72, at Ogleby	.34	.43	.59	1.8	1.4	.73	3.6
43	16	Dove Creek	Broad River	Elbert County, lat 34°04', long 82°58', at State Highway 72, at Ogleby	.24	.34	.54	2.9	2.0	.76	8.3
44	44	Falling Creek	Broad River	Elbert County, lat 34°00', long 82°49', at county road, ¾ miles southwest of Portonia	.24	.37	.66	4.9	3.1	.97	17
45	31	Long Creek	Broad River	Oglethorpe County, lat 33°50', long 83°00', at State Highway 10, 3½ miles southeast of Lexington	.78	1.1	1.6	7.4	5.3	2.2	19

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SAVANNAH RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)				Min. Daily Flow (cfs)	Minimum 12-Month Flow 1954-55 (cfs)	
					1-Day	7-Day	Monthly	June	July		
45A	15	Buffalo Creek	Long Creek	Oglethorpe County, lat 33°49', long 83°02', at State Highway 6, 6 miles southeast of Lexington	0	0	0	-41	-27	0	3.4
45B	7.8	Indian Creek	Long Creek	Oglethorpe County, lat 33°53', long 83°02', at State Highway 77, 6½ miles east of Lexington	0	0	0	-67	-50	.13	2.8
46	43	Clark Creek	Long Creek	Wilkes County, lat 33°55', long 82°49', at county road, 4½ miles northeast of Bell Gap	0	0	0	0	0	0	0
47	1,430	Broad River	Savannah River	USGS Complete Record Gaging Station 1926-22, 1937-7; Broad River near Bell, Ga., Wilkes-Elbert Counties, lat 33°56', long 82°46', at State Highway 17, 1 mile south of Bells Crossroads	110	118	148	378	298	198	812
48	5.3	Chickasaw Creek	Broad River	Wilkes County, lat 33°56', long 82°46', at State Highway 17, 4½ miles north of Tivoli	.058	.085	.14	.83	.56	.20	2.5
49	6.4	Rock Creek	Middle Creek	Wilkes County, lat 33°56', long 82°46', at State Highway 17, 2½ miles north of Washington	0	0	.051	.61	.47	.13	2.5
50	32.6	Soap Creek	Savannah River	Lincoln County, lat 33°56', long 82°23', at State Highway 79, 3 miles north of Linneola	0	0	0	0	0	0	0
51	66	North Fork Little River	Little River	Taliferro County, lat 33°39', long 82°55', at State Highway 22, 6½ miles north of Crawfordville	0	0	0	0	0	0	0
51A	16	South Fork Little River	Little River	Greene County, lat 33°39', long 82°51', at county road, 11 miles northeast of Greenville	0	0	0	0	0	0	0
52	46	South Fork Little River	Little River	Taliferro County, lat 33°37', long 82°55', at State Highway 22, 4½ miles northeast of Crawfordville	0	0	0	0	0	0	0
53	47	Kettle Creek	Little River	Wilkes County, lat 33°41', long 82°50', at State Highway 44, 6¾ miles southwest of Washington	0	0	0	0	0	0	0
54	4.5	Harden Creek	Little River	Taliferro County, lat 33°33', long 82°50', at State Highway 47, 3½ miles east of Crawfordville	0	0	0	0	.39	.12	1.8
55	24	Harden Creek	Little River	Taliferro County, lat 33°27', long 82°46', at State Highway 47, 8/10 mile northwest of Fieldin	0	0	0	0	0	0	0
56	291	Little River	Savannah River	USGS Complete Record Gaging Station 1949-; Little River near Washington, Ga., Wilkes-Taliferro Counties, lat 33°37', long 82°45', at county road, 9 miles south of Washington	.32	.33	.44	14	10	1.9	83
57	30	Rocky Creek	Little River	Wilkes County, lat 33°29', long 82°38', at county road, 1½ miles southwest of Annis	0	0	0	0	0	0	0
58	18	Hart Creek	Big Creek	McDuffie County, lat 33°24', long 82°06', at State Highway 80, 1¾ miles northwest of Wrightsboro	0	0	0	0	0	0	0

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 37

59	10	Mattox Creek	Big Creek	McDuffie County, lat 33°30', long 82°32', at State Highway 223, 2½ miles northwest of Thomson	0	0	0	0	0	0	0
60	14	Lloyd Creek	Little River	Lincoln County, lat 33°42', long 82°29', at State Highway 43, 6½ miles south of Lincolnton	0	0	0	0	0	0	0
61	43 9	Kiokee Creek	Savannah River	Columbia County, lat 33°32', long 82°19', at State Highway 47, 0.2 miles south of Appling	.70	.75	.88	7.0	5.7	2.1	21
62	33 3	Greenbrier Creek	Kiokee Creek	Columbia County, lat 33°34', long 82°19', at State Highway 47, 2 miles north of Appling	0	0	0	0	0	0	0
63	106	Kiokee Creek	Savannah River	Columbia County, lat 33°36', long 82°14', at State Highway 104, 7½ miles northwest of Evans	0	0	0	1.6	.99	.10	19
64	13 6	Little Kiokee Creek	Savannah River	Columbia County, lat 33°32', long 82°15', at State Highway 232, 4 miles southeast of Appling	.073	.075	.092	1.3	1.0	.29	5 2
65	26 6	Little Kiokee Creek	Savannah River	Columbia County, lat 33°35', long 82°13', at State Highway 104, 6 miles northwest of Evans	0	0	0	0	0	0	0
66	24 2	Uchee Creek	Savannah River	Columbia County, lat 33°22', long 82°47', at Wrightsboro Road, 2½ miles northeast of Crozetown	0	0	0	0	0	0	0
67	58 3	Uchee Creek	Savannah River	Columbia County, lat 33°34', long 82°11', at State Highway 104, 4 miles northwest of Evans	0	0	0	0	0	0	0
68	6 81	Reed Creek	Savannah River	Columbia County, lat 33°31', long 82°07', at State Highway 104, 1½ miles southwest of Evans	.22	.23	.26	1.4	1.2	.53	3 2
69	16 1	Raes Creek	Savannah River	Richmond County, lat 33°20', long 82°00', 1 mile above State Highway 28 bridge, at Augusta	0	0	.068	1.2	.93	.23	5 6
70	7,508	Savannah River	Atlantic Ocean	USGS Complete Record Gaging Station 1938; Savannah River at Augusta, Ga.	4,360*	4,460*	4,082*				
71	10 5	Rocky Creek	Cason Dead River	Richmond County, lat 33°26', long 81°57'	1.4	1.5	2.1	2.8	2.6	1.5	5 7
72	13 2	Butler Creek	Cason Dead River	Richmond County, lat 33°26', long 82°02', at State Highway 4 at Augusta	.25	.25	.50	.83	.77	.28	3 1
73	29 4	Butler Creek	Cason Dead River	Richmond County, lat 33°23', long 82°02', at State Highway 21, 6 miles south of Augusta	6.1	6.1	8.3	10	10	6.4	19
74	18 0	Spirit Creek	Savannah River	Richmond County, lat 33°22', long 82°08', at State Highway 4, 11 miles southwest of Augusta	11	11	12	14	14	11	18
75	50 3	Spirit Creek	Savannah River	Richmond County, lat 33°21', long 82°05', at Windsor Spring Road	27	28	32	36	35	28	49
76	71 1	Spirit Creek	Savannah River	Richmond County, lat 33°19', long 81°57', at State Highway 56, 5½ miles north of McRae	23	23	29	35	34	24	55
77	28 3	Little Spirit Creek	Spiral Creek	Richmond County, lat 33°19', long 81°57', at State Highway 56, 5 miles north of McRae	3.3	3.3	4.9	6.5	6.2	3 4	14
78	41 4	McBean Creek	Savannah River	Richmond-Burke Counties, lat 33°14', long 82°03', at State Highway 21, 5½ miles west of McRae	14	14	18	21	21	15	33
79	70 0	McBean Creek	Savannah River	Richmond-Burke Counties, lat 33°14', long 81°57', at State Highway 56 at McRae	19	19	25	30	29	20	50
80	23 3	Beaverdam Creek	Savannah River	Burke County, lat 33°08', long 81°44', at county road, 6 miles north of Girard	5.9	5.9	7.8	9.3	9.1	5 9	16

* Flow regulated by powerplant above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SAVANNAH RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
81	8,650	Savannah River	Atlantic Ocean	USGS Complete-Record Gaging Station 1937; Savannah River at Burtons Ferry Bridge near Millhaven, Ga., Scriven County, lat. 32°56'N, long. 81°30', at State Highway 73, 9 miles east of Millhaven	4,770*	4,924*	5,524*	0	0	0	0
82	9.37	Brier Creek	Savannah River	Warren County, lat. 32°56', long. 82°36', at State Highway 12, 4 miles east of Warrenton	0	0	0	0	0	0	0
83	55.2	Brier Creek	Savannah River	McDuffie County, lat. 33°22'N, long. 82°28', at State Highway 17, 4½ miles northwest of Bonessville	0	0	0	0	0	0	41
84	7.46	Sweetwater Creek	Brier Creek	McDuffie County, lat. 33°26', long. 82°27', at State Highway 10, 0.8 mile northwest of Bonessville	0	0	0	0	0	0	97
85	24	Little Brier Creek	Brier Creek	McDuffie-Warren Counties, lat. 33°40', long. 82°28', at State Highway 17, 6½ miles south of Bonessville	.31	.31	.31	.68	1.2	1.1	.35
86	171	Brier Creek	Savannah River	Richmond-Jefferson Counties, lat. 33°17', long. 82°18', at State Highway 4, 5½ miles east of Bluffton	1.2	1.2	2.8	5.3	4.8	4.8	26
87	33.2	Sandy Run Creek	Brier Creek	Richmond County, lat. 33°18', long. 82°16', at State Highway 4, 3 miles west of Bluffton	7.4	7.4	9.9	12	12	12	22
87A	297	Brier Creek	Savannah River	Jefferson-Jurke Counties, lat. 33°14', long. 82°14', at State Highway 88, 4½ miles northeast of Mathews	34	34	51	69	66	66	37
88	1.38	Brushy Creek	Brier Creek	Jefferson County, lat. 33°14', long. 82°27', at State Highway 206, 1¾ miles northeast of Stapleton	0	0	0	0	0	0	0
89	9.40	Brushy Creek	Brier Creek	Jefferson County, lat. 33°12', long. 82°24', at State Highway 4, 0.8 mile southwest of Wren	0	0	0	0	0	0	0
90	40.7	Brushy Creek	Brier Creek	Jefferson County, lat. 33°11', long. 82°16', at Middle Ground Road, 3½ miles southeast of Mathews	4.2	4.2	6.4	8.5	8.3	4.4	20
91	473	Brier Creek	Savannah River	Burke County, lat. 33°07', long. 81°58', at State Highway 56, 3½ miles northeast of Waynesboro	67	67	96	130	120	70	260
92	6.80	McIntosh Creek	Brier Creek	Burke County, lat. 33°05', long. 82°01', at State Highway 21, 0.8 mile southwest of Waynesboro	.11	.11	.23	.38	.35	.12	1.5
93	646	Brier Creek	Savannah River	USGS Complete-Record Gaging Station 1937; Brier Creek at Millhaven, Ga.	62	62	95	130	126	68	302
94	670	Brier Creek	Savannah River	Scriven County, lat. 32°52', long. 81°37', at county road 74	74	74	120	160	150	84	340
95	85.3	Beaverdam Creek	Brier Creek	Scriven County, lat. 32°52', long. 81°40', at county road 114, 3 miles southeast of Hiltonia	.84	.84	1.0	2.5	1.2	.01	11

97	143	Beaverdam Creek	Brier Creek	Screven County, lat 32°56', long 81°36', below outflow from Blue Springs, 6 miles northeast of Sylvan, Georgia, River near Clyo, Ga.	22	22	25	25	26	23	65
98	9,850	Savannah River	Atlantic Ocean	USGS Complete Record Gaging Station 1937-; Savannah Airline Railroad bridge, 3 miles north of Clyo, Clanton County, lat 32°13', long 81°12', at State Highway 21, 0½ miles north of Savannah	5,310 ^a	5,439 ^a	5,893	5,893	0	0	0
99	18.6	Black Creek	Savannah River		0	0	0	0	0	0	0

OGEECHEE RIVER BASIN

100	28	North Fork Ogeechee River	Ogeechee River	Taliferro County, lat 33°31', long 82°54', at State Highway 22, 2½ miles south of Crawfordville, Greene County, lat 33°29', long 82°54', at county road, 7 miles west of Crawfordville	0	0	0	0	0	0	0
100A	14	South Fork Ogeechee River	Ogeechee River	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	.81	.59	.13
1G1	33	South Fork Ogeechee River	Ogeechee River	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	.83	.58	.092
101A	23	Fulsome Creek	Ogeechee River	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	0	0	0
102	13	Long Creek	Ogeechee River	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	0	0	0
103	0.9	Fowler Branch	Long Creek	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	0	0	0
104	34	Long Creek	Ogeechee River	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	0	0	0	0	0	0	0
105	242	Ogeechee River	Atlantic Ocean	Taliferro County, lat 33°31', long 82°55', at State Highway 22, 2½ miles south of Crawfordville, Hancock County, lat 33°29', long 82°58', at county road, 10½ miles northeast of Sharlotown, Warren County, lat 33°22', long 82°45', at county road, 0 miles southwest of Warrenton, at State Highway 16, 7½ miles south of Warrenton	.48	.51	.68	.16	11	11	77
105A	7.0	Little Ogeechee River	Ogeechee River	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	0	0	0	0	0	0	0
106	500	Ogeechee River	Atlantic Ocean	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	5.5	5.5	8.5	20	18	18	5.8
107	15	Rocky Comfort Creek	Ogeechee River	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	0	0	0	0	0	0	0
108	27	Rocky Comfort Creek	Ogeechee River	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	0	0	0	0	0	0	0
109	7.1	Goldens Creek	Rocky Comfort Creek	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	0	0	0	0	0	0	0
110	94	Rocky Comfort Creek	Ogeechee River	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	0	0	0	0	0	0	0
111	3.1	Duhart Creek	Rocky Comfort Creek	Hancock County, lat 33°18', long 82°55', at State Highway 16, 3½ miles northeast of Sparta, Jefferson County, lat 32°59', long 82°56', at State Highway 24, 1½ miles southwest of Louisville, Warren County, lat 33°25', long 82°53', at State Highway 24, 3½ miles west of Warrenton, Warren County, lat 33°28', long 82°51', at State Highway 16, 3½ miles southwest of Warrenton, Warren County, lat 33°24', long 82°40', at State Highway 12, at Warrenton, at State Highway 80, 1 mile northwest of Gibson, Jefferson County, lat 33°13', long 82°29', at State Highway 90, at Stapleton	1.5	1.5	1.8	2.0	2.0	1.5	2.8

^a Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
OGEECHEE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-56 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
112	286	Rocky Comfort Creek	Ogeechee River	Jefferson County, lat 33°00', long 82°25'; at State Highway 24, 0.7 mile southwest of Louisville	.21	.22	.35	.49	.46	.23	120
113	800	Ogeechee River	Atlantic Ocean	Jefferson County, lat 33°58', long 82°25'; at State Highway 4, 2 miles south of Louisville	.21	.21	.40	.64	.59	.23	210
114	8,07	Big Creek	Ogeechee River	Jefferson County, lat 33°11', long 82°25'; at Penns Bridge Road, 2½ miles southwest of Wrens	1.5	1.5	2.2	2.7	2.6	1.6	5.0
115	56.9	Big Creek	Ogeechee River	Jefferson County, lat 33°02', long 82°22'; at Middle Ground Road, 4½ miles northeast of Louisville	2.2	2.2	3.9	5.9	5.5	2.3	18
116	2.31	Unnamed	Big Creek	Jefferson County, lat 33°29', long 82°22'; at Middle Ground Road, 4 miles northeast of Louisville	0	0	.067	.11	.10	0	.47
117	95.8	Unnamed Tributary	Ogeechee River	Jefferson County, lat 32°59', long 82°21'; at State Highway 17, 3½ miles southeast of Louisville	13	13	.19	.25	.23	.13	51
117A	60	Big Creek	Ogeechee River	Washington County, lat 33°00', long 82°38'; at State Highway 24, 10¾ miles east of Sandersville	5.4	5.6	5.8	8.7	7.0	6.3	20
118	5.4	Williamson Swamp Creek	Williamson Swamp Creek	Jefferson County, lat 32°53', long 82°30'; at county road, 1 mile west of Bartow Highway 78, 0.4 mile southwest of Bartow	.057	.057	.075	.16	.086	.061	.71
119	185	Salter Branch	Ogeechee River	Jefferson County, lat 32°52', long 82°26'; at State Highway 78, 0.4 mile southwest of Bartow	14	14	16	26	17	15	60
120	6.0	Williamson Swamp Creek	Swamp Creek	Jefferson County, lat 32°51', long 82°28'; at State Highway 78, 1½ miles south of Bartow	0	0	0	0	0	0	0
121	9.0	Gray Coat Creek	Williamson Swamp Creek	Jefferson County, lat 32°52', long 82°26'; at State Highway 78, 1½ miles west of Bartow	0	0	0	0	0	0	0
122	233	Williamson Swamp Creek	Ogeechee River	Jefferson County, lat 32°51', long 82°24'; at State Highway 4, 1½ miles south of Valley	17	17	21	33	22	19	75
123	8.6	Boggy Gut Creek	Williamson Swamp Creek	Jefferson County, lat 32°53', long 82°24'; at county road, 1½ miles northeast of Wadley Branch-Jefferson Counties, lat 32°41', long 82°24'; at State Highway 4, 4 miles south of Wadley	0	0	0	0	0	0	0
124	11	Rocky Creek	Ogeechee River	Burke County, lat 32°50', long 82°00'; at State Highway 7, 4½ miles east of Milledgeville	0	0	0	0	0	0	0
125	32	Barkcamp Creek	Ogeechee River	Jenkins County, lat 34°49', long 82°05'; at State Highway 17, 2½ miles northeast of Herndon.	0	0	0	0	0	0	0
126	23	Chew Mill Creek	Ogeechee River	Jenkins County, lat 32°48', long 82°01'; at State Highway 17, 4½ miles west of Millen	.24	.24	.36	.76	.39	.29	3.2
127	21	Unnamed Tributary	Ogeechee River	Burke County, lat 33°04', long 82°09'; at State Highway 24, 5 miles southwest of Waynesboro	0	0	0	0	0	0	0
128	31.7	Rocky Creek	Buckhead Creek		.073	.073	.10	.29	.11	.079	2.0

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 41

129	34.8	Rocky Creek	Buckhead Creek	Burke County, lat 33°30', long 82°05', at State Highway 66, 6 miles southwest of Waynesboro	0	0	0	0	0	0	0
130	64	Buckhead Creek	Ogeechee River	Burke County, lat 33°28', long 82°07', at State Highway 56, 10½ miles southwest of Waynesboro	0	0	0	0	0	0	0
132	29.7	Little Buckhead Creek	Buckhead Creek	Jenkins County, lat 32°46', long 81°57', at State Highway 21, 1½ miles north of Millen	0	0	0	0	0	0	0
133	11	Richardson Creek	Ogeechee River	Jenkins County, lat 32°43', long 82°02', at State Highway 23, 1½ miles northeast of Thrift	0	0	0	0	0	0	0
134	43	Richardson Creek	Ogeechee River	Jenkins County, lat 32°43', long 81°58', at State Highway 67, 6 miles south of Millen	0	0	0	0	0	0	0
135	1,940	Ogeechee River	Atlantic Ocean	USGS Complete-Record Gaging Station 1337; Ogeechee River at Scarborough, Ga., Jenkins County, lat 32°42.40', long 81°52.45', at highway bridge, at Scarborough	120	121	143	195	165	125	612
136	75	Horse Creek	Ogeechee River	Screven County, lat 32°41', long 81°50', at State Highway 17, 1½ miles northwest of Rocky Ford	0	0	0	0	0	0	0
137	2,150	Ogeechee River	Atlantic Ocean	Bullock-Screven Counties, lat 32°34', long 81°43', at State Highway 72, 9 miles northeast of Statesboro	140	170	220	190	140	690	
138	14.0	Ogeechee Creek	Ogeechee River	Screven County, lat 32°47', long 81°43', at county road, 6 miles northwest of Sylvan	0	0	0	0	0	0	0
139	141	Ogeechee Creek	Ogeechee River	Screven County, lat 32°31', long 81°33', at State Highway 17, 0.1 mile west of Oliver	0	0	0	0	0	0	0
140	39.0	Mill Creek	Ogeechee River	Bullock County, lat 32°28', long 81°45', at State Highway 73, 2½ miles northeast of Statesboro	0	0	0	0	0	0	0
141	2,650	Ogeechee River	Atlantic Ocean	USGS Complete-Record Gaging Station, 1937; Ogeechee River near Eden, Ga., Bryan-Effingham Counties, lat 32°10, long 81°26', at State Highway 26, 2 miles west of Eden	131	138	191	286	222	146	746
142	12.1	Unnamed Tributary	Upper Black Creek	Bullock County, lat 32°21', long 81°38', at State Highway 26, 1½ miles southeast of Brooklet	0	0	0	0	0	0	0
143	8.63	Pole Branch	Cross Branch	Bullock County, lat 32°29.49', long 81°34', at State Highway 26, ¾ mile south of Sullion	0	0	0	0	0	0	0
144	9.54	Caney Branch	Black Creek	Bullock County, lat 32°14', long 81°31', at State Highway 26, 6½ miles south of Sullion	0	0	0	0	0	0	0
145	232	Black Creek	Ogeechee River	Bryan County, lat 32°10', long 81°29', at State Highway 30, 4½ miles southwest of Eldorado	0	0	0	0	0	0	0
146	29.2	Mill Creek	Black Creek	Bryan County, lat 32°09', long 81°30', at State Highway 30, 6 miles southwest of Eldorado	0	0	0	0	0	0	0
147	55	Canoochee Creek	Canoochee River	Emainual County, lat 32°26', long 82°15', at State Highway 26, ¾ miles east of Swainsboro	0	0	0	0	0	0	0
148	14	Little Canoochee River	Canoochee River	Emainual County, lat 32°36', long 82°14', at State Highway 26, 6 miles east of Swainsboro	0	0	0	0	0	0	0
149	10	Reedy Creek	Little Canoochee River	Emainual County, lat 32°25', long 82°12', at State Highway 26, ¾ miles east of Swainsboro	0	0	0	0	0	0	0
149A	185	Canoochee Creek	Canoochee River	Candler County, lat 32°23', long 82°05', at State Highway 46, ¾ miles west of Metter	.20	30	30	98	.35	.22	8.3

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
OGEECHEE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
150	555	Canoochee River	Ogeechee River	USGS Complete-Record Gaging Station 1837-1 Canochee River near Claxton, Ga. Evans County, lat 32°11'105", long 81°53'25", at State Highway 73, 2 miles northeast of Claxton Bullbrook County, lat 32°22', long 81°51', at State Highway 73, 1 miles southwest of Stateator, Evans-Bryan Counties, lat 32°08', long 81°47', at State Highway 30, 2 miles west of Groveland	.86	.86	1.2	3.7	1.4	.96	29
151	118	Lotts Creek	Canochee River					0	0	0	0
152	833	Canoochee River	Ogeechee River					0	0	0	0

ALTAMAHAW RIVER BASIN

153	8.7	Sugar Creek	South River	DeKalb County, lat 33°41', long 84°18', at Clifton Church Road, 2½ miles east of DeKalb DeKalb County, lat 33°43', long 84°16', at Rain- bow Drive, 5 miles southeast of DeKalb DeKalb County, lat 33°47', long 84°14', at Rock- bridge Road, east of DeKalb	0	0	0	.11	1.1	.56	.16
154	7.45	Shoal Creek	South River	DeKalb County, lat 33°43', long 84°16', at Rain- bow Drive, 5 miles southeast of DeKalb DeKalb County, lat 33°47', long 84°14', at Rock- bridge Road, east of DeKalb	1.2	1.3	1.8	.46	4.6	3.6	2.1
155	6.9	Snappinger Creek	South River	DeKalb County, lat 33°46', long 84°14', at Indian Creek Road, east of DeKalb	.44	.52	.83	2.8	2.0	.98	5.8
156	4.60	Indian Creek	Snappinger Creek	DeKalb County, lat 33°46', long 84°14', at Indian Creek Road, east of DeKalb	.34	.36	.55	2.0	1.4	.71	.40
157	28	Snappinger Creek	South River	DeKalb County, lat 33°44', long 84°11', at State Highway 12, east of DeKalb	2.1	2.3	3.6	12	8.7	4.5	25
158	3.3	Pole Bridge Creek	South River	DeKalb County, lat 33°45', long 84°08', at State Highway 12, west of Lithonia	.33	.36	.53	1.6	1.2	.64	3.1
159	3.3	Jackson Creek	South River	Roswell County, lat 33°38', long 84°06', at county road, 6½ miles southwest of Conyers and 0½ miles upstream from mouth	.28	.31	.46	1.5	1.1	.57	3.0
160	4.9	Upton Creek	Cotton Creek	Clayton County, lat 33°30', long 84°17', at county road, 4½ miles southeast of Forest Park	.10	.12	.22	1.2	.73	.29	3.1
161	7.9	Farther Creek	Upton Creek	Henry County, lat 33°34', long 84°16', at State Highway 12, 2½ miles northwest of Stockbridge	.24	.27	.49	2.3	1.4	.61	6.5
162	46	Cotton Creek	Big Cotton Creek	Henry County, lat 33°33', long 84°17', at State Highway 133, 3¾ miles east of Stockbridge	.60	.74	1.1	4.1	2.7	1.1	21

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 43

163	.8	Rum Creek	Line Creek	Line Creek, Clayton County, lat 33°32', long 84°21', at State Highway 138, east of Jonesboro	.077	.096	.11	.24	.19	.11	.64
164	18	Line Creek	Reeves Creek	Highway 138, Henry County, lat 33°31', long 84°14', at county road, 1½ miles south of Stockbridge	.68	.83	1.1	3.2	2.2	1.1	11
165	11	Reeves Creek	Indian Creek	Henry County, lat 33°31', long 84°14', at county road, 1½ miles south of Stockbridge	.26	.32	.46	1.4	.98	.46	6.0
166	17	Pates Creek	Indian Creek	Henry County, lat 33°31', long 84°14', at county road, 1½ miles south of Stockbridge	.42	.54	.75	2.3	1.6	.76	9.5
167	50	Indian Creek	Big Cotton River	Henry County, lat 33°30', long 84°13', at county road, 3 miles southeast of Stockbridge	1.4	1.7	2.4	7.2	5.0	2.4	28
168	30	Walnut Creek	South River	Highway 42, 2½ miles southeast of Stockbridge	.93	1.1	1.6	4.6	3.2	1.6	18
169	7.2	Camp Creek	Walnut Creek	Henry County, lat 33°28', long 84°12', at State Highway 42, 1¾ miles northeast of McDonough	.66	.79	1.0	2.2	1.7	.98	5.7
170	51	Walnut Creek	South River	Henry County, lat 33°28', long 84°12', at State Highway 42, 1½ miles northwest of McDonough	2.5	3.0	4.0	10	7.4	4.0	34
171	456	South River	Ocmulgee River	USGS Committee-Record Gaging Station 1938; South River near McDonough, Ga.	.53 ^b	.58 ^b	.67 ^b	136 ^b	116 ^b	82 ^b	289 ^b
171A	6.3	Almond Branch	Snapping Shoals	Newtown, Henry County, lat 33°30', long 84°20', at county road, 9 miles northeast of McDonough	.29	.32	.55	2.2	1.5	.69	4.9
172	2.09	Yellow River	Ocmulgee River	Rockdale County, lat 33°37', long 84°01', at State Highway 20, 3½ miles south of Conyers	0	0	0	0	0	0	0
173	1.59	Wildcat Creek	Yellow River	Gwinnett County, lat 34°00', long 83°59', at State Highway 20, 3 miles north of Lawrenceville	.01	.02	.072	.21	.11	.02	.79
174	6.08	Yellow River	Ocmulgee River	Wildcat Creek near Lawrenceville, Ga.							
175	4.99	Little Suwanee Creek	Yellow River	Gwinnett County, lat 34°00', long 84°00', at county road, 3½ miles north of Lawrenceville	0	0	0	0	0	0	0
176	3.17	Aer Creek	Little Suwanee Creek	Gwinnett County, lat 34°00', long 84°00', at county road, 4 miles southeast of Lawrenceville	0	0	0	0	0	0	0
177	9.62	Little Suwanee Creek	Yellow River	Gwinnett County, lat 34°00', long 84°00', at county road, 2½ miles northwest of Lawrenceville	0	0	0	0	0	0	0
178	17.7	Yellow River	Ocmulgee River	Gwinnett County, lat 34°00', long 84°00', at county road, 2½ miles northwest of Lawrenceville	0	0	.635	1.3	.58	.13	5.8
179	19.1	Yellow River	Ocmulgee River	Gwinnett County, lat 34°00', long 84°00', at State Highway 120, 2½ miles west of Lawrenceville	0	0	0	0	0	0	0
180	1.88	Wolf Creek	Yellow River	Gwinnett County, lat 33°55', long 84°03', at county road, 4½ miles northwest of Lawrenceville	.065	.077	.14	.85	.51	.40	2.3
181	3.84	Wolf Creek	Yellow River	Gwinnett County, lat 33°55', long 84°02', at county road, 3 miles west of Lawrenceville	0	0	0	0	0	0	0
182	25.3	Yellow River	Ocmulgee River	Gwinnett County, lat 33°57', long 84°02', at county road, 3 miles west of Lawrenceville	0	0	0	0	0	0	0

^b Flow regulated by diversion from Chattahoochee River for Atlanta Municipal supply.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly		
183	26.5	Yellow River	Omulgee River	Gwinnett County, lat 33°29'7", long 84°03', at county road, 3½ miles west of Lawrenceville, Ga.	0	0	0	0	0
184	28.0	Yellow River	Omulgee River	Gwinnett County, lat 33°26', long 84°04', at State Highway 8, 2½ miles southwest of Lawrenceville, Ga.	0	0	0	0	0
185	2.23	Pew Creek	Yellow River	USGS Complete-Record Gaging Station 1063; Pew Creek near Lawrenceville, Ga.	.16	.18	.25	.68	.33
186	3.11	Redland Creek	Pew Creek	Gwinnett County, lat 33°26', long 84°01', on county road, 1½ mile southwest of State Highway 8, 2½ miles southwest of Lawrenceville, Ga.	0	0	0	.40	.21
187	5.99	Rocky Branch	Yellow River	Gwinnett County, lat 33°26', long 84°02', at State Highway 8, 2½ miles southwest of Lawrenceville, Ga.	.22	.24	.43	1.9	1.2
188	43.5	Yellow River	Omulgee River	Gwinnett County, lat 33°25', long 84°03', at county road, 1 mile east of Chester	.42	.48	1.0	7.5	.98
189	45.1	Yellow River	Omulgee River	Gwinnett County, lat 33°25', long 84°04', at county road, 0.5 miles south of Chester	.28	.33	.77	4.5	4.4
190	4.32	Bankston Creek	Yellow River	Gwinnett County, lat 33°25', long 84°04', at county road, 1 mile south of Chester	.19	.21	.36	1.5	3.2
191	2.34	Fork Creek	Yellow River	Gwinnett County, lat 33°25', long 84°05', at county road, 0.8 mile west of Glastonbury	.675	.084	.15	.69	.44
192	1.48	Knox Creek	Sweetwater Creek	Gwinnett County, lat 33°25', long 84°05', at State Highway 120, 1½ miles southeast of Duluth	0	0	0	.14	.050
193	1.96	Fork Creek	Sweetwater Creek	Gwinnett County, lat 33°25', long 84°06', at State Highway 120, 3½ miles southeast of Duluth	0	0	0	.27	.57
194	19.5	Sweetwater Creek	Yellow River	Gwinnett County, lat 33°25', long 84°06', at county road, 4½ miles southeast of Duluth	.680	.094	.22	2.2	.11
195	2.78	Beaver Ruin Creek	Sweetwater Creek	Gwinnett County, lat 33°25', long 84°12', at county road, 1½ miles southeast of Norcross	.075	.084	.15	.69	.44
196	6.11	Beaver Ruin Creek	Sweetwater Creek	Gwinnett County, lat 33°25', long 84°10', at county road, 2½ miles southeast of Norcross	.18	.20	.35	1.6	.36
197	0.94	Shetley Creek	Beaver Ruin Creek	USGS Complete-Record Gaging Station 1053; Shetley Creek near Norcross, Ga.	.01	.02	.041	1.0	1.6
198	9.23	Unnamed Tributary	Beaver Ruin Creek	Gwinnett County, lat 33°27', long 84°10', at county road, 3 miles east of Norcross	.26	.52	.28	.80	.05
				road, 4 miles east of Norcross					.51

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 45

199	11.7	Unnamed Tributary Creek	Gwinnett County, lat $33^{\circ}56'$, long $84^{\circ}08'$, at county road, 5 miles east of Norcross	.18	.20	.40	2.4	1.5	1.1	6.9
200	48.1	Sweetwater Creek	Gwinnett County, lat $33^{\circ}55'$, long $84^{\circ}08'$, at State Highway 8, 7 miles southwest of Lawrenceville	0	0	.20	0	0	0	34
201	3.70	Jackson Creek	Gwinnett County, lat $33^{\circ}55'$, long $84^{\circ}11'$, at county road, 4½ miles southeast of Norcross	.35	.38	.59	1.8	1.3	1.1	3.5
202	5.87	Jackson Creek	Gwinnett County, lat $33^{\circ}55'$, long $84^{\circ}10'$, at county road, 4½ miles southeast of Norcross	.22	.25	.43	1.9	1.2	.99	4.3
203	1.62	Pumpkin Vine Creek	Gwinnett County, lat $33^{\circ}54'$, long $84^{\circ}10'$, at county road, 3½ miles southeast of Norcross	.16	.17	.27	.83	.66	.51	1.6
204	9.53	Jackson Creek	Gwinnett County, lat $33^{\circ}54'$, long $84^{\circ}09'$, at county road, 5 miles southeast of Norcross	.16	.23	.42	2.3	1.4	1.1	6.1
205	6.47	Camp Creek	Gwinnett County, lat $33^{\circ}53'$, long $84^{\circ}08'$, at county road, 6½ miles southeast of Norcross	.42	.46	.73	2.4	1.7	1.4	4.9
206	18.8	Jackson Creek	Gwinnett County, lat $33^{\circ}54'$, long $84^{\circ}07'$, at county road, 6½ miles southeast of Norcross	.45	.49	.92	4.8	3.0	2.4	12
207	124	Yellow River	Gwinnett County, lat $33^{\circ}53'$, long $84^{\circ}05'$, at county road, 1½ miles southwest of Glastonbury	.86	.98	2.1	18	9.7	7.2	60
208	126	Yellow River	Gwinnett County, lat $33^{\circ}52'$, long $84^{\circ}05'$, at county road, 3½ miles west of Snellville	1.1	1.6	2.8	20	11	8.4	64
209	134	Yellow River	Gwinnett County, lat $33^{\circ}52'$, long $84^{\circ}05'$, at county road, 3½ miles west of Snellville, Ga.	1.6	1.9	3.9	25	15	5.2	75
210	5.54	Garner Creek	USGS Complete-Record Gaging Station 1942;							
210A	9.2	Stone Mountain Creek	Yellow River near Snellville, Ga.							
211	7.0	Crooked Creek	Gwinnett County, lat $33^{\circ}51'$, long $84^{\circ}05'$, at county road, 3½ miles west of Snellville	.55	.61	.89	2.7	2.0	1.7	5.2
212	29	Stone Mountain Creek	Gwinnett County, lat $33^{\circ}52'$, long $84^{\circ}05'$, at county road, 1½ miles west of Snellville	.13	.16	.32	1.9	1.1	.42	5.4
213	5.1	Swift Creek	Dekalb County, lat $33^{\circ}49'$, long $84^{\circ}08'$, at State Highway 10, 2½ miles east of Stone Mountain	.69	.77	1.1	3.5	2.5	2.2	6.6
213A	248	Yellow River	Dekalb County, lat $33^{\circ}48'$, long $84^{\circ}07'$, at Stephen-Baron Road, 4 miles north of Lithonia	1.2	1.3	2.3	9.7	6.4	5.2	22
214	56	Big Haynes Creek	Dekalb County, lat $33^{\circ}46'$, long $84^{\circ}05'$, at State Highway 124, 4½ miles north of Lithonia	.15	.17	.31	1.5	.93	.74	3.5
215	24	Little Haynes Creek	Dekalb County, lat $33^{\circ}45'$, long $84^{\circ}05'$, at State Highway 124, 9½ miles north of Lithonia	3.5	4.1	8.3	51	30	11	140
216	31	Gum Creek	Rockdale County, lat $33^{\circ}41'$, long $83^{\circ}55'$, at State Highway 138, 3½ miles east of Conyers	2.0	2.2	3.8	16	11	8.8	37
217	278	Yellow River	Rockdale County, lat $33^{\circ}42'$, long $83^{\circ}55'$, at State Highway 138, 6 miles northeast of Conyers	.58	.67	1.2	6.3	3.9	3.1	16
218	4.0	Alcovy River	Rockdale-Newton Counties, lat $33^{\circ}43'$, long $83^{\circ}55'$, at State Highway 138, 7 miles northeast of Conyers	.096	.18	.98	.61	.48	2.6	
			Gwinnett County, lat $33^{\circ}39'$, long $83^{\circ}54'$, at county road, 3½ miles northwest of Covington							
			USGS Complete-Record Gaging Station 1897; 1890-1901; 1944-1							
			Yellow River near Covington, Ga., Newton County, 1½ miles northwest of Covington							
			Gwinnett County, lat $33^{\circ}39'$, long $83^{\circ}57'$, at county road, 3 miles northeast of Lawrenceville							

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)				Min. Daily Flow (cfs)	Minimum 12-Month Flow 1934-45 (cfs)
					1-Day	7-Day	Monthly	June		
219	4.6	Cedar Creek	Altovy River	Gwinnett County, lat 33°36', long 83°57', at county road, 23½ miles northeast of Lawrenceville	.15	.17	.30	1.4	.90	.72
220	1.9	Mountain Creek	Altovy River	Walton County, lat 33°40', long 83°44', at county road, 2½ miles northwest of Monroe	.15	.16	.25	.84	.59	.50
221	2.8	Richland Creek	Altovy River	Walton County, lat 33°41', long 83°44', at county road, 2½ miles northwest of Social Circle	.28	.31	.48	1.4	1.0	.90
222	5.2	Big Flat Creek	Altovy River	Walton County, lat 33°50', long 83°52', at State Highway 10, 2½ miles east of Loganville	.11	.12	.24	1.3	.78	.77
223	7.0	Little Flat Creek	Big Flat Creek	Walton County, lat 33°46', long 83°57', at State Highway 138, 1½ miles west of Monroe	.41	.44	.77	2.7	1.9	1.5
224	7.5	West Bear Creek	Bear Creek	Newton County, lat 33°31', long 83°47', at State Highway 215, 3½ miles west of Mansfield	.31	.32	.44	1.3	.71	.71
225	2.2	Maholms Creek	Tussahaw Creek	Burnt Creek, lat 33°20', long 83°51', at county road, 1½ miles northeast of Lexington	0	0	0	0	0	0
226	59	Tussahaw Creek	Branch Creek	Burnt Creek, lat 33°22', long 83°58', at county road, 5½ miles north of Jackson	.71	.94	1.4	5.2	3.3	1.4
227	16	Herd's Creek	Ocmulgee River	Jasper County, lat 33°21', long 83°49', at county road, 8 miles northwest of Montezuma	.13	.18	.27	1.1	.69	.27
228	1,420	Ocmulgee River	Alabama River	USGS Complete-Accord Gaging Station 1906-1916; 1954; Ocmulgee River near Jackson, Ga., near State Highway 10, 7 miles east of Jackson, Butts-Jasper Counties, lat 33°18', long 83°50'	69a	75a	99a			
229	11	Yellow Water Creek	Ocmulgee River	Butts County, lat 33°19', long 83°58', at State Highway 31, 1½ miles north of Jackson	.20	.25	.36	1.2	.82	.36
230	28	Yellow Water Creek	Ocmulgee River	Butts County, lat 33°18', long 83°52', at State Highway 10, 1½ miles east of Jackson	.50	.64	.92	3.1	2.1	.92
231	3.4	Plymale Creek	Little Sandy Creek	Butts County, lat 33°15', long 83°53', at county road, 1 mile east of Floryda	.33	.37	.48	1.1	.81	.14
232	5.4	Hopothelyehloho Creek	Big Sandy Creek	Butts County, lat 33°15', long 83°51', at State Highway 26, 3½ miles southwest of Jackson	.11	.13	.19	.62	.41	.40
233	3.4	Aboothlaocosta Creek	Big Sandy Creek	Butts County, lat 33°16', long 83°58', at county road, 2 miles south of Jackson	.24	.29	.37	.87	.65	.18
233A	3.4	Town Branch Creek	Aboothlaocosta Creek	Butts County, lat 33°16', long 83°56', at county road, 2½ miles east of Floryda	.21	.22	.30	.80	.46	.28

234	11	Aboothacoosta Creek	Big Sandy Creek	Ocmulgee River	Butts County, lat 33°15', long 83°55', near State Highway 42 at Indian Springs, and just upstream from confluence with Hopothysaholo Creek	.46	.56	.76	.76	2.1	1.5	.77	7.1						
235	31	Big Sandy Creek	Big Sandy Creek	Ocmulgee River	Butts County, lat 33°15', long 83°56', at State Highway 42, 2½ miles south of Indian Springs	1.7	2.0	2.7	6.8	5.0	2.7								
236	6.93	Rocky Creek	Big Sandy Creek	Ocmulgee River	Butts County, lat 33°15', long 83°56', at State Highway 42, 2½ miles south of Indian Springs	.17	.21	.30	.91	.62	.29	3.8							
237	57	Big Sandy Creek	Big Sandy Creek	Ocmulgee River	Butts-Monroe Counties, lat 33°11', long 83°50', at State Highway 87, 5½ miles southeast of Philolia	1.1	1.5	2.1	6.7	4.6	2.1	30							
238	5.2	Towaliga River	Towaliga River	Ocmulgee River	Henry County, lat 33°24', long 83°15', at county road, 2 miles east of Hampton	.073	.094	.14	.49	.32	.14	2.5							
239	33	Towaliga River	Ocmulgee River	Ocmulgee River	Splatking County, lat 33°07', long 84°11', at State Highway 15½ miles northeast of Griffin	.79	.96	1.5	4.3	2.9	1.4	18							
240	17	Troublesome Creek	Towaliga River	Towaliga River	Spalding County, lat 33°14', long 84°11', at State Highway 15½ miles northeast of Griffin	1.7	2.0	2.5	5.4	4.2	2.6	14							
241	15	Indian Creek	Towaliga River	Towaliga River	Henry County, lat 33°21', long 84°18', at county road, 1½ miles west of Locust Grove	.52	.64	.88	2.6	1.8	.87	9.2							
242	105	Towaliga River	Ocmulgee River	Towaliga River	Butts County, lat 33°16', long 84°04', at State Highway 18, 6½ miles west of Jackson	4.6	6.1	8.7	26	23	13	58							
243	33	Cabin Creek	Towaliga River	Towaliga River	Butts County, lat 33°14', long 84°04', at county road, 7½ miles southwest of Jackson	1.6	1.9	2.5	6.7	4.9	2.6	22							
243A	148	Towaliga River	Ocmulgee River	Towaliga River	Butts County, lat 33°13', long 84°04', at State Highway 36, 7½ miles southwest of Jackson	5.0	5.5	10	32	29	15	77							
244	6.27	Buck Creek	Towaliga River	Towaliga River	Spalding County, lat 33°13', long 84°11', at county road, 5 miles southeast of Griffin	.23	.27	.38	1.1	.75	.38	3.8							
245	4.23	Little Towaliga River	Towaliga River	Lamar County, lat 33°55', long 84°07', at State Highway 7, 1½ miles northeast of Barnesville	.30	.36	.47	1.1	.82	.47	3.2								
246	7.70	Edie Creek	Towaliga River	Lamar County, lat 33°49', long 84°00', at county road, 3½ miles northeast of Milner	.15	.20	.28	.91	.61	.28	4.0								
247	2.38	Unnamed Tributary	Edie Creek	Lamar County, lat 33°07', long 84°09', at State Highway 36, 4½ miles north of Barnesville	.081	.097	.12	.38	.27	.13	1.4								
248	26.5	Rocky Creek	Towaliga River	Monroe County, lat 33°07', long 83°57', at county road, 5½ miles north of Forsyth	.29	.40	.53	2.2	1.4	.59	12								
249	8.8	Falling Creek	Caney Creek	Jasper County, lat 33°21', long 83°42', at county road, 7½ miles south of Monticello	0	0	0	0	0	0	0	0							
250	5.8	Gladewater Creek	Little Falling Creek	Jasper County, lat 33°12', long 83°47', at State Highway 83, 9½ miles southwest of Monticello	0	0	0	0	0	0	0	0							
251	108	Caney Creek	Ocmulgee River	Jones County, lat 33°02', long 83°45', at county road, 1½ miles northeast of Dames Ferry	0	0	0	0	0	0	0	0							
252	4.91	Walkers Branch	Rum Creek	Monroe County, lat 33°05', long 83°55', at State Highway 83, ¾ mile northeast of Forsyth	.18	.19	.36	1.1	1.0	.54	2.6								
253	74	Rum Creek	Ocmulgee River	Monroe County, lat 33°00', long 83°44', at State Highway 87, 1½ miles south of Dames Ferry	.28	.33	5.0	5.3	4.4	1.6	20								
254	9.3	Tobler Creek	Ocmulgee River	Monroe County, lat 32°59', long 83°44', at State Highway 87, 4½ miles northeast of Bolingbrook	0	0	0	0	0	0	0	0							
255	11	Beaverdam Creek	Ocmulgee River	Bibb County, lat 32°55', long 83°43', at Westway Drive northwest of Macon	.094	.11	.24	1.2	1.0	.43	3.8								

^a Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAW RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
256	2,240	Ocmulgee River	Altamahaw River	USGS Complete-Record Gaging Station 1893-1913; 1481-1 Ocmulgee River at Macon, Ga., Bibb County, lat. 32°51', long. 83°34', at Fifth Street Bridge in Macon.	128*	139*	165*	0	0	0	0
257	29	Walnut Creek	Ocmulgee River	Jones County, lat. 32°30', long. 83°37', at State Highway 8, 5½ miles southwest of Gray.	0	0	0	0	0	0	0
258	4.2	Bonner Creek	Walnut Creek	Jones County, lat. 32°30', long. 83°37', at State Highway 11, 2½ miles southwest of Gray.	.0167	.071	.14	.61	.52	.24	1.7
259	79	Walnut Creek	Ocmulgee River	Bibb County, lat. 32°53', long. 83°37', at State Highway 11, 3 miles north of Macon.	0	0	0	0	0	0	0
260	11	Swift Creek	Ocmulgee River	Bibb County, lat. 32°48', long. 83°34', at crossing of Mason, Dublin & Savannah Railroad, 4½ miles east of Macon.	5.3	5.5	5.7	5.6	5.6	5.6	7.7
261	20	Stone Creek	Ocmulgee River	Bibb County, lat. 32°48', long. 83°32', at county road, 5½ miles east of Macon.	3.0	3.2	3.4	3.2	3.3	3.3	7.0
263	5.48	Tobesofkee Creek	Ocmulgee River	Lamar County, lat. 33°02', long. 84°07', at county road, 2½ miles east of Barnesville.	1.3	1.4	1.9	3.3	3.1	2.3	5.0
264	27.7	Tobesofkee Creek	Ocmulgee River	Monroe County, lat. 32°47', long. 82°01', at county road, 5 miles west of Forsyth.	0	0	0	1.1	.97	.78	.23
265	7.07	Todd Creek	Tobesofkee Creek	Monroe County, lat. 32°01', long. 82°58', at State Highway 83, 1½ miles southwest of Forsyth.	.32	.35	.59	1.8	1.6	.88	3.9
266	16.8	Little Tobesofkee Creek	Tobesofkee Creek	Monroe County, lat. 32°47', long. 84°05', at State Highway 83, 8½ miles southwest of Forsyth.	.072	.080	.21	1.2	1.0	.39	4.7
267	30	Little Tobesofkee Creek	Tobesofkee Creek	Montgomery County, lat. 32°55', long. 82°57', at State Highway 42, 8 miles south of Forsyth.	.78	.87	1.6	5.7	5.0	2.5	14
268	9.0	Yellow Creek	Little Tobesofkee Creek	Montgomery County, lat. 32°56', long. 82°57', at State Highway 42, 6½ miles south of Forsyth.	1.3	1.4	1.9	4.0	3.7	2.5	7.0
269	182	Tobesofkee Creek	Ocmulgee River	USGS Complete-Record Gaging Station 1937; Tonesofkee Creek near Macon, Ga., Bibb County, lat. 32°48', long. 82°46', at State Highway 22, 8 miles west of Macon.	2.5	3.1	6.0	25	22	10	73
270	21	Rocky Creek	Tobesofkee Creek	Bibb County, lat. 32°52', long. 83°45', at county road, 2 miles southwest of Wesleyan College near Macon.	0	0	0	0	0	0	0
271	4.4	Wolf Creek	Rocky Creek	Bibb County, lat. 32°52', long. 83°42', at county road, ¾ miles south of Wesleyan College near Macon.	.053	.057	.12	.55	.47	.21	1.6

• Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)		
					1-Day	7-Day	Monthly	June	July	August
292	155	Big Creek	Ocmulgee River	Pulaski County, lat $32^{\circ}14'$, long $83^{\circ}30'$, at State Highway 27, $3\frac{1}{2}$ miles southwest of Hawkinsville	5.1	6.6	6.7	6.2	6.2	22
294	50	Cedar Creek	Big Creek	Phinizy County, lat $32^{\circ}13'$, long $83^{\circ}17'$, at county road, 5 miles southwest of Hawkinsville	4.0	4.4	5.2	4.2	4.6	12
295	29	Brushy Creek	Cedar Creek	Wilcox County, lat $32^{\circ}03'$, long $83^{\circ}26'$, at county road, 8½ miles northwest of Ahulawatla	0	0	0	0	0	0
297	69	House Creek	Ocmulgee River	Wilcox County, lat $31^{\circ}51'$, long $83^{\circ}15'$, at county road, 10 miles southeast of Abbeville	0	0	0	0	0	0
298	70	Horse Creek	Big Horse Creek	Telfair County, lat $31^{\circ}05'$, long $83^{\circ}07'$, at State Highway 31, $\frac{1}{3}\frac{1}{2}$ miles north of Jacksonsville	0	0	0	0	0	0
299	1.4	Boggy Creek	Horse Creek	Telfair County, lat $31^{\circ}36'$, long $82^{\circ}57'$, at State Highway 31, $8\frac{1}{2}$ miles northeast of Jacksonsville	0	0	0	0	0	0
300	27	Alligator Creek	Big Horse Creek	Telfair County, lat $31^{\circ}52'$, long $82^{\circ}49'$, at State Highway 31, $3\frac{1}{2}$ miles north of Jacksonsville	0	0	0	0	0	0
301	.6	Unnamed Tributary	Big Horse Creek	Telfair County, lat $31^{\circ}56'$, long $82^{\circ}06'$, at State Highway 31, 8 miles south of McRae	0	0	0	0	0	0
302	2.9	Unnamed Tributary	Big Horse Creek	Telfair County, lat $31^{\circ}37'$, long $82^{\circ}06'$, at State Highway 31, $\frac{1}{2}$ miles south of McRae	0	0	0	0	0	0
303	5,180	Ocmulgee River	Altamaha River	USGS Complete-Record Gaging Station 1936; Ocmulgee River at Lambar City, Ga., Telfair County, lat $31^{\circ}55'$, long $82^{\circ}40'$, at State Highway 27, at Lambar City	808a	813a	887a			
304	41	Gum Swamp Creek	Little Ocmulgee River	Hancock County, lat $32^{\circ}27'$, long $83^{\circ}17'$, at State Highway 26, $6\frac{1}{4}$ miles northeast of Coopersburg	0	0	0	0	0	0
305	149	Gum Swamp Creek	Little Ocmulgee River	Dodge County, lat $32^{\circ}15'$, long $83^{\circ}08'$, at State Highway 117, $4\frac{1}{2}$ miles northeast of Eastman	0	0	0	0	0	0
306	329	Little Ocmulgee River	Little Ocmulgee River	Wheeler-Telfair Counties, lat $32^{\circ}00'$, long $83^{\circ}45'$, at State Highway 124, at Towns	.66	1.1	2.9	4.0	3.7	42
307	128	Alligator Creek	Little Ocmulgee River	Laurens County, lat $32^{\circ}11'$, long $82^{\circ}54'$, at State Highway 31, $8\frac{1}{2}$ miles north of McRae	6	0	0	0	0	0
308	23	Little Creek	Alligator Creek	Wheeler County, lat $32^{\circ}09'$, long $82^{\circ}46'$, at State Highway 30, $1\frac{1}{4}$ miles east of Alamo	0	0	0	0	0	0
310	265	Alligator Creek	Little Ocmulgee River	Wheeler County, lat $32^{\circ}02'$, long $82^{\circ}40'$, at State Highway 134, $9\frac{1}{2}$ miles southeast of Alamo	.31	.61	1.7	2.4	2.1	.75
311	33	Sugar Creek	Turnpike Creek	Dodge County, lat $32^{\circ}00'$, long $83^{\circ}05'$, at State Highway 165, 1 mile southwest of Chauncey	0	0	0	0	0	0

312	66	Sugar Creek	Turpikie Creek	Telfair County, lat 32°29'36", long 82°35'56", at State Highway 30, 1 mile south of McRae	0	0	0	0	0	0	0	0
313	47	Turpikie Creek	Little Ocmulgee River	Telfair County, lat 31°51'36", long 82°35'56", at State Highway 31, 5½ miles south of McRae	0	0	0	0	0	0	0	0
314	14	Oconee River	Altamaha River	Telfair County, lat 34°00'00", long 82°35'56", at State Highway 13, northeast of Gainesville	4.8	5.2	6.6	11	8.9	7.1	16	
314A	4.9	Candler Creek	Oconee River	Fall Creek, lat 31°19', long 82°35'56", at State Highway 52, 9½ miles east of Gainesville	.74	.84	1.2	2.6	1.8	1.3	4.1	
314B	15	Candler Creek	Oconee River	Jackson County, lat 31°15', long 82°35'56", at county road, 1½ miles west of Mayesville	1.7	2.0	2.9	6.9	4.6	3.3	11	
315	70	Oconee River	Altamaha River	Jackson County, lat 31°14', long 82°34', at county road, 1½ miles south of Mayesville	7.7	8.4	13	30	20	14	51	
316	3.5	Border Creek	Oconee River	Jackson County, lat 34°01'11", long 82°29'59", at State Highway 15, 2 miles southwest of Comer	.35	.42	.60	1.5	.98	.66	2.5	
317	2.0	Roger Creek	Border Creek	Jackson County, lat 34°00'00", long 82°28', at county road, 3½ miles south of Comer	.44	.48	.66	1.3	.96	.74	1.9	
318	3.8	Little Curry Creek	Big Curry Creek	Jackson County, lat 34°01'17", long 82°31', at county road, 3 miles east of Jefferson	.40	.46	.69	1.7	1.1	.78	2.8	
319	61	Sandy Creek	Oconee River	Clarke County, lat 32°55'56", long 82°23', at State Highway 24, at Athens	1.9	2.3	3.2	8.7	7.4	4.8	27	
320	4.4	West Fork Trail	Trail Creek	Clarke County, lat 33°35'58", long 82°21', at county road, at Athens	.44	.53	.66	1.4	1.2	.90	3.0	
321	283	Oconee River	Altamaha River	Clarke County, lat 33°56'57", long 82°22', at Cemetery Bridge in Athens	16	18	24	.57	.50	.35	160	
322	24	Pond Fork	Middle Oconee River	Jackson County, lat 34°11'17", long 82°40', at county road, 1¾ miles northeast of Pendergrass	1.6	1.9	2.9	8.2	5.1	3.4	15	
323	12	Allen Creek	Pond Fork	Hall County, lat 34°12'17", long 82°45', at county road, 1½ miles east of Candler	1.4	1.6	2.3	5.5	3.7	2.6	9.1	
324	17.3	Allen Creek	Pond Fork	USGS Complete Record Gaging Station 1951-1; Allen Creek at Talmo, Ga.	2.0	2.3	3.3	7.9	5.3	3.9	13	
324A	57	Pond Fork	Middle Oconee River	Jackson County, lat 34°12', long 82°45', at State Highway 11, ½ mile north of Talmo	3.6	4.2	5.5	13	11	7.9	33	
325	4.2	Unnamed Tributary	Walnut Creek	Hall County, lat 34°10'00", long 82°47', at county road, 2¾ miles south of Candler	.55	.63	.88	2.1	1.4	1.0	3.3	
326	128	Middle Oconee River	Oconee River	Jackson County, lat 34°06', long 82°46', at State Highway 11, 2½ miles southwest of Jefferson	9.7	11	14	32	28	21	79	
327	13	Mulberry River	Middle Oconee River	Hall County, lat 34°07', long 82°42', at county road, 5½ miles southeast of Flower Branch	.68	.82	1.3	3.9	2.4	1.5	7.4	
328	13	Mulberry Creek	Mulberry River	Hall County, lat 34°08', long 82°42', at county road, 5 miles southeast of Flower Branch	.68	.81	1.3	3.9	2.4	1.5	7.4	
329	43	Mulberry River	Middle Oconee River	Hall County, lat 34°08', long 82°47', at State Highway 21, 7 miles southeast of Flower Branch	2.2	2.7	4.3	13	7.9	5.1	25	
330	7.3	Rock Creek	Little Mulberry River	Barrow County, lat 34°02', long 82°50', at county road, 1½ miles north of Autumn	.13	.16	.30	1.2	.65	.37	2.8	

^a Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly		
331	117	Mulberry River	Middle Oconee River	Jackson-Barrow Counties, lat. $34^{\circ}09'$, long. $83^{\circ}43'$, at State Highway 53, 4½ miles north of Winder, Barrow County, lat. $33^{\circ}50'$, long. $83^{\circ}44'$, at county road, 2 miles northeast of Statham.	.73	.85	11	.26	.16
332	3.8	Bear Creek	Middle Oconee River	USGS Complete-Record Gaging Station 1901-02; Clarke County, lat. $33^{\circ}58'$, long. $83^{\circ}25'$, near State Highway 8 and 10, 2 miles west of Athens	.84	.95	1.3	.25	1.4
333	398	Middle Oconee River	Oconee River	Barrow County, lat. $33^{\circ}56'$, long. $83^{\circ}06'$, at county road, 1½ miles south of Statham.	.28	.32	.42	.94	.60
334	8.8	Barber Creek	Middle Oconee River	Clarke County, lat. $33^{\circ}56'$, long. $83^{\circ}17'$, at State Highway 10, 2½ miles south of Winterville.	.54	.62	.80	1.9	1.6
335	7.8	Shoals Creek	Oconee River	Oglethorpe County, lat. $33^{\circ}47'$, long. $83^{\circ}15'$, at county road 10, 1½ miles southwest of Lexington.	0	0	0	.81	.53
335A	32	Falling Creek	Oconee River	Greene County, lat. $33^{\circ}40'$, long. $83^{\circ}16'$, at State Highway 15, 8 miles northwest of Greensboro.	.082	.084	.11	2.2	.071
335B	32	Fishing Creek	Oconee River	Oconee County, lat. $33^{\circ}45'$, long. $83^{\circ}25'$, at county road, 1½ miles north of Farmington.	.37	.40	.52	1.2	.39
336	4.0	Greenbrier Creek	Oconee River	Greene County, lat. $33^{\circ}40'$, long. $83^{\circ}20'$, at county road, 11 miles northwest of Farmington.	.58	.68	.94	3.1	1.7
336A	26	Greenbrier Creek	Oconee River	Greene County, lat. $33^{\circ}48'$, long. $83^{\circ}17'$, at State Highway 12, 5 miles northwest of Greensboro.	0	0	0	0	10
336B	12	Town Creek	Oconee River	Greene County, lat. $33^{\circ}48'$, long. $83^{\circ}17'$, at State Highway 16, ½ mile northwest of Greensboro.	.59 ^a	.87 ^a	.280 ^a	.225 ^a	.616 ^a
337	1,090	Oconee River	Altamaha River	USGS Complete-Record Gaging Station 1903-1023; Oconee River near Greensboro, Ga., Greene County, lat. $33^{\circ}35'$, long. $83^{\circ}16'$, at State Highway 12; 1½ miles northwest of Greensboro.	.66	.81	1.3	7.0	2.9
338	4.2	Williamson Creek	Apalachee River	Barrow County, lat. $33^{\circ}38'$, long. $83^{\circ}48'$, at county road, 4½ miles southwest of Winder.	.76	.84	1.0	1.9	1.4
339	54	Apalachee River	Oconee River	Barrow-Walton Counties, lat. $33^{\circ}51'$, long. $83^{\circ}43'$, at State Highway 11, 2½ miles south of Bettie's Hamm.	3.3	3.8	5.1	13	11
339A	123	Apalachee River	Oconee River	Walton-Oconee Counties, lat. $33^{\circ}55'$, long. $83^{\circ}30'$, at State Highway 10, ¾ miles northeast of Monroe.	.66	.81	1.3	7.0	3.6
340	17	Big Robinson Creek	Apalachee River	Oconee County, lat. $33^{\circ}48'$, long. $83^{\circ}29'$, at county road, 2½ miles west of Bishop.	1.6	1.7	2.2	5.3	3.3

341	6.7	Jacks Creek	Apalachee River	Walton County, lat 33°9'48", long 83°41', at State Highway 10, $\frac{1}{4}$ miles east of Monroe	.11	13	.18	.72	.58	.35	2.8								
342	3.0	Unnamed Tributary	Jacks Creek	Walton County, lat 33°48", long 83°37', at State Highway 83, 1 mile northwest of Good Hope	.26	29	.36	.90	.78	.56	2.1								
343	26	Wolf Creek	Apalachee River	Walton County, lat 33°45', long 83°37', at county road, 1 mile northwest of Good Hope	1.4	1.6	2.1	5.8	4.9	3.4	16								
344	3.6	Hard Labor Creek	Apalachee River	Oconee County, lat 33°44', long 83°25', at county road, 3 miles south of Farmington	.14	16	.22	.67	.56	.37	2.0								
345	0.6	Hard Labor Creek	Apalachee River	Walton County, lat 33°46", long 83°31', at county road, $\frac{1}{2}$ miles southeast of Monroe	0	0	0	0	0	0	0	.19							
345A	35	Speeds Branch	Apalachee River	Morgan County, lat 33°40', long 83°36', at county road, $\frac{1}{2}$ miles north of Rutledge	.08	80	1.2	4.3	3.5	2.2	15								
346	2.6	Beaverdam Creek	Hard Labor Creek	Morgan County, lat 33°37", long 83°29", at county road, 2 miles north of Madison	.057	.068	.096	.35	.28	.18	1.2								
346A	7.5	Big Sandy Creek	Hard Labor Creek	Morgan County, lat 33°41", long 83°27", at county road, 1 mile southwest of Apalachee	.48	.54	.71	1.9	1.6	1.1	4.8								
347	61	Big Sandy Creek	Hard Labor Creek	Morgan County, lat 33°40", long 83°27", at State Highway 24, $\frac{1}{2}$ miles southwest of Apalachee	1.0	1.2	1.8	6.8	5.5	3.4	26								
348	436	Apalachee River	Oconee River	USGS Complete-Record Gaging Station 1901-58; Morgan-Green County line, Buckhead, Ga.	16	18	26	79	67	43									
349	3C	Sugar Creek	Oconee River	Morgan County, lat 33°32", long 83°21', at county head	2.2	2.3	2.9	7.6	4.4	2.8	16								
349A	12	Richland Creek	Oconee River	Morgan County, lat 33°32", long 83°22', at county road, $\frac{1}{2}$ miles south of Buckhead	0	0	0	.12	.671	0	1.8								
349B	18	Richland Creek	Oconee River	Greene County, lat 33°47", long 83°16', at county road, $\frac{1}{2}$ miles north of Greensboro	0	0	0	.25	.17	.072	2.5								
349C	44	Beverdam Creek	Richland Creek	Highway 15, at Greensboro	0	0	0	.662	2.1	1.5	.27								
349D	25	Bruce Creek	Lundy Creek	Greene County, lat 33°40", long 83°45', at county road, $\frac{1}{2}$ miles south of Greensboro	.41	.42	.49	4.0	3.2	1.2	12								
349E	15	Whitten Creek	Shoulderbone Creek	Hancock County, lat 33°23", long 83°01', at State Highway 16, $\frac{1}{2}$ miles north of Sparta	0	0	0	.72	.51	.094	4.3								
350	98	Shoulderbone Creek	Oconee River	Hancock County, lat 33°20", long 83°25', at State Highway 16, $\frac{1}{2}$ miles northwest of Sparta	0	0	.096	1.1	.27	.082	7.0								
350A	10	Kimbo Creek	Shoulderbone Creek	Greene County, lat 33°29", long 83°17', at county road, $\frac{1}{2}$ miles south of Greensboro	13	.13	.16	1.4	1.2	.40	4.4								
350B	24	Fort Creek	Shoulderbone Creek	Hancock County, lat 33°18", long 83°06', at county road, $\frac{1}{2}$ miles west of Sparta	.072	.074	.094	1.8	1.3	.32	8.2								
351	8.2	Booty Creek	Oconee River	Putnam County, lat 33°20", long 83°23', at State Highway 16, at Eatonton	0	0	0	.23	.073	0	1.0								
351A	84	Little River	Oconee River	Morgan County, lat 33°27", long 83°50", at county road, 10½ miles south of Madison	2.2	2.6	3.7	12	10	6.6	41								
352	8.8	Big Indian Creek	Little River	Morgan County, lat 33°36", long 83°55', at county road, $\frac{1}{2}$ miles southeast of Hulridge	.16	.18	.26	.98	.46	.26	2.7								

a Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAW RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs) 1944-56
					1-Day	7-Day	Monthly	June	July	August	
353	30	Big Indian Creek	Little River	Morgan County, lat 33°32', long 83°22', at State Highway 83, 5½ miles southwest of Madison	.78	.84	1.2	4.1	2.0	1.2	10
354	11	Little Indian Creek	Big Indian Creek	Morgan County, lat 33°31', long 83°20', at county road, 5½ miles south of Madison	.21	.23	.33	1.3	.59	.31	3.4
355	21	Gladys Creek	Little River	Putnam County, lat 33°31', long 83°20', at county road, 3½ miles northwest of Eatonton	0	0	0	.40	.059	0	2.1
356	262	Little River	Oconee River	Putnam County, lat 33°19', long 83°26', at State Highway 16, 3 miles west of Eatonton	5.8	6.3	8.6	32	16	8.4	86
357	6.2	Robinson Creek	Murder Creek	Jasper County, lat 33°24', long 83°42', at county road, 6 miles northwest of Marion	.27	.27	.39	1.1	.62	.36	2.6
358	13	Sheppard Creek	Murder Creek	Jasper County, lat 33°24', long 83°42', at county road, 6½ miles north of Marion	.56	.57	.82	2.4	1.3	.75	5.5
359	24	Murder Creek	Little River	USGS Comptche-Recruit Gaging Station 1951-; Murder Creek near Monticello, Ga.	.81	.87	1.2	3.9	2.0	1.1	9.3
360	6.0	Pittman Creek	Murder Creek	Jasper County, lat 33°25', long 83°40', at State Highway 229, 8 miles north of Monticello	.44	.47	.60	1.5	.92	.56	3.2
361	13	Pittman Branch	Pittman Creek	Jasper County, lat 33°26', long 83°40', at county road, 6½ miles northwest of Study Dale	.99	1.0	1.3	3.4	2.1	1.2	6.9
362	71	Murder Creek	Little River	Jasper County, lat 33°22', long 83°37', at State Highway 83, 2½ miles southwest of Marion	.57	.60	.92	4.7	1.9	.85	16
363	5.5	Pearson Creek	Shoal Creek	Jasper County, lat 33°19', long 83°32', at State Highway 11, 1½ miles northwest of Monticello	0	0	0	0	0	0	0
363A	30	Shoal Creek	Murder Creek	Jasper County, lat 33°21', long 83°29', at State Highway 83, 4 miles northeast of Monticello	.86	.99	1.4	4.6	3.8	2.5	15
363B	104	Murder Creek	Little River	Jasper County, lat 33°20', long 83°37', at county road, 3½ miles south of Marion	2.0	2.1	3.1	12	5.6	2.8	32
364	126	Murder Creek	Little River	Jasper County, lat 33°19', long 83°34', at State Highway 16, 7 miles east of Monticello	2.0	2.3	3.3	13	5.9	3.0	37
365	18	Hog Creek	Cedar Creek	Jones County, lat 33°07', long 83°31', at county road, 7½ miles north of Gray	.076	.083	.14	.80	.29	.12	3.1
366	129	Cedar Creek	Little River	Putnam County, lat 33°31', long 83°26', at State Highway 44, 10 miles south of Eatonton	0	0	.076	1.0	.23	.062	7.3
367	5.34	Champion Creek	Oconee River	Baldwin County, lat 33°07', long 83°11', at county road, 3½ miles northeast of Millidgeville	.086	.090	.14	.53	.25	.13	1.5

367A	3.64	Ganty Creek	Baldwin County, lat 33°07', long 83°11', at county road, 3½ miles northeast of Milledgeville, at county road, at Milledgeville	0	0	.060	.28	.22	.12	1.2
369	9.1	Tobler Creek	UGGS Complete Record, Ganty, Station 1803-1895; 1837'; Oconee River at Milledgeville, Ga.	0	0	0	0	0	0	0
370	2,950	Oconee River	Baldwin County, lat 33°07', long 83°13', at county road, at Milledgeville	0	0	0	0	0	0	0
		Altamaha River	UGGS Complete Record, Ganty, Station 1803-1895; 1837'; Oconee River at Milledgeville, Ga.	92a	223a	344a				
371	10	Unnamed Tributary	Baldwin County, lat 33°05', long 83°13', near State Highway 24, at Milledgeville	.26	.27	.38	1.3	.66	.35	.34
372	60	Fishing Creek	Baldwin County, lat 33°04', long 83°20', at State Highway 22, 6½ miles west of Milledgeville	.20	.22	.37	2.3	.81	.32	.94
373	63	Fishing Creek	Baldwin County, lat 33°05', long 83°16', at county road, 2½ miles west of Milledgeville	.056	.002	.11	1.1	.31	.099	.58
374	28	Camp Creek	Baldwin County, lat 33°04', long 83°15', at State Highway 48, at Milledgeville	.15	.16	.26	1.4	.55	.23	.52
374A	12 8	Town Creek	Baldwin-Hancock Counties, lat 33°05', long 83°06', at State Highway 22, 9½ miles northeast of Milledgeville	.12	.13	.15	1.6	1.3	.41	.54
374B	58.9	Town Creek	Baldwin County, lat 32°59', long 83°05', at State Highway 24, 11 miles southeast of Milledgeville	3.1	3.4	4.2	3.4	3.5	3.5	11
374C	15	Buffalo Creek	Hancock County, lat 32°53', long 82°55', at county road, 4 miles south of Spartanburg	0	0	0	.37	.24	0	3.2
375	93	Buffalo Creek	Hancock-Washington Counties, lat 33°00', long 82°58', at county road, 2 miles east of Linton	.65	.71	1.1	5.6	2.2	.99	19
376	72	Keg Creek	Washington County, lat 33°01', long 82°56', at county road, 5½ miles northwest of Sandersville	.94	1.0	1.4	1.0	1.1	1.1	5.8
376A	248	Buffalo Creek	Washington County, lat 32°58', long 82°57', at State Highway 24, 8½ miles west of Sandersville	9.0	9.9	13	9.9	11	11	38
377	32	Sandy Hill Creek	Washington County, lat 32°51', long 82°55', at State Highway 272, 8½ miles west of Sandersville	.24	.28	.42	.28	.31	.31	1.9
378	1.5	Wolf Creek	Jones County, lat 33°01', long 83°31', at State Highway 22, at Gray	0	0	.052	.19	.090	.047	.50
379	37	Commissioner Creek	Jones County, lat 32°56', long 83°25', at State Highway 49, 6½ miles southeast of Gray	.41	.44	.67	2.9	1.2	.58	9.1
379A	97	Commissioner Creek	Wilkinson County, lat 32°53', long 83°14', at county road, 6 miles northwest of Irwinton	7.0	7.6	9.3	7.6	8.6	8.0	22
379B	10	Slash Creek	Jones County, lat 32°54', long 83°21', at county road, 9 miles southeast of Gray	.63	.69	1.1	3.0	2.8	1.6	6.2
379C	156	Commissioner Creek	Wilkinson County, lat 32°51', long 83°11', at State Highway 29, 3 miles northwest of Irwinton	21	22	27	22	23	23	51
379D	191	Commissioner Creek	Wilkinson County, lat 32°50', long 83°05', at county road, 5½ miles east of Irwinton	60	63	69	63	64	64	100
380	6 6	Sandy Creek	Jones County, lat 32°52', long 83°30', at county road, 9½ miles south of Gray	.099	.11	.15	.11	.12	.12	.59

a Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
ALTAMAHAA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly	June	July	August	
381	74	Big Sandy Creek	Oconee River	Wilkinson County, lat $32^{\circ}46'$, long $83^{\circ}20'$, at county road, 10 miles west of Irwinwood.	.24	.24	.33	0	0	0	40
382	1.9	Clear Creek	Big Sandy Creek	Wilkinson County, lat $32^{\circ}40'$, long $83^{\circ}22'$, at county road, 11 miles west of Irwinwood.	0	0	0	0	0	0	0
383A	177	Big Sandy Creek	Oconee River	Highway 20, $3\frac{1}{4}$ miles south of Irwinwood, at Highway 20, lat $32^{\circ}46'$, long $83^{\circ}10'$, at State Highway 67, 9 miles east of Wrightsville.	.9	.9	1.1	1.3	1.1	1.1	35
383B	19	Buckeye Creek	Oconee River	Laurens County, lat $32^{\circ}34'$, long $82^{\circ}55'$, at county road, 3½ miles northeast of Dublin.	2.6	2.7	2.8	3.9	3.3	3.0	7.8
382C	74	Big Creek	Oconee River	Laurens County, lat $32^{\circ}34'$, long $82^{\circ}52'$, at county road, 3½ miles northeast of Dublin.	4.8	5.2	6.4	5.2	5.5	5.5	16
383	4,400	Oconee River	Altamaha River	USGS Complete-Record Gaging Station 1833-1015, 1954 ^a ; Oconee River at Dublin, Ga., Laurens County, lat $32^{\circ}32'$, long $82^{\circ}56'$, at State Highway 26, at Dublin.	351 ^a	392 ^a	409 ^a				
384	4.6	Long Branch	Oconee River	Laurens County, lat $32^{\circ}31'$, long $82^{\circ}55'$, at State Highway 31, south of Dublin.	0	0	0	0	0	0	C
385	43	Pughes Creek	Oconee River	Laurens County, lat $32^{\circ}30'$, long $82^{\circ}46'$, at State Highway 28, 8½ miles southeast of Dublin.	0	0	0	0	0	0	0
386	104	Turkey Creek	Oconee River	Laurens County, lat $32^{\circ}32'$, long $82^{\circ}33'$, at State Highway 19, 8½ miles west of Dublin.	0	0	0	0	0	0	0
387	62.9	Rocky Creek	Turkey Creek	USGS Complete-Record Gaging Station 1851-1; Rocky Creek near Dudley, Ga.	.37	.65	1.4	1.8	1.7	.76	12
387A	316	Turkey Creek	Oconee River	Laurens County, lat $32^{\circ}29'$, long $82^{\circ}09'$, at county road, 5 miles southwest of Dudley.	.47	.35	.38	1.2	.63	.47	10
388	20	Mercer Creek	Oconee River	Laurens-Treutlen Counties, lat $32^{\circ}27'$, long $82^{\circ}07'$, at State Highway 28, $7\frac{1}{4}$ miles northwest of Soperton.	0	0	0	0	0	0	0
389	5,110	Oconee River	Altamaha River	USGS Complete-Record Gaging Station 1837-65; Oconee River near Mount Vernon, Ga., Wheeler-Montgomery Counties, lat $32^{\circ}12'$, long $82^{\circ}38'$, at State Highway 30, 2 miles west of Mount Vernon.	470 ^a	508 ^a	605 ^a				
390	76	Ochlocknee Creek	Oconee River	Wheeler County, lat $32^{\circ}11'$, long $82^{\circ}39'$, at State Highway 30, 1½ miles east of Glenwood.	0	0	0	0	0	0	0

69	Cob Creek	Altamaha River	Toombs County, lat 32°02', long 82°23', at State Highway 55, 12½ miles south of Lyons	0	0	0	0	0	0
51	Ohopee River	Altamaha River	Johnson County, lat 32°43', long 82°16', at State Highway 57, 2½ miles west of Wrightsville	0	0	0	0	0	0
12	Little Cedar Creek	Cedar Creek	Johnson County, lat 32°44', long 82°27', at State Highway 78, 1½ miles east of Wrightsville	0	0	0	0	0	0
4.3	Cypress Creek	Ohopee River	Johnson County, lat 32°44', long 82°40', at State Highway 78, 3 miles east of Wrightsville	0	0	0	0	0	0
63	Little Ohopee River	Ohopee River	Johnson County, lat 32°47', long 82°37', at State Highway 78, 10 miles northeast of Wrightsville	0	0	0	0	0	0
5.8	Hurricane Branch	Little Ohopee River	Johnson County, lat 32°47', long 82°35', at State Highway 78, 9 miles northeast of Wrightsville	0	0	0	0	0	0
7.2	Smith Creek	Little Ohopee River	Johnson County, lat 32°48', long 82°32', at State Highway 78, 11½ miles northeast of Wrightsville	0	0	0	0	0	0
1.1	Big Battleground Creek	Battleground Creek	Johnson County, lat 32°48', long 82°36', at State Highway 78, 8½ miles northeast of Wrightsville	0	0	0	0	0	0
620	Ohopee River	Altamaha River	Emainual County, lat 32°22', long 82°19', at State Highway 4, 2½ miles north of Oak Park	5.3	5.8	6.0	13	8.7	7.1
185	Pendleton Creek	Ohopee River	Toombs County, lat 32°17', long 82°18', at State Highway 4, 4½ miles north of Lyons	0	0	0	0	0	0
36	Swift Creek	Pendleton Creek	Toombs County, lat 32°14', long 82°22', at State Highway 130, 3½ miles northeast of Vidalia	0	0	0	0	0	0
46	Swift Creek	Pendleton Creek	Toombs County, lat 32°14', long 82°20', at State Highway 4, 1½ miles north of Lyons	0	0	0	0	0	0
2.4	Unnamed tributary	Swift Creek	Toombs County, lat 32°13', long 82°20', at State Highway 4, at Lyons	0	0	0	0	0	0
1,110	Ohopee River	Altamaha River	USGS Complete-Record Gaging Station 1903-07; 1837; Ohopee River near Reidsville, Ga.	19	20	21	41	29	24
9 1	Rocky Creek	Ohopee River	Tift County, lat 32°04', long 82°11', at State Highway 56, 3½ miles west of Reidsville	0	0	0	0	0	0
13,600	Altamaha River	Atlantic Ocean	Toombs County, lat 32°12', long 82°25', at railroad crossing south of Vidalia	0	0	0	0	2,350	2,110
			USGS Complete-Record Gaging Station 1931-; Altamaha River at Doctortown, Ga.	1,430	1,460	1,748	2,990	4,635	4,635
			Way-Long County line, lat 32°29', long 81°50', at Atlantic Coast Line Railroad at Doctortown						

SATILLA RIVER BASIN

Flow regulated by reservoir above station:

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SATILLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
410	3.6	Bear Creek	Satilla River	Coffee County, lat. 31°24', long. 82°50', at State Highway 32, 9 1/4 miles west of Douglas	0	0	0	0	0	0	0
411	235	Satilla River	Atlantic Ocean	Coffee County, lat. 31°25', long. 82°51', at State Highway 31, 6 1/2 miles south of Douglas	0	0	0	0	0	0	0
412	2.9	Unnamed Tributary	Satilla River	Coffee County, lat. 31°26', long. 82°51', at State Highway 31, 5 1/4 miles south of Douglas	0	0	0	0	0	0	0
413	4.4	Unnamed Tributary	Satilla River	Atkinson County, lat. 31°23', long. 82°51', at State Highway 31, 6 1/2 miles north of Pearson	0	0	0	0	0	0	0
414	2.5	Mose Smith Pond Creek	Pudding Creek	Atkinson County, lat. 31°24', long. 82°50', at State Highway 50, 3 1/4 miles east of Wilcoxaches	0	0	0	0	0	0	0
415	74	Pudding Creek	Satilla River	Atkinson County, lat. 31°22', long. 82°50', at State Highway 31, 4 1/4 miles north of Pearson	0	0	0	0	0	0	0
416	5.3	Sweetwater Creek	Satilla River	Atkinson County, lat. 31°20', long. 82°51', at State Highway 31, 2 1/4 miles north of Pearson	0	0	0	0	0	0	0
417	355	Satilla River	Atlantic Ocean	Atkinson County, lat. 31°20', long. 82°51', at State Highway 64, 5 1/4 miles northeast of Pearson	[2]	.22	.28	.76	.47	.37	3.8
418	5.3	Ricketson Bay Creek	Little Red Bluff Creek	Highway 50, 3 1/4 miles east of Pearson	0	0	0	0	0	0	0
419	2.4	Unnamed Tributary	Red Bluff Creek	Highway 50, 6 1/4 miles east of Pearson	0	0	0	0	0	0	0
420	78	Red Bluff Creek	Satilla River	Atkinson County, lat. 31°19', long. 82°53', at State Highway 50, 8 1/4 miles east of Pearson	0	0	0	0	0	0	0
421	70	Seventeen Mile Creek	Satilla River	Atkinson County, lat. 31°24', long. 82°51', at State Highway 31, 4 miles north of Douglas	0	0	0	0	0	0	0
422	145	Seventeen Mile Creek	Satilla River	Coffee County, lat. 31°23', long. 82°49', at State Highway 135, 1 1/2 miles east of Douglas	0	0	0	0	0	0	0
423	6.1	Unnamed Tributary	Seventeen Mile Creek	Coffee County, lat. 31°23', long. 82°48', at State Highway 135, 3 1/2 miles northeast of Douglas	0	0	0	0	0	0	0
424	2.0	Unnamed Tributary	Seventeen Mile Creek	Coffee County, lat. 31°24', long. 82°48', at State Highway 135, 4 miles northeast of Douglas	0	0	0	0	0	0	0
425	165	Seventeen Mile Creek	Satilla River	Coffee County, lat. 31°23', long. 82°48', at State Highway 32, 6 miles east of Douglas	0	0	0	0	0	0	0
426	12	Otter Creek	Seventeen Mile Creek	Coffee County, lat. 31°23', long. 82°48', at State Highway 135, 8 1/2 miles northeast of Douglas	0	0	0	0	0	0	0
427	3.3	Unnamed Tributary	Otter Creek	Coffee County, lat. 31°23', long. 82°48', at State Highway 135, 8 miles northeast of Douglas	0	0	0	0	0	0	0

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SATILLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
450	438	Alabama River	Satilla River	Pierce County, lat. $31^{\circ}19'$, long $82^{\circ}14'$, at State Highway 38, 1 mile northeast of Blackshear	.74	.83	.96	2.4	1.4	1.3	9.4
451	1.2	Big Satilla Creek	Little Satilla River	Jeff Davis County, lat. $31^{\circ}50'$, long $82^{\circ}37'$, at State Highway 135, $2\frac{1}{2}$ miles southwest of Hazlehurst	0	0	0	0	0	0	0
452	1.9	Unnamed Tributary	Big Satilla Creek	Jeff Davis County, lat. $31^{\circ}51'$, long $82^{\circ}37'$, at State Highway 135, 2 miles southwest of Hazlehurst	0	0	0	0	0	0	0
453	17	Big Satilla Creek	Little Satilla Creek	Jeff Davis County, lat. $31^{\circ}47'$, long $82^{\circ}34'$, at State Highway 15, $3\frac{1}{4}$ miles south of Hazlehurst	0	0	0	0	0	0	0
454	2.7	Unnamed Tributary	Big Satilla Creek	Jeff Davis County, lat. $31^{\circ}46'$, long $82^{\circ}34'$, at county road at Spell's Still, $7\frac{1}{4}$ miles south of Hazlehurst	0	0	0	0	0	0	0
455	1.4	Unnamed Tributary	Big Satilla Creek	Bacon County, lat. $31^{\circ}41'$, long $82^{\circ}30'$, at State Highway 15, 10 miles north of Alma	0	0	0	0	0	0	0
456	112	Big Satilla Creek	Little Satilla River	Appling-Bacon Counties, lat. $31^{\circ}39'$, long $82^{\circ}26'$, at State Highway 4, $\frac{3}{4}$ miles north of Alma	0	0	0	0	0	0	0
457	49	Little Satilla Creek	Little Satilla River	Wayne County, lat. $31^{\circ}40'$, long $82^{\circ}05'$, at State Highway 27, at Odum, and 10 miles northwest of Jesup	0	0	0	0	0	0	0
458	646	Little Satilla River	Satilla River	USGS Complete-Record Gaging Station 1951; Little Satilla River near Oglethorpe, Ga., Wayne-Ferrell Counties, lat. $31^{\circ}27'$, long $82^{\circ}03'$, at State Highway 38, $3\frac{1}{4}$ miles southwest of Screven, 4 miles northeast of Oglethorpe	0	0	0	0	0	0	0
459	2,796	Satilla River	Atlantic Ocean	USGS Complete-Record Gaging Station 1931; Satilla River at Atkinson, Ga., Brantley County, lat. $31^{\circ}13'$, long $81^{\circ}52'$, at State Highway 50, 7 miles east of Nahunka, 1 mile west of Atkinson	21	21	25	59	49	34	181

ST. MARYS RIVER BASIN

460	160	North Prong St. Marys River	St. Marys River	USGS Complete-Record Gaging Station 1921-1923; 1927-1930; 1932-1934; 1950-; North Prong St. Marys River at Monroe, Ga.	0	0	0	0	0	0	.39
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SUWANNEE RIVER BASIN

75	48	Alligator Creek	Ware County, lat 31°08', long 83°30', at State Highway 38, 10½ miles southwest of Waycross	0	0	0	0	0
76	24	Swannee Creek	Ware County, lat 31°05', long 83°37', at State Highway 38, 3 miles southwest of Manor	0	0	0	0	0
77	29	Cane Creek	Church County, lat 31°03', long 83°42', at State Highway 38, 3½ miles west of Argo	0	0	0	0	0
78	35	Saviors Creek	Church County, lat 31°03', long 83°44', at State Highway 38, 1½ miles east of Homerville	0	0	0	0	0
79	38	Tatum Creek	Church County, lat 30°55', long 82°49', at State Highway 80, 11 miles southeast of Homerville	0	0	0	0	0
80	10	Unnamed Tributary	Church County, lat 30°51', long 82°40', at State Highway 83, 12½ miles northwest of Fargo	0	0	0	0	0
81	11	Unnamed Tributary	Church County, lat 30°56', long 82°39', at State Highway 80, 11¾ miles northwest of Fargo	0	0	0	0	0

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SUWANNEE RIVER BASIN

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 63

498	663	Alapaha River	USGS Complete-Record Gaging Station 1937; Alapaha River near Alapaha Ga.	0	0	0	48	0	01	29
499	1 2	Unnamed Tributary	Berrien County, lat 31°23', long 83°10', at State Highway 60, 2 miles east of Alapaha River, Berrien County, lat 31°32', long 83°10', at State Highway 60, 3 miles east of Alapaha River, Ben Hill County, lat 31°41', long 83°16', at county road 2½ miles south of Fitzgerald, Irwin County, lat 31°26', long 83°10', at State Highway 32, 4½ miles east of Oella, Irwin County, lat 31°26', long 83°10', at State Highway 90, 8 miles southeast of Oella, Irwin County, lat 31°24', long 83°19', at State Highway 26, 4½ miles southwest of Oella, Irwin County, lat 31°26', long 83°16', at State Highway 22, 1 mile west of Oella, Irwin County, lat 31°25', long 83°15', at State Highway 11, 1 mile south of Oella, Irwin County, lat 31°25', long 83°12', at State Highway 32, 3 miles east of Oella, Atkinson-Berrien Counties, lat 31°22', long 83°06', at State Highway 50, 3½ miles west of Wilcoxee, Coosawee, Atkinson County, lat 31°21', long 83°04', at State Highway 50, 1½ miles west of Wilcoxee, Atkinson-Berrien Counties, lat 31°20', long 83°04', at State Highway 135, 1½ miles southwest of Wilcoxee, Lanier County, lat 31°03', long 83°03', at State Highway 37, 2 miles east of Lakeland, Berrien County, lat 31°14', long 83°08', at State Highway 76, 7½ miles east of Nashville, Lanier County, lat 31°02', long 83°04', at State Highway 11 and 31, at Lakeland, Lowndes-Lawler Counties, lat 30°55', long 83°02', at State Highway 38, 2½ miles southwest of Stockton	0	0	0	0	0	0	0
500	2 9	Unnamed Tributary	USGS Complete-Record Gaging Station 1937; Alapaha River near Alapaha Ga.	0	0	0	0	0	0	0
501	79	Wilacoochee River	Turkey Branch	0	0	0	0	0	0	0
502	90	Wilacoochee River	Alapaha River	0	0	0	0	0	0	0
503	29	Reedy Creek	Alapaha River	0	0	0	0	0	0	0
504	9 3	Stump Creek	Turkey Branch	0	0	0	0	0	0	0
505	11	Stump Creek	Alapaha River	0	0	0	0	0	0	0
506	5 7	Little Brushy Creek	Alapaha River	0	0	0	0	0	0	0
507	25C	Wilacoochee River	Wilacoochee River	0	0	0	0	0	0	0
508	3 5	Unnamed Tributary	Alapaha River	0	0	0	0	0	0	0
509	940	Alapaha River	Suwannee River	0	0	0	0	0	0	0
510	1,086	Alapaha River	Suwannee River	8.3	8.7	10	19	14	12	56
512	15	Five Mile Creek	Big Creek	0	0	0	0	0	0	0
513	138	Alapaha River	Alapaha River	14	15	19	46	30	23	2 1
514	1,270	Alapaha River	Suwannee River	10	11	13	24	18	15	71
515	1,400	Alapaha River	Suwannee River	17	18	21	37	28	24	100
516	95	Grand Bay Creek	Little River	.66	.70	.84	1 6	1 1	.95	4.8
517	199	Little River	Alapaha River	4.0	4.2	5.0	8 2	6 4	5.6	20
518	1 9	Unnamed Tributary	Wilacoochee River	0	0	0	0	0	0	0

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SUWANNEE RIVER BASIN

Map No.	Drainage Area (sq. mi.) ¹	Stream Name	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum Flow 12-Month (cfs) 1954-55
					1-Day	7-Day	Monthly	June	July	August	
519	11	Withlacoochee River	Suwannee River	Berrien County, lat. 31°25', long. 83°21', at State Highway 50, 2 miles west of Einigma	0	0	0	0	0	0	0
520	3 5	Camp Creek	Withlacoochee River	Berrien County, lat. 31°25', long. 83°20', at State Highway 50, at Einigma	0	0	0	0	0	0	0
521	1 5	Unnamed Tributary	Withlacoochee River	Tift County, lat. 31°25', long. 83°24', at State Highway 50 6½ miles southeast of Tifton	0	0	0	0	0	0	0
522	3 0	Unnamed Tributary	Dry Creek	Berrien County, lat. 31°25', long. 83°20', at State Highway 50, at Einigma	0	0	0	0	0	0	0
523	3 3	Gum Creek	Dry Creek	Berrien County, lat. 31°24', long. 83°18', at State Highway 50, 1½ miles east of Einigma	0	0	0	0	0	0	0
524	125	Withlacoochee River	Suwannee River	Berrien County, lat. 31°13', long. 83°16', at State Highway 125, 1¾ miles west of Nashville	0	0	0	0	0	0	0
525	132	Withlacoochee River	Suwannee River	Berrien County, lat. 31°12', long. 83°16', at State Highway 76, 1½ miles southwest of Nashville	0	0	0	0	0	0	0
526	11	Unnamed River	New River	Tift County, lat. 31°26', long. 83°26', at State Highway 56, 5 miles northeast of Tifton	0	0	0	0	0	0	0
527	1 1	Unnamed Tributary	New River	Tift County, lat. 31°26', long. 83°25', at State Highway 66, 6 miles southeast of Tifton	0	0	0	0	0	0	0
528	4 5	New River	Withlacoochee River	Tift County, lat. 31°27', long. 83°20', at State Highway 35, 1½ miles east of Tifton	0	0	0	0	0	0	0
529	1 4	Unnamed Tributary	New River	Tift County, lat. 31°23', long. 83°30', at State Highway 7, 5½ miles south of Tifton	0	0	0	0	0	0	0
530	146	New River	Withlacoochee River	Berrien-Cook Counties, lat. 31°17', long. 83°19', at State Highway 76, 43¾ miles southwest of Nashville	0	0	0	0	0	0	0
531	12	Bear Branch	Days Creek	Cook County, lat. 31°09', long. 83°26', at State Highway 7, 1 mile north of Adel	0	0	0	0	0	0	0
532	31	Cat Creek	Withlacoochee River	Berrien County, lat. 31°04', long. 83°12', at State Highway 37, at Ray City	0	0	0	0	0	0	0
533	537	Withlacoochee River	Suwannee River	Lowndes County, lat. 30°53', long. 83°19', at State Highway 7, 5 miles northwest of Valdosta	0	0	0	0	0	0	0
534	20	Little River	Withlacoochee River	Turner County, lat. 31°40', long. 83°12', at State Highway 112, 3½ miles southwest of Ashburn	0	0	0	0	0	0	0
535	1 6	Unnamed Tributary	Ashburn Branch	Turner County, lat. 31°43', long. 83°40', at county road at west city limits of Ashburn	0	0	0	0	0	0	0
536	6 1	Daniels Creek	Little River	Turner County, lat. 31°38', long. 83°43', at State Highway 112, 6 miles southwest of Ashburn	0	0	0	0	0	0	0

537	145	Little River	Withlacoochee River	Tift County, lat 31°26', long 83°34', at State Highway 5C, 3 miles west of Tifton	0	0	0	0
538	161	Little River	Withlacoochee River	Tift County, lat 31°24', long 83°32', at State Highway 35, 4½ miles south of Tifton	0	0	0	0
539	8.7	Arnold Creek	Little River	Tift County, lat 31°25', long 83°33', at State Highway 35, 5½ miles south of Tifton	0	0	0	0
540	4.8	Gum Creek	Little River	Tift County, lat 31°21', long 83°36', at State Highway 35, 1 mile northeast of Omega	0	0	0	0
541	47	Ty Ty Creek	Warrior Creek	Tift County, lat 31°28', long 83°40', at State Highway 50, 1 mile west of Ty Ty	0	0	0	0
542	97	Ty Ty Creek	Warrior Creek	Colquitt County, lat 31°20', long 83°37', at State Highway 35, ½ miles northeast of Crossland	0	0	0	0
543	20	Warrior Creek	Little River	Worth County, lat 31°31', long 83°47', at State Highway 50, 1½ miles east of Sylvester	0	0	0	0
544	134	Warrior Creek	Little River	Colquitt County, lat 31°18', long 83°46', at State Highway 35, 3 miles northeast of Norman Park	0	0	0	0
545	2.8	Unnamed Tributary	Warrior Creek	Colquitt County, lat 31°17', long 83°41', at State Highway 35, 1½ miles northeast of Norman Park	0	0	0	0
546	547	Little River	Withlacoochee River	USGS Complete-Record Gaging Station 194C; Little River near Adel, Ga.	.29	.31	.68	43
547	12	Bull Creek	Little River	Cook-Colquitt Counties, lat 31°09', long 83°33', at a State Highway 37, 7½ miles west of Adel	0	0	0	0
548	10	Indian Creek	Little River	Colquitt County, lat 31°09', long 83°37', at State Highway 35, 2½ miles southwest of Tifton	0	0	0	0
549	5.5	Unnamed Tributary	Indian Creek	Colquitt County, lat 31°15', long 83°44', at State Highway 35, 3 miles southwest of Norman Park	0	0	0	0
550	21	Indian Creek	Little River	Colquitt County, lat 31°14', long 83°44', at State Highway 35, 4 miles east of Moultrie	0	0	0	0
551	4.1	Little Indian Creek	Indian Creek	Colquitt County, lat 31°13', long 83°45', at State Highway 35, 4 miles northeast of Moultrie	0	0	0	0
552	8.8	Little Indian Creek	Indian Creek	Colquitt County, lat 31°11', long 83°44', at State Highway 37, ¾ miles east of Moultrie	0	0	0	0
553	5.4	Bear Creek	Indian Creek	Colquitt County, lat 31°15', long 83°45', at State Highway 35, 2½ miles southwest of Norman Park	0	0	0	0
554	17	Bear Creek	Indian Creek	Colquitt County, lat 31°11', long 83°41', at State Highway 37, 4 miles east of Moultrie	0	0	0	0
555	12	Reedy Creek	Bear Creek	Colquitt County, lat 31°10', long 83°40', at State Highway 37, 7¾ miles east of Moultrie	0	0	0	0
556	11	Morrison Creek	Wells Mill Creek	Colquitt County, lat 31°07', long 83°26', at county road, 2 miles south of Adel	0	0	0	0
557	7.4	Wells Mill Creek	Little River	Cook County, lat 31°07', long 83°28', at county road, 6½ miles southwest of Adel	0	0	0	0
558	7.2	Slaughter Creek	Little River	Brooks County, lat 30°59', long 83°30', at State Highway 76, 3 miles north of Moreton	0	0	0	0
559	2.0	Unnamed Tributary	Slaughter Creek	Brooks County, lat 30°58', long 83°30', at State Highway 76, 1 mile north of Moreton	0	0	0	0

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
SUWANNEE RIVER BASIN

Map No.	Drainage Area, (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs) 1953-55
					1-Day	7-Day	Monthly	June	July	August	
560	5 6	Downing Creek	Slaughter Creek	Brooks County, lat 30°54', long 83°30', at State Highway 76, 3½ miles south of Moren	0	0	0	0	0	0	0
561	1 7	Jones Creek	Downing Creek	Brooks County, lat 30°55', long 83°30', at State Highway 76, ½ miles south of Moren	0	0	0	0	0	0	0
562	875	Little River	Withlacoochee River	Brooks-Townes Counties, lat 30°51', long 83°21', at county road, 13 miles northeast of Quitman	0	0	0	12	86	53	18
563	1,480	Withlacoochee River	Suwannee River	Brooks-Townes Counties, lat 30°51', long 83°21', at former State Highway 38, 6½ miles east of Quitman	4.7	5.2	11	31	24	13	190
564	27	Okapilco Creek	Withlacoochee River	Colquitt County, lat 31°12', long 83°47', at State Highway 35, 1½ miles north of Moultrie	0	0	0	0	0	0	0
565	1 0	Coon Creek	Okapilco Creek	Brooks County, lat 30°59', long 83°31', at State Highway 76, 6½ miles northeast of Quitman	0	0	0	0	0	0	0
566	1 2	Unnamed Tributary	Coon Creek	Brooks County, lat 30°50', long 83°31', at State Highway 76, 4 miles northeast of Quitman	0	0	0	0	0	0	0
567	278	Okapilco Creek	Withlacoochee River	Brooks County, lat 30°47', long 83°32', at State Highway 38, ¾ miles east of Quitman	1.6	2.2	4.2	11	8.3	4.9	49
568	87	Piscola Creek	Okapilco Creek	Brooks County, 1-t 30°47', long 83°41', at State Highway 38, 1 mile southwest of Dixie	0	0	0	0	0	0	0
569	5 5	Gay Mill Creek	Piscola Creek	Brooks County, lat 30°47', long 83°38', at State Highway 38, east of Dixie	0	0	0	0	0	0	0
570	14	Unnamed Tributary	Piscola Creek	Brooks County, lat 30°44', long 83°36', at State Highway 38, 2½ miles west of Quitman	0	0	0	0	0	0	0
571	144	Piscola Creek	Okapilco Creek	Brooks County, lat 30°45', long 83°32', at State Highway 38, 3½ miles southeast of Quitman	0	0	0	0	0	0	0

AUCILLA RIVER BASIN

573	1 5	Olive Creek	Aucilla River	Thomas County, lat 33°50', long 83°57', at State Highway 38 east of Thomasville	0	0	0	0	0	0	.085
574	47	Aucilla River	Gulf of Mexico	Thomas County, lat 33°49', long 83°52', at State Highway 38, 7½ miles east of Thomasville	0	0	0	0	0	0	0

OCHLOCKONEE RIVER BASIN

575	11	Mass Branch	Olive Creek	Thomas County, lat 30°48', long 83°25', at State Highway 38.9 miles east of Thomasville	0	0	0	0	0	0	0
576	81	Aucilla River	Gulf of Mexico	Thomas County, lat 30°47', long 83°48', at State Highway 133, southwest of Boston	0	0	0	0	0	0	0
577	1.4	Unnamed Tributary	Aucilla River	Thomas County, lat 30°47', long 83°46', at State Highway 38, 2 miles east of Boston	0	0	0	0	0	0	0
578	96	Ochlockonee River	Gulf of Mexico	Columbia County, lat 31°11', long 83°48', at State Highway 37 west of Moultrie	0	0	0	0	0	0	0
579	5.5	Little Creek	Ochlockonee River	Columbia County, lat 31°12', long 83°53', at State Highway 37, 6 miles west of Moultrie	0	0	0	0	0	0	0
580	2.6	Unnamed Tributary	Little Creek	Columbia County, lat 31°12', long 83°54', at State Highway 37, 6½ miles west of Moultrie	0	0	0	0	0	0	0
581	38	Bridge Creek	Ochlockonee River	Columbia County, lat 31°12', long 83°55', at State Highway 37, 8½ miles west of Moultrie	0	0	0	0	0	0	0
582	5.4	Unnamed Tributary	Bridge Creek	Columbia County, lat 31°12', long 83°56', at State Highway 37, 4 miles west of Faison	0	0	0	0	0	0	0
583	3.6	Unnamed Tributary	Big Creek	Thomas County, lat 31°07', long 83°52', at State Highway 35 at Coolidge	0	0	0	0	0	0	0
584	1.2	Unnamed Tributary	Big Creek	Thomas County, lat 30°59', long 83°53', at State Highway 35, 2½ miles southwest of Coolidge	0	0	0	0	0	0	0
585	49	Big Creek	Ochlockonee River	Thomas County, lat 30°58', long 83°54', at State Highway 35, 2½ miles southwest of Coolidge	0	0	0	0	0	0	0
586	3.5	Coon Creek	Ochlockonee River	Thomas County, lat 30°56', long 83°55', at State Highway 35, 2 miles southwest of Merrillville	0	0	0	0	0	0	0
587	3.0	Unnamed Tributary	Coon Creek	Thomas County, lat 30°55', long 83°55', at State Highway 35, 3 miles northwest of Merrillville	0	0	0	0	0	0	0
588	17	Little Ochlockonee River	Ochlockonee River	Columbia County, lat 31°12', long 83°00', at State Highway 37, 12½ miles west of Moultrie	0	0	0	0	0	0	0
589	3.0	Unnamed Tributary	Little Ochlockonee River	Columbia County, lat 31°12', long 83°03', at State Highway 37, 12½ miles west of Moultrie	0	0	0	0	0	0	0
590	3.4	Lost Creek	Little Ochlockonee River	Mitchell County, lat 31°14', long 83°03', at State Highway 37, 2½ miles southwest of Sale City	0	0	0	0	0	0	0
591	21	Lost Creek	Little Ochlockonee River	Mitchell County, lat 31°10', long 84°03', at State Highway 37, 1½ miles east of Colquitt	0	0	0	0	0	0	0
592	3.1	Big Creek	Little Creek	Mitchell County, lat 31°08', long 83°07', at State Highway 37, 2 miles east of Pelham	0	0	0	0	0	0	0
593	1.3	Goodwater Creek	Oquinia Creek	Thomas County, lat 30°53', long 83°56', at State Highway 35, 4½ miles northeast of Thomasville	0	0	0	0	0	0	0
594	550	Ochlockonee River	Gulf of Mexico	USGS Complete Record, Gaging Station 1837; Ochlockonee River near Thomasville, Ga.	3.5	3.9	4.7	11	7.4	5.1	69
				Thomas County, lat 30°52', long 83°53', at State Highway 38, 6 miles northwest of Thomasville							

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
OCHLOCKONEE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly		
595	104	Barnetts Creek	Ochlockonee River	Thomas-Grady Counties, lat 30°54'N, long 84°05'W, at county road, 7½ miles northwest of Thomasville; Grady County, lat 30°54'N, long 84°05'W, at State Highway 38, 3½ miles northwest of Cairo	1.1	1.4	1.6	3.3	1.7
596	31	Tired Creek	Ochlockonee River	Grady County, lat 30°54'N, long 84°05'W, at State Highway 38, 2½ miles northeast of Whigham	.38	.46	1.3	.48	.98
597	19	Wolf Creek	Tired Creek	USGS Complete-Record Gaging Station 1943-Tired Creek near Cairo, Ga.	1.1	1.3	2.7	1.3	2.1
598	60	Tired Creek	Ochlockonee River	Tired Creek, near Cairo, Ga.; Grady County, lat 30°52'N, long 84°16'W, at county road, 3 miles west of Cairo	1.1	1.3	2.9	1.4	2.6
599	20	Little Tired Creek	Tired Creek	Grady County, lat 30°53'N, long 84°11'W, at State Highway 28 at Cairo	0	0	0	0	0
600	15	Turkey Creek	Tired Creek	Grady County, lat 30°49'N, long 84°16'W, at State Highway 111, 4½ miles southwest of Cairo	0	0	0	0	0
601	19	Maxwell Creek	Tired Creek	Grady County, lat 30°49'N, long 84°15'W, at State Highway 111, 5 miles southwest of Cairo	.70	.82	1.4	.68	.57
602	3 4	Atapulgus Creek	Little River	DeKalb County, lat 30°53'N, long 84°23'W, at State Highway 38, 3½ miles east of Chima	.41	.44	.65	.40	.35
603	1.1	Unnamed Tributary	Atapulgus Creek	Douglas County, lat 30°53'N, long 84°24'W, at State Highway 38, 2½ miles east of Chima	.14	.16	.23	.15	.22
				Highway 38, 2½ miles east of Sautie				.13	.58

APALACHICOLA RIVER BASIN

607	8 78	Smith Creek	Chattochoochee River	White County, lat 34°42'N, long 83°44'W, at county road, 1½ miles north of Helen	7.8	8.1	8.4	18	13	11	20
608	45 0	Chattahoochee River	Apalachicola River	White County, lat 34°42'N, long 83°44'W, at State Highway 75 at Helen	22	23	24	69	46	33	80
609	13 0	Dukes Creek	Chattochoochee River	White County, lat 34°41'N, long 83°46'W, at county road, 2½ miles west of Helen	7.2	7.4	7.7	21	16	11	24
610	21.5	Dukes Creek	Chattochoochee River	White County, lat 34°40'N, long 83°43'W, at State Highway 75, south of Nacoochee	11	11	12	33	23	16	38
611	73 .8	Chattahoochee River	Apalachicola River	White County, lat 34°41'N, long 83°41'W, at county road (abandoned), ½ mile south of Sautie	33	35	35	110	72	51	130

444A	50	Suwannee Creek	Gwinnett County, lat 34°19', long 84°09', at county road, 2½ miles southwest of Suwannee	1.3	1.5	2.8	14	8.6	3.6	34
445A	3.6	Crooked Creek	Gwinnett County, lat 34°17', long 84°16', at county road, 1½ miles west of Norcross	0	0	.29	.14	0	1.3	
446	1,230	Chattahoochee River	USGS Complete-Record Gaging Station, 1941-; Chattahoochee River near Roswell, Ga.	328	383	421	1,100	800	614	1,460
447	36	Big Creek	Fulton County, lat 34°01', long 84°20', near Roberts Drive, 2 miles southeast of Roswell	1.9	2.7	4.2	12	6.0	4.4	27
448	67	Big Creek	Forsyth County, lat 34°09', long 84°23', at State Highway 9, 6 miles southwest of Cumming	1.5	1.8	3.2	12	5.2	3.5	37
449	4.8	Four Killer Creek	Fulton County, lat 34°01', long 84°16', at county road, 2½ miles east of Alpharetta	.39	.44	.67	1.7	.95	.71	3.0
550	96	Big Creek	Fulton County, lat 34°01', long 84°20', at State Highway 9, 2 miles southwest of Alpharetta	2.3	2.7	4.8	18	7.7	5.1	54
551	31	Soap Creek	Fulton County, lat 34°09', long 84°26', at Holcomb's Bridge Road, east of Roswell	1.1	1.3	2.2	7.1	3.3	2.3	20
552	6,63	Long Island Creek	Cobb County, lat 33°47', long 84°56', at South Roswell Road, east of Marietta	0	0	0	.22	.055	0	74
553	15	Potter Creek	Fulton County, lat 34°33', long 84°25', at Northside Drive in Atlanta	1.6	1.8	2.7	6.3	3.6	2.8	13
554	1,450	Chattahoochee River	Cobb County, lat 34°35', long 84°29', at Terrell Mill Road, near Marietta	340	390	432	1,180	806	590	1,615
555	10.5	North Fork Peachtree Creek	USGS Complete-Record Gaging Station, 1928-1931; Chattahoochee River, at Atlanta, Ga. Cobb-Fulton Counties, lat 33°52', long 84°27', at Paces Ferry Road, Atlanta	1.4	.16	.32	2.0	1.2	.42	5.9
556	27.8	North Fork Peachtree Creek	DeKalb County, lat 33°56', long 84°19', at Tucker Road, near Chamblee	.11	.14	.35	3.3	1.7	.49	12
557	38.5	North Fork Peachtree Creek	Fulton County, lat 33°49', long 84°22', at Lindbergh Drive, Atlanta	.092	.16	.28	3.3	1.6	.40	14
558	6.13	South Fork Peachtree Creek	DeKalb County, lat 33°40', long 84°15', at Montreal Road at Clarkston, northeast of Decatur	0	0	.48	.22	.053	2.1	
559	9.08	South Fork Peachtree Creek	DeKalb County, lat 33°48', long 84°17', at U. S. Highway 20, near Decatur	0	0	.26	.096	0	1.8	
560	1.84	Montreal Branch	Fulton County, lat 33°50', long 84°16', at Hudson Road near Monroe and north of Decatur	0	0	.32	.18	.061	.97	
561	4.66	Burnt Fork Creek	DeKalb County, lat 33°49', long 84°18', at Northland Hills Road, north of Decatur	.14	.16	.28	1.3	.85	.36	3.2
562	28.4	South Fork Peachtree Creek	DeKalb County, lat 33°48', long 84°20', at Johnson Mill Road, near Atlanta	0	0	0	0	0	0	0
563	80.8	Peachtree Creek	Fulton County, lat 33°49', long 84°25', at Northside Drive, Atlanta	1.7	2.1	3.8	20	9.1	4.9	55
564	9.20	Nancy Creek	DeKalb County, lat 33°55', long 84°18', at North Shallowford Road, near Chamblee	.59	.66	1.1	3.8	2.6	1.3	7.7
565	38.2	Nancy Creek	Fulton County, lat 33°51', long 84°26', at West Paces Ferry Road, near Atlanta	.34	.4C	.86	6.3	3.5	1.2	20
566	134	Peachtree Creek	Fulton County, lat 33°50', long 84°27', at Ridgewood Road, at Atlanta	3.4	3.9	6.8	25	11	7.4	

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			
					1-Day	7-Day	Monthly	June	July	August	
666	15.5	Proctor Creek	Chattahoochee River	Fulton County, lat 33°49'N, long 84°26', at Bolton Road, Atlanta	.74	.82	1.4	5.6	3.7	1.7	12
666A	17	Nickajack Creek	Chattahoochee River	Cobb County, lat 33°51', long 84°32', at county road, 8 miles south of Marietta, Georgia	.74	.85	1.4	5.8	3.9	1.8	13
666B	28	Nickajack Creek	Chattahoochee River	Cobb County, lat 33°49', long 84°30', at county road, 9½ miles south of Marietta, Georgia	.95	1.0	1.8	8.3	5.3	2.3	20
666C	1.9	Unnamed Tributary	Nickajack Creek	Cobb County, lat 33°48', long 84°32', at county road, about ½ mile south of State Highway 8	.24	.26	.39	1.1	.80	.46	1.9
667	9.75	Noth Uroy Creek	Utoy Creek	Fulton County, lat 33°44', long 84°31', at Fairburn Road, north of Ben Hill	.23	.26	.50	2.5	1.6	.64	6.4
668	12.3	South Uroy Creek	Utoy Creek	Fulton County, lat 33°44', long 84°31', at Fairburn Road, north of Ben Hill	.57	.64	1.1	4.3	2.9	1.4	9.5
669	2.6	Unnamed Tributary	Mud Creek	Carroll County, lat 33°46', long 84°34', at State Highway 61, north of Villa Rica	0	0	0	0	0	0	0
670	13	Mill Creek	Sweetwater Creek	Paulding County, lat 33°52', long 84°40', at State Highway 92, south of Hiram	.078	.084	.17	1.5	1.2	4.0	6.0
670A	102	Sweetwater Creek	Chattahoochee River	Cobb County, lat 33°50', long 84°33', at county road, 3 miles southwest of Powder Springs	.13	.15	.35	5.6	4.3	1.0	33
671	13	Gothards Branch	Sweetwater Creek	Paulding County, lat 33°47', long 84°45', at State Highway 12, south of Hiram	0	0	0	.46	.27	.055	3.0
672	17	Powder Springs Creek	Sweetwater Creek	Cobb County, lat 33°42', long 84°43', at State Highway 4, west of Powder Springs	.36	.39	.66	3.7	3.0	1.3	11
672A	29	Powder Springs Creek	Sweetwater Creek	Cobb County, lat 33°49', long 84°40', at county road 1 ½ miles northwest of Austell	.41	.46	.81	5.1	4.3	1.6	17
673	6.3	Noses Creek	Sweetwater Creek	Cobb County, lat 33°27', long 84°37', at State Highway 120, west of Marietta	0	0	.051	.57	.43	.13	2.6
674	5.7	Wards Creek	Noses Creek	Cobb County, lat 33°35', long 84°36', at Wards Road, southwest of Marietta	0	0	0	.23	.16	0	1.5
675	46	Noses Creek	Sweetwater Creek	Cobb County, lat 33°50', long 84°39', at Powder Springs-Mallleton Road, 2 miles north of Austell	0	0	0	0	0	0	0
676	14	Olley Creek	Sweetwater Creek	Cobb County, lat 33°50', long 84°38', at Powder Springs-Mallleton Road, north of Austell	.97	1.0	1.5	5.4	4.6	2.5	12
677	246	Sweetwater Creek	Chattahoochee River	USGS Complete Record Gaging Station 194-1657, Rd; 1937-7; Sweetwater Creek near Austell, Ga.	2.1	2.3	4.4	34	28	9.8	125
				Douglas County, lat 33°26', long 84°37', at county road, 3 miles southeast of Austell							

4.5	Beaver Run Creek	78	Douglas County, lat 33°46', long 84°40', at county road, 3½ miles south of Austell and upstream from Grovers Lake, at 33°46', long 84°40', at county road near Ben Hill	.099	.17	.95	.78	.34	2.8
23	Camp Creek	78A	Fulton County, lat 33°40', long 84°33', at Butler Highway 74, 7 miles west of Ben Hill	1.2	1.3	2.2	8.4	5.8	2.7
43	Camp Creek	78B	Fulton County, lat 33°41', long 84°38', at State Road, north of Ben Hill	1.6	1.9	3.2	14	9.1	4.0
11	Deep Creek	79	Fulton County, lat 33°41', long 84°36', at Jones Road, north of Ben Hill	.26	.31	.48	2.1	1.6	.73
27	Deep Creek	80	Fulton County, lat 33°40', long 84°38', at State Highway 4, 7½ miles northwest of Fairburn	1.4	1.6	2.3	7.8	6.1	3.2
20	Annewakee Creek	80A	Douglas County, lat 33°41', long 84°41', at State Highway 166, 1 mile upstream from mouth of Fulton River	.75	.85	1.4	7.0	6.0	2.6
9.1	Pea Creek	81	Fulton County, lat 33°47', long 84°32', at State Highway 154, 6½ miles northeast of Palmetto	.5C	.58	.84	2.8	2.2	1.2
23	Bear Creek	82	Douglas County, lat 33°45', long 84°35', at State Highway 160, 8½ miles south of Douglasville	3.2	3.4	4.6	12	9.7	6.0
8.4	Big Bear Creek	83	Fulton County, lat 33°47', long 84°46', at county road, 3½ miles north of Palmetto	0	0	0	0	0	0
24	Big Bear Creek	84	Fulton County, lat 33°36', long 84°45', at Woodruff Road, 7 miles northeast of Palmetto	0	0	.077	.94	.58	.16
18	Dog River	85	Douglas County, lat 33°41', long 84°35', at county road, 5 miles south of Winston	0	0	0	0	0	0
43	Dog River	86	Douglas County, lat 33°40', long 84°35', at county road, 5 miles southwest of Winston	.73	.86	1.4	7.0	5.1	2.2
10	Mobley Creek	87	Douglas County, lat 33°41', long 84°50', at county road, 2½ miles south of Winston	.38	.43	.65	2.5	1.9	.96
4.9	Snake Creek	88	Carroll County, lat 33°37', long 84°32', at State Highway 160, east of Carrollton	.27	.31	.45	1.5	1.2	.64
37	Snake Creek	89	USGS Complete-Record Gaing, Station 1954-; Snake Creek near Whitesburg, Ga.	2.4	2.7	3.8c			2.8
12	Alexander Creek	90	Coweta County, lat 33°36', long 84°36', at county road, 3 miles northeast of Whitesburg	.11	.13	.23	1.4	.98	.38
16	Wahoo Creek	92	Coweta County, lat 33°25', long 84°50', at county road, 3 miles southeast of Cartersville	.38	.45	.70	3.1	2.4	1.1
6.8	Acorn Creek	93	Coweta County, lat 33°28', long 84°57', at State Highway 5, 6 miles southwest of Whitesburg	.50	.56	.78	2.4	1.9	1.1
4.5	Whooping Creek	94	Carroll County, lat 33°31', long 85°03', at county road, 4½ miles southeast of Carrollton	0	.054	.092	.54	.39	.15
26	Whooping Creek	95	Carroll County, lat 33°27', long 85°00', at State Highway 5, southwest of Whitesburg	1.2	1.4	2.0	7.2	5.6	2.9
4.2	Dirt Creek	96	Carroll County, lat 33°27', long 85°04', at State Highway 5, 3½ miles east of Roswell	.59	.67	.86	2.1	1.8	1.1
24	Centralhatchee Creek	97	Head County, lat 33°24', long 85°10', at county road, 4 miles northwest of Centralhatchee	2.1	2.4	3.2	9.3	7.5	4.3

Estimated.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly	June	July	August	
698	57	Centralhatchee Creek	Chattahoochee River	Heard County, lat 33°10', long 85°06', at State Highway 1, north of Franklin	4.2	4.7	6.7	20	16	9.1	36
699A	77	Glovers Creek	Chattahoochee River	Heard County, lat 33°17', long 85°07', at State Highway 34, 1 mile west of Franklin	3.8	4.2	7.2	28	19	8.9	61
700	3.6	Messiers Creek	New River	Coweta County, road 32915, long 84°49', at county road 2 miles northeast of Grantville	.86	.93	1.2	2.4	2.0	1.4	3.6
701	23	Caney Creek	New River	Heard County, lat 33°16', long 84°58', at county road 3 miles northwest of Corinth	0	0	0	0	0	0	0
701A	127	New River	Chattahoochee River	Heard County, lat 33°44', long 84°59', at State Highway 100, 7 miles southeast of Franklin	.70	.85	1.9	17	9.0	2.7	58
702	8.3	Yellowjacket Creek	Chattahoochee River	Coweta County, lat 33°14', long 84°48', at county road 3 miles east of Grantville	.30	.34	.56	2.1	1.5	.77	4.8
703	40	Yellowjacket Creek	Chattahoochee River	Trout County, lat 33°11', long 84°56', at State Highway 4, north of Hogansville	.24	.29	.60	4.0	2.6	.95	14
704	19	Flat Creek	Yellowjacket Creek	Meriwether County, lat 33°08', long 84°51', at county road 2 miles west of St. Marks	.55	.63	1.1	4.2	3.1	1.5	10
705	27	Flat Creek	Yellowjacket Creek	Trout County, lat 33°08', long 84°55', at State Highway 14, south of Hogansville	.59	.68	1.2	5.2	3.7	1.7	14
705A	91	Yellowjacket Creek	Chattahoochee River	Trout County, lat 33°09', long 84°59', at county road, 4½ miles southwest of Hogansville	.46	.53	1.1	8.3	5.5	1.9	30
706	11	Beach Creek	Yellowjacket Creek	Meriwether County, lat 33°04', long 84°51', at county road, 4½ miles northwest of Odessdale	1.3	1.4	1.9	4.9	4.0	2.4	8.9
707	12	Bear Creek	Beach Creek	Meriwether County, lat 33°06', long 84°51', at county road, 2¾ miles southwest of St. Marks	.13	.14	.29	1.6	1.1	.44	4.9
708	45	Beach Creek	Yellowjacket Creek	Trout County, lat 33°06', long 84°56', at State Highway 14, northeast of LaGrange	1.9	2.2	3.5	12	9.1	4.7	27
709	52	Beach Creek	Yellowjacket Creek	Trout County, lat 33°06', long 84°55', at county road, 4½ miles northeast of LaGrange	1.6	1.8	3.1	12	8.7	4.3	29
710	9.2	Shoal Creek	Beach Creek	Trout County, lat 33°04', long 84°58', at State Highway 14, northeast of LaGrange	.43	.48	.76	2.6	2.0	1.0	5.7
711	16	Shoal Creek	Beach Creek	Trout County, lat 33°05', long 84°59', at county road, 3½ miles northeast of LaGrange	1.0	1.2	1.8	5.4	4.2	2.4	11
712	182	Yellowjacket Creek	Chattahoochee River	USGS Complete-Record Gaging Station 1051-1; Yellowjacket Creek near LaGrange, Ga., Highway 219, 4½ miles northwest of LaGrange	5.2	5.8	10	40	30	14	99

713	27	Whitewater Creek	Chattohoochee River	Troup County, lat 33°06', long 85°08', at State Highway 109, northwest of LaGrange	.062	.073	.18	1.6	.97	.3C	7.0
714	99	Wehadkee Creek	Chattohoochee River	Troup County, lat 33°01', long 85°12', at county road, 10½ miles west of LaGrange	0	0	.14	2.3	1.2	.28	15
715	3,550	Chattahoochee River	Apalachicola River	USGS Complete Record Gaging Station 1890-101H; 1912- Chattohoochee River at West Point, Ga.	364	432	510	1,620	1,250	800	2,960
716	9.9	Long Cane Creek	Chattohoochee River	Troup County, lat 32°52', long 85°11', just downstream from Ossabaw Creek, at State Highway 1, south of LaGrange	.38	.42	.69	2.5	1.9	.96	5.8
717	23	Long Cane Creek	Chattohoochee River	Troup County, lat 33°01', long 84°58', at county road, 3½ miles east of LaGrange	.58	.64	1.1	4.7	3.4	1.6	12
717A	75	Long Cane Creek	Chattohoochee River	Troup County, lat 32°36', long 85°00', at county road, 3½ miles northeast of East Point	2.2	2.5	4.5	21	14	5.8	52
718	24	Flat Shoals Creek	Chattohoochee River	Meriwether County, lat 32°56', long 84°51', at county road, 3½ miles southwest of Odenville	.098	.12	.26	2.0	1.2	.42	7.4
719	7.28	Sulphur Creek	Flat Shoal Creek	Meriwether County, lat 32°56', long 84°47', at county road, 1½ miles northeast of Durand	0	0	0	0	0	0	0
720	.87	Mill Creek	White Sulphur Creek	Harris-Meriwether Counties, lat 32°52', long 84°47', at county road, 1½ miles east of Chimney Rock	0	0	0	0	0	0	0
721	22.2	White Sulphur Creek	Sulphur Creek	Meriwether County, lat 32°53', long 84°48', at State Highway 18, 1½ miles west of Durand	.44	.47	.84	3.9	2.8	1.2	11
722	43.1	Sulphur Creek	Flat Shoal Creek	Meriwether County, lat 32°57', long 84°50', at county road, 1½ miles south of Stovall	.35	.41	.84	5.0	3.3	1.3	16
723	5.06	Unnamed Tributary	Crawford Creek	Meriwether County, lat 32°44', long 84°49', at State Highway 18, 3½ miles southwest of Durand	.48	.53	.76	2.1	1.6	.98	3.9
724	2.70	Crawford Creek	Sulphur Creek	Meriwether County, lat 32°53', long 84°50', at State Highway 18, northeast of Chimney Rock	.30	.31	.45	1.2	.94	.57	2.1
725	119	Flat Shoal Creek	Chattohoochee River	Troup County, lat 32°57', long 84°55', at State Highway 1, southeast of LaGrange	3.0	3.2	5.6	24	17	7.9	60
726	204	Flat Shoal Creek	Chattohoochee River	Troup County, lat 32°56', long 85°05', at State Highway 18, 5½ miles east of West Point	11	12	19	62	47	26	130
727	2.00	Mountain Creek	Chattohoochee River	Harris County, lat 32°44', long 84°50', at State Highway 1, south of Chimney Rock	.17	.18	.26	.74	.59	.34	1.5
728	9.30	Mountain Creek	Chattohoochee River	Harris County, lat 32°48', long 84°53', at county road, 4½ miles southwest of Chimney Rock	.63	.70	1.0	3.2	2.5	1.4	6.5
729	61.7	Mountain Creek	Chattohoochee River	USGS Complete Record Gaging Station 1943-1; Mountain Creek near Hamilton, Ga.	5.5	5.7	6.6	15	14	9.4	358
730	12.3	Mulberry Creek	Chattohoochee River	Harris County, lat 32°43', long 84°44', at State Highway 103, 1½ miles west of Hamilton	0	0	0	0	0	0	0
731	28.5	Dowdell Creek	Mulberry Creek	Harris County, lat 32°45', long 84°46', at county road, 5 miles northwest of Waverly Hill	5.5	5.8	7.8	17	14	9.4	27
732	8.94	Palmetto Creek	Mulberry Creek	Harris County, lat 32°46', long 84°46', at county road, 1½ miles northeast of Hamilton	1.7	1.9	2.5	5.2	4.4	3.0	8.4
733	19.4	Ossahatchie Creek	Mulberry Creek	Harris County, lat 32°39', long 84°46', at State Highway 85, 2½ miles southwest of Waverly Hill	0	0	0	0	0	0	0

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)				Minimum 12-Month Flow 1944-55 (cfs)
					1-Day	7-Day	Monthly	June	
734	42.6	Ossahatchie Creek	Mulberry Creek	Harris County, lat. $32^{\circ}41'$, long. $84^{\circ}52'$, at State Highway 1, south of Hamilton	0	0	.11	1.4	.77
735	9.70	Standing Boy Creek	Chattahoochee River	Harris County, lat. $32^{\circ}38'$, long. $84^{\circ}54'$, at State Highway 1, 1 mile south of Hamilton	0	0	.21	.11	0
736	2.40	Hellhorn Creek	Standing Boy Creek	Harris County, lat. $32^{\circ}37'$, long. $84^{\circ}55'$, at State Highway 1, 10.5 miles south of Hamilton	0	0	.22	.14	.050
737	4.670	Chattohoochee River	Apalachicola River	USGS Complete-Record Gauging Station 1912; Chattohoochee River at Columbus, Ga. ^a ; Muscogee County, lat. $32^{\circ}28'$, long. $85^{\circ}00'$, at Central of Ga. Railroad Bridge, at Columbus	600 ^a	640 ^a	701 ^a		.78
738	8.05	Bull Creek	Chattahoochee River	Muscogee County, lat. $32^{\circ}34'$, long. $84^{\circ}51'$, at State Highway 86 1½ miles southwest of Millard	0	0	0	0	0
739	.98	Unnamed Tributary	Bull Creek	Marion County, lat. $32^{\circ}32'$, long. $84^{\circ}50'$, at Marion Road, ½ mile west of Upatoi	0	0	0	0	0
740	14.4	Bull Creek	Chattahoochee River	Muscogee County, lat. $32^{\circ}32'$, long. $84^{\circ}51'$, at Macon Road, ½ mile west of Upatoi	.39	.45	.76	3.1	2.2
740A	7.74	Lindsey Creek	Bull Creek	Muscogee County, lat. $32^{\circ}29'$, long. $84^{\circ}57'$, at State Highway 22, at Columbus	.13	.15	.20	.15	.16
741	16.8	South Fork Upatoi Creek	Upatoi Creek	Talbot County, lat. $32^{\circ}35'$, long. $84^{\circ}23'$, at State Highway 22, 1 mile north of Tieueva	0	0	0	0	0
742	38.6	South Fork Upatoi Creek	Upatoi Creek	Talbot County, lat. $32^{\circ}34'$, long. $84^{\circ}27'$, at State Highway 22, 3½ miles west of Tieueva	0	0	0	0	0
742A	47.4	Juniper Creek	Upatoi Creek	Marien-Talbot Counties, lat. $32^{\circ}33'$, long. $84^{\circ}24'$, at State Highway 41, ½ miles south of Genera, Chattahoochee-Talbot Counties, lat. $32^{\circ}02'$, Imp ^b	37	38	39	38	38
743B	107	Upatoi Creek	Chattahoochee River	Upatoi Creek, lat. $32^{\circ}32'$, long. $84^{\circ}46'$, at Bow Springs	32	33	37	33	34
743	21.2	Baker Creek	Upatoi Creek	Muscogee-Talbot Counties, lat. $32^{\circ}30'$, long. $84^{\circ}40'$, at State Highway 22, 4 miles east of Upatoi	0	0	0	0	0
744	3.03	Tar River	Upatoi Creek	Muscogee County, lat. $32^{\circ}33'$, long. $84^{\circ}42'$, at State Highway 22, 2½ miles east of Tieueva	0	0	0	0	0
745	17.1	Kendall Creek	Upatoi Creek	Muscogee County, lat. $32^{\circ}33'$, long. $84^{\circ}43'$, at State Highway 22, 1½ miles east of Upatoi	.053	.062	.14	1.2	.72
746	3.30	Cox Creek	Upatoi Creek	Muscogee-Talbot Counties, lat. $32^{\circ}33'$, long. $84^{\circ}44'$, at State Highway 22, 0.5 miles east of Upatoi	0	0	0	0	0
746A	201	Upatoi Creek	Chattahoochee	Muscogee-Chattahoochee Counties, lat. $32^{\circ}27'$, long. $84^{\circ}45'$, at State Highway 103, at Echbeck	21	23	27	23	24

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66. 5	Pine Knot Creek	Bellbeck Creek	Chattahoochee County, lat 32°30'N, long 84°44'W, at State Highway 103, 1½ miles east of Echekaw, at Muscogee County, lat 32°35'N, long 84°48', at county road, 2 miles east of Midland	60	63	64	63	63	84
4. 66	Randall Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°47', at county road, 2½ miles east of Upatoi	60	0	0	0	0	0
. 08	Unnamed Tributary	Randall Creek	Muscogee County, County, lat 32°35'N, long 84°47', at county road, 2½ miles east of Upatoi	60	0	0	0	0	0
. 11	Unnamed Tributary	Randall Creek	Muscogee County, County, lat 32°35'N, long 84°47', at county road, 2½ miles east of Upatoi	60	0	0	0	0	0
18. 7	Randall Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°47', at State Highway 22, 2 miles west of Upatoi	.067	.080	.18	1.4	.88	5.5
. 30	Unnamed Tributary	Randall Creek	Muscogee County, County, lat 32°35'N, long 84°45', at State Highway 22, 1½ miles west of Upatoi	0	0	0	0	0	0
3. 36	Doxier Creek	Randall Creek	Muscogee County, County, lat 32°35'N, long 84°45', at Macon Road 4½ miles west of Upatoi	0	0	0	.28	.18	.662
. 24	Unnamed Tributary	Dozier Creek	Muscogee County, County, lat 32°35'N, long 84°49', at Macon Road 4 miles west of Upatoi	0	0	0	0	0	0
. 14	Unnamed Tributary	Dozier Creek	Muscogee County, County, lat 32°35'N, long 84°48', at Macon Road 3½ miles west of Upatoi	0	0	0	0	0	0
46. 9	Randall Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°48', at State Highway 103, 2½ miles northeast of Ellijeville	.062	.066	.095	.077	.077	1.3
51. 2	Randall Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°48', at Sand Hill	.16	.17	.26	.22	.22	2.5
342	Upatoi Creek	Chattahoochee River Long Branch	Armed Division Road, 6 miles east of Sand Hill	110	110	130	120	120	240
. 23	Unnamed Tributary	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°40', at Red Arrow Road, 5 miles east of Sand Hill	0	0	0	0	0	0
2. 01	Long Branch	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°40', at 2nd Armed Division Road, 4½ miles east of Sand Hill	0	0	0	0	0	0
2. 04	Wolf Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°40', at Sand Hill	0	0	0	0	0	0
2. 24	Unnamed Tributary	Wolf Creek	Muscogee County, County, lat 32°35'N, long 84°40', at Sand Hill	0	0	0	0	0	0
8. 71	Wolf Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°40', at Sand Hill	0	0	0	0	0	0
9. 53	Wolf Creek	Upatoi Creek	Muscogee County, County, lat 32°35'N, long 84°40', at Sand Hill	.12	.13	.18	.16	.16	1.1
8. 59	Ohillie Creek	Upatoi Creek	Chattahoochee County, County, lat 32°35'N, long 84°42', at State Highway 26, at Ida Vesper	2.7	2.8	3.2	.30	3.0	6.0
. 32	Unnamed Tributary	Ohillie Creek	Chattahoochee County, County, lat 32°35'N, long 84°43', at State Highway 26, 1½ miles west of Ida Vesper	0	0	0	0	0	0
24. 1	Ohillie Creek	Upatoi Creek	Chattahoochee County, County, lat 32°35'N, long 84°44', at Christopher Road, at Christopher	6.8	6.0	7.0	6.6	6.6	14
53. 3	Ohillie Creek	Upatoi Creek	Chattahoochee County, County, lat 32°35'N, long 84°46', at Houghglass Road, at Hurley	8.9	9.1	11	9.9	9.9	25

Flow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
768A	64.2	Ochilgee Creek	Upatoi Creek	Chattahoochee County, lat 32°22', long 84°51', at community road, at Ochilgee	13	14	16	14	14	14	27
769	1.58	Steam Mill Creek	Upatoi Creek	Muscogee County, lat 32°25', long 84°54', at St. Mary's Road, 1½ miles northeast of Sand Hill	0	0	0	0	0	0	0
770	2.55	Steam Mill Creek	Upatoi Creek	Muscogee County, lat 32°25', long 84°53', at 2nd Armored Division Road, 0.8 mile east of Sand Hill	0	0	0	0	0	0	0
771	2.01	Tiger Creek	Upatoi Creek	Muscogee County, lat 32°27', long 84°55', at Steam Mill Road, 2½ miles north of Sand Hill	0	0	0	0	0	0	0
772	3.49	Tiger Creek	Upatoi Creek	Muscogee County, lat 32°26', long 84°54', at St. Mary's Road, 1½ miles north of Sand Hill	0	0	0	0	0	0	0
773	4.86	Tiger Creek	Upatoi Creek	Muscogee County, lat 32°27', long 84°53', at road 0.2 mile upstream from mouth of Sand Hill	0	0	.653	0	0	0	.38
774	2.00	Heriot Creek	Upatoi Creek	Chattahoochee County, lat 32°27', long 84°53', at Marano Road, 1½ miles southeast of Sand Hill	.76	.78	.87	.84	.84	.84	1.6
775	1.36	Opossum Creek	Upatoi Creek	Muscogee County, lat 32°24', long 84°54', at State Highway 1, 0.6 mile southwest of Sand Hill	0	0	0	0	0	0	0
776	1.40	Hamel Creek	Upatoi Creek	Chattahoochee County, lat 32°23', long 84°55', at Marine Road	.35	.36	.41	.39	.39	.39	.85
777	447	Upatoi Creek	Chattahoochee River	Chattahoochee-Muscogee Counties, lat 32°23', long 84°57', at water plant, 1 mile upstream No. 1 Chattahoochee County, lat 32°22', long 84°57', at Marine Road	92	98	120	110	110	110	240
778	.90	Armory Creek	Upatoi Creek	Chattahoochee County, lat 32°16', long 84°48', at county road, 3½ miles southwest of Cusseta	.17	.18	.21	.19	.19	.19	.47
778A	3.42	Shell Creek	Chattahoochee River	Chattahoochee County, lat 32°16', long 84°48', near county road, 6½ miles southwest of Cusseta, Chattahoochee County, lat 32°16', long 84°47', at State Highway 1, 2½ miles south of Cusseta	.75	.79	.89	.79	.81	.81	1.5
779	15.8	Hichitee Creek	Chattahoochee River	Chattahoochee County, lat 32°16', long 84°47', at State Highway 1, 2½ miles south of Cusseta	2.2	2.2	2.7	2.5	2.5	2.5	6.9
779A	4.50	Hewell Creek	Hichitee Creek	Chattahoochee County, lat 32°16', long 84°48', at county road, 3½ miles southwest of Cusseta	0	.055	.080	.055	.055	.055	.34
779B	2.75	Cany Creek	Hichitee Creek	Chattahoochee County, lat 32°15', long 84°49', at county road, 3½ miles southwest of Cusseta	0	0	0	0	0	0	0
780	39.0	Hichitee Creek	Chattahoochee River	Stewart County, lat 32°14', long 84°51', at county road, 4 miles north of Lovaline	5.1	5.6	6.6	6.0	6.0	6.0	17
781	74	Hannahatchee Creek	Chattahoochee River	Stewart County, lat 32°10', long 84°50', at State Highway 1, 1½ miles south of Lovaline	.53	.57	.83	.70	.70	.70	.58
782	7.10	Frog Bottom Creek	Colochee Creek	Stewart County, lat 32°06', long 84°49', at State Highway 1, 3½ miles north of Lumpkin	.12	.13	.18	.15	.15	.15	.03

783	132	Hannabathee Creek	Chattahoochee River	Stewart County, lat 32°20'N, long 84°26', at county road, 2½ miles southwest of Julia	11	11	14	13	13	42
785	12	Tobanee Creek	Chattahoochee River	Quintin County, lat 31°52', long 85°06', at county road, 0.8 miles south of Georgetown	2.4	2.5	2.9	2.7	2.7	6.5
786	70	Pataula Creek	Chattahoochee River	Stewart County, lat 31°56', long 84°48', at State Highway 1, 1 mile south of Lumpkin	9.8	9.8	12	11	11	30
787	11	Hoddochke Creek	Pataula Creek	Stewart County, lat 32°23', long 84°47', at State Highway 27, 1 mile east of Lumpkin	3.3	3.5	3.9	3.7	3.7	7.5
788	295	Pataula Creek	Chattahoochee River	Quintin County, lat 31°56', long 84°58', at State Highway 50, 2½ miles northeast of Morris	.69	.75	.86	.120	.120	170
789	3.4	McCallop Creek	Holalina Creek	Randolph County, lat 31°24', long 84°52', at State Highway 30, 5 miles northeast of Cuthbert	.075	.082	.11	.097	.097	.52
790	41	Holanna Creek	Pataula Creek	Quintin County, lat 31°57', long 84°57', at county road, at Morris	8.2	8.2	9.8	9.1	9.1	22
791	25	Hog Creek	Cemochechobee Creek	Clay County, lat 31°29', long 84°56', at county road, 5½ miles northeast of Fort Gaines	4.0	4.4	5.3	8.0	7.4	12
792	103	Cemochechobee Creek	Chattahoochee River	Clay County, lat 31°29', long 84°56', at State Highway 30, north of Fort Gaines	26	28	32	.46	.43	.62
794	97	Colomokee Creek	Chattahoochee River	Clay County, lat 31°21', long 84°02', at State Highway 39, 6 miles south of Fort Gaines	57	57	.59	.81	.74	.84
795	8,040	Chattahoochee River	Apalachicola River	USGS Complete-Record Gaging Station 1028-1, Chattohoochee River at Columbus, Ala.	1,210 ^a	1,290 ^a	1,371 ^a			
796	26	Sawhatchee Creek	Chattahoochee River	Early County, lat 31°17', long 85°07', at county road, 9 miles southwest of Blakely	1.2	1.2	1.4	4.6	3.2	5.4
797	3.1	Mud Creek	Flint River	Clayton County, lat 33°17', long 84°24', at county road, 2 miles west of Forest Park	.40	.45	.56	1.1	.90	.56
798	21	Flint River	Apalachicola River	Clayton County, lat 33°35', long 84°23', at county road, 1¾ miles east of Riverdale	1.9	2.2	2.8	6.3	4.7	2.7
799	1.8	Jesters Creek	Flint River	Clayton County, lat 33°55', long 84°21', at Morrow Road, 4½ miles south of Canley	0	0	.063	.21	.14	.063
800	6.0	Camp Creek	Flint River	Clayton County, lat 33°37', long 84°20', at county road, 1½ miles southwest of Riverdale	.63	.97	1.2	2.4	1.9	.54
801	17	Camp Creek	Flint River	Clayton-Payette Counties, lat 33°31', long 84°20', at State Highway 85, north of Fayetteville	1.6	1.8	2.3	5.2	3.9	14
802	3.3	Swamp Creek	Flint River	Clayton County, lat 33°30', long 84°22', at county road, 2 miles southwest of Jonesboro	0	0	0	0	0	0
803	37	Morning Creek	Flint River	Fayette County, lat 33°30', long 84°26', at State Highway 85, north of Fayetteville	.36	.46	.70	2.9	.8	.70
804	40	Morning Creek	Flint River	Fayette County, lat 33°29', long 84°26', at State Highway 51, 3½ miles northeast of Fayetteville	.696	.14	.34	1.4	.76	.23
805	130	Flint River	Apalachicola River	Clayton County, lat 33°26', long 84°23', at county road, 4½ miles southwest of Lovettsville	5.6	6.7	9.1	.25	.18	.83
806	8.2	Shoal Creek	Flint River	Clayton County, lat 33°25', long 84°22', at county road, 3½ miles southwest of Lovettsville and 1 mile upstream from mouth	.12	.16	.24	.86	.55	.40

^aFlow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Draining Area (sq. mi.)	Stream	Thiabutary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
807	9.2	Murphy Creek	Flint River	Fayette County, lat. $33^{\circ}27'$ long. $84^{\circ}24'$, at county road, $3\frac{1}{2}$ miles southeast of Fayetteville and 2 miles upstream from mouth of Highway 3, 1 mile west of Hampton, at Expressway	0	0	0	0	0	0	0
808	5.9	Bear Creek	Flint River	Henry County, lat. $33^{\circ}23'$, long. $84^{\circ}18'$, at county road, $1\frac{1}{2}$ miles west of Hampton, lat. $33^{\circ}23'$, long. $84^{\circ}18'$, at county road, 10 miles west of Fayette-Spalding Counties, lat. $33^{\circ}10'$, long. $83^{\circ}29'$, at State Highway 12, $2\frac{1}{2}$ miles south of Woolsley, Fayette County, lat. $33^{\circ}21'$, long. $84^{\circ}26'$, at county road, $\frac{1}{2}$ mile from Woolsley, Spalding County, lat. $33^{\circ}18'$, long. $84^{\circ}21'$, at State Highway 9, 6 miles northwest of Griffin	.12	.14	.20	.69	.45	.20	3.0
809	6.0	Bear Creek	Flint River	Spalding County, lat. $33^{\circ}17'$, long. $84^{\circ}22'$, at county road, 7 miles west of Griffin	.12	.14	.21	.71	.46	.20	3.1
810	194	Flint River	Apalachicola River	Fulton County, lat. $33^{\circ}23'$, long. $84^{\circ}18'$, at county road, 10 miles west of Griffin, Fulton-Payette Counties, lat. $33^{\circ}10'$, long. $84^{\circ}26'$, at county road, 10 miles west of Griffin, Fulton-Payette Counties, lat. $33^{\circ}07'$, long. $84^{\circ}26'$, at county road, 10 miles west of Griffin, Fulton-Payette Counties, lat. $33^{\circ}04'$, long. $84^{\circ}26'$, at county road, 10 miles west of Griffin and 0.9 mile upstream from mouth of Spalding County, lat. $33^{\circ}16'$, long. $84^{\circ}25'$, at county road, $8\frac{1}{4}$ miles west of Griffin	2.7	3.6	6.0	22	14	6.0	96
811	2.9	Woolsey Creek	Horton Creek	Spalding County, lat. $33^{\circ}17'$, long. $84^{\circ}21'$, at State Highway 9, 6 miles northwest of Griffin	.21	.25	.32	.77	.57	.31	2.1
813	10	Heads Creek	Wildcat Creek	Spalding County, lat. $33^{\circ}17'$, long. $84^{\circ}22'$, at county road, 7 miles west of Griffin	.21	.26	.37	1.2	.82	.37	5.3
814	22	Heads Creek	Wildcat Creek	Spalding County, lat. $33^{\circ}16'$, long. $84^{\circ}22'$, at county road, 7 miles west of Griffin	.84	.99	1.4	3.9	2.7	1.4	14
815	21	Shoal Creek	Wildcat Creek	Spalding County, lat. $33^{\circ}16'$, long. $84^{\circ}22'$, at county road, 7 miles west of Griffin and 0.9 mile upstream from mouth of Spalding County, lat. $33^{\circ}16'$, long. $84^{\circ}25'$, at county road, $8\frac{1}{4}$ miles west of Griffin	.61	.74	1.0	3.2	2.1	1.0	12
816	48	Wildcat Creek	Flint River	USGS Complete-Record Gaging Station 10074, Flint River near Griffin, Ga.	1.6	1.8	2.6	7.7	5.2	2.6	28
817	272	Flint River	Apalachicola River	Fulton-Payette Counties, lat. $33^{\circ}14'$, long. $84^{\circ}28'$, at State Highway 10, 10 miles west of Griffin, Fulton-Payette Counties, lat. $33^{\circ}31'$, long. $84^{\circ}36'$, at county road, 10 miles west of Griffin, Fulton-Payette Counties, lat. $33^{\circ}34'$, long. $84^{\circ}37'$, at State Highway 54, 1 mile southwest of Abercorn	2.5d	3.2d	6.0d	34d	22d	10d	142d
818	4.0	Line Creek	Flint River	Covington County, lat. $33^{\circ}23'$, long. $84^{\circ}37'$, at State Highway 51, $3\frac{1}{2}$ miles north of Sharpsburg	0	0	0	.04	.28	.17	0.63
819	38	Line Creek	Flint River	Covington County, lat. $33^{\circ}24'$, long. $84^{\circ}35'$, at State Highway 51, $1\frac{1}{2}$ miles east of Abercorn	2.2	2.6	3.4	8.7	6.3	3.4	26
820	24	Shoal Creek	Line Creek	Covington County, lat. $33^{\circ}23'$, long. $84^{\circ}37'$, at State Highway 51, $3\frac{1}{2}$ miles north of Sharpsburg	.65	.80	1.1	3.5	2.4	1.1	14
821	15	Flat Creek	Line Creek	Covington County, lat. $33^{\circ}24'$, long. $84^{\circ}34'$, at county road, $2\frac{1}{2}$ miles north of Senoia	.51	.62	.86	2.5	1.7	.85	9.0
822	9.4	Keg Creek	Line Creek	Covington County, lat. $33^{\circ}20'$, long. $84^{\circ}34'$, at county road, $2\frac{1}{2}$ miles north of Senoia	.48	.58	.76	2.0	1.4	.76	6.3

823	6.6	Ginger Cake Creek	Whitewater Creek	Fayette County, lat 33°27', long 84°29', at State Highway 44, 1½ miles west of Fayetteville	.057	.073	.12	.49	.30	.11	2.7
823A	210	Line Creek	Flint River	Coweta-Shelby Counties, lat 33°15', long 84°30', at State Highway 10, 4½ miles southeast of Senoia	3.9	4.6	8.9	49	30	12	130
824	9.4	Dead oak Creek	Line Creek	Coweta County, lat 33°15', long 84°22', at county road, 3 miles south of Senoia	.56	.66	.87	2.2	1.6	.87	6.6
824B	38	White oak Creek	Flint River	Coweta County, lat 33°20', long 84°43', at State Highway 16, 4 miles southeast of Newnan	.95	1.1	2.0	10	6.4	2.6	25
825	57	White oak Creek	Flint River	Coweta County, lat 33°17', long 84°45', at county road, 8 miles southeast of Newnan	.33	.44	.71	3.4	1.9	.70	21
826	146	White oak Creek	Flint River	Marietta County, lat 33°11', long 84°35', at State Highway 85, 0.7 mile north of Atlanta	3.2	3.9	5.4	18	12	5.4	77
826A	8.6	Wolf Creek	White oak Creek	Marietta County, lat 33°08', long 84°34', at county road, 3½ miles south of Atlanta	0	0	0	.095	0	0	1.0
827	18	Birch Creek	Flint River	Elie County, lat 33°07', long 84°27', at county road, 2½ miles north of Concord	.68	.81	1.1	3.2	2.2	1.1	11
828	7.7	Coleman Creek	Red oak Creek	Marietta County, lat 33°00', long 84°44', at State Highway 41, 1 mile north of Pinetree	.18	.21	.38	1.6	1.1	.52	4.0
829	8.6	Little Red oak Creek	Red oak Creek	Marietta County, lat 33°08', long 84°44', at State Highway 41, 1½ miles southeast of Pinetree	.42	.46	.74	2.5	1.9	1.0	5.5
830	4.5	Walnut Creek	Bridge Creek	Marietta County, lat 33°00', long 84°43', at State Highway 41, 1 mile south of Greenville	0	0	.085	.52	.34	.13	1.7
831	4.20	Kendall Creek	Walnut Creek	Marietta County, lat 32°58', long 84°43', at State Highway 41, 2½ miles south of Greenville	.59	.63	.86	2.1	1.7	1.1	3.6
831A	144	Red oak Creek	Flint River	Marietta County, lat 33°02', long 84°33', at county road, 3½ miles northwest of Molinea	.81	.95	2.2	12	11	4.1	44
832	13	Elkins Creek	Flint River	Pike County, lat 33°07', long 84°21', at State Highway 3, 1½ miles north of Zebulon	0	0	.068	.41	.21	.068	3.6
833	20	Elkins Creek	Flint River	Pike County, lat 33°06', long 84°27', at State Highway 18, 1 mile west of Zebulon	0	0	0	0	0	0	0
834	11	Powder Creek	Elkins Creek	Pike County, lat 33°05', long 84°23', at county road, 4 miles west of Meansville	.16	.21	.42	1.7	1.4	.68	4.6
835	52	Elkins Creek	Flint River	Pike County, lat 33°04', long 84°24', at county road, 2½ miles southeast of Concord	0	0	0	0	0	0	0
836	101	Elkins Creek	Flint River	Pike-Troup Counties, lat 32°58', long 84°31', at county road, 3 miles south of Molinea and 1 mile upstream from mouth	1.2	1.6	2.3	9.1	5.7	2.3	45
837A	32.5	Cane Creek	Flint River	Marietta County, lat 32°56', long 84°38', at State Highway 85W, 4½ miles northeast of Warm Springs	.68	.78	1.5	5.2	4.9	2.3	14
837B	53.6	Cane Creek	Flint River	Marietta County, lat 32°53', long 84°36', at county road, 7 miles northeast of Warm Springs	5.4	5.9	9.1	20	19	12	33
837C	34.5	Lazar Creek	Flint River	Tulifant County, lat 32°55', long 84°33', above mouth of Marshall Creek, 4½ miles north of Talbotton	5.2	5.5	7.9	16	15	10	27

^aFlow regulated by diversion.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)				Min. Daily Flow (cfs)	Minimum 12-Month Flow 1954-55 (cfs)	
					1-Day	7-Day	Monthly	June	July	August	
837D	81.3	Lazar Creek	Flint River	Talbot County, lat 32°44', long 84°33', below mouth of Marshall Creek at State Highway 41, 4½ miles north of Talbotton	4.7	5.1	8.5	23	21	12	49
838	9.48	Edwards Creek	Lazar Creek	Talbot County, lat 32°43', long 84°33' at State Highway 41, 2½ miles north of Talbotton	.46	.50	.87	2.5	2.2	1.3	5.5
839	8.29	Celocoochee Creek	Lazar Creek	Talbot County, lat 32°44', long 84°33', at county road, ¾ mile north of Talbotton	2.1	2.2	2.9	5.1	4.8	3.5	7.7
840	23	Big Potato Creek	Potato Creek	Lamar County, lat 33°08', long 84°14', at county road, 2½ miles west of Milner	2.3	2.8	4.4	9.0	8.2	5.2	16
841	2.26	Grape Creek	Big Potato Creek	Lamar County, lat 33°07', long 84°13', at county road, 1½ miles west of Milner	0	0	.063	.28	.24	.11	.85
841A	57	Big Potato Creek	Potato Creek	Lamar County, lat 33°06', long 84°14', at county road, 5 miles southwest of Milner	2.0	2.2	3.9	12	11	6.0	30
841B	67	Big Potato Creek	Potato Creek	Lamar County, lat 33°04', long 84°14', at State Highway 18, 4½ miles east of Barnesville	.90	1.0	2.1	8.9	7.9	3.6	27
841C	7.4	Little Potato Creek	Big Potato Creek	Pike County, lat 33°04', long 84°18', on county road, 1 mile north of Mansville	.13	.15	.30	1.1	1.0	.48	3.2
841D	96	Big Potato Creek	Potato Creek	Lamar County, lat 33°01', long 84°16', on county road, 6½ miles southwest of Barnesville	1.7	1.9	3.8	15	13	6.2	41
842	4.5	Little Potato Creek	Potato Creek	Lamar County, lat 33°00', long 84°12', at county road, 1 mile south of Highway 18, 2½ miles west of Barnesville	.50	.54	.82	1.8	1.7	1.1	3.3
843	20	Ten Mile Creek	Potato Creek	Upson County, lat 32°55', long 84°21', at county road, ¾ miles northwest of Thomaston	2.8	3.0	4.3	9.0	8.3	5.6	16
844	6.70	Basin Creek	Potato Creek	Upson County, lat 32°55', long 84°22', at county road, 4 miles northwest of Thomaston	.94	1.0	1.4	3.0	2.8	1.9	5.2
845	186	Potato Creek	Flint River	USGS Complete Record, Gathlin Station 1938; Potto Creek, near Thomaston, Ga.	.784 ^d	1.84 ^d	2.64 ^d	29 ^d	20 ^d	9.84 ^d	87 ^d
846	12	Hackasofkee Creek	Flint River	Upson County, lat 32°54', long 84°21'45", 300 ft downstream from State Highway 74, 2½ miles northwest of Thomaston	.82	.89	1.4	3.8	3.4	2.0	7.6
847	4.23	East Swift Creek	Swift Creek	Talbot County, lat 32°52', long 84°26', at State Highway 22, 6½ miles east of Talbotton	1.3	1.4	1.8	2.9	2.7	2.1	4.2

848	1,850	Flint River	Apalachicola River														
849	45.7	Auchumpkee Creek	Flint River	USGS Complete-Record Gaging Station 1911-23; 1928-31; 1937- Flint River near Culloden, Ga., at State Highway 3, 13 miles southwest of Culloden.	97	99	108	381	332	220	1,018						
850	29.9	Ulchatchee Creek	Auchumpkee Creek	Upson County, lat $32^{\circ}45'$, long $84^{\circ}13'$; at State Highway 22, 1½ miles southwest of Thomaston.	0	0	12	1.3	1.0	.27	7.4						
851	2.9	Spring Creek	Flint River	Crawford County, lat $32^{\circ}46'$, long $84^{\circ}07'$; at State Highway 22, 6½ miles northwest of Roberta.	0	0	0	0	0	0	0						
852	6.8	Mathews Creek	Spring Creek	Crawford County, lat $32^{\circ}42'$, long $84^{\circ}03'$; at State Highway 128, 2½ miles southwest of Roberta.	0	0	0	0	0	0	0						
853	13	Culpepper Creek	Spring Creek	Crawford County, lat $32^{\circ}41'$, long $84^{\circ}01'$; at State Highway 7, 2 miles south of Roberta.	12	12	13	.13	.13	.13	.13						
853A	19	Avera Creek	Spring Creek	Crawford County, lat $32^{\circ}39'$, long $84^{\circ}00'$; at county road, 4½ miles south of Roberta.	12	12	12	12	12	12	12						
854	139	Paddiga Creek	Flint River	Taylor County, lat $32^{\circ}34'$, long $84^{\circ}05'$; at State Highway 128, 1½ mile north of Franklin.	28	29	33	29	30	30	30						
855	12	Unnamed Tributary	Flint River	Crawford County, lat $32^{\circ}32'$, long $84^{\circ}07'$; at State Highway 90, 6 miles east of Reynolds.	0	0	0	0	0	0	0						
855T	93.4	Whitewater Creek	Flint River	USGS Complete-Record Gaging Station 1951-; Whitewater Creek, below Ramblette Creek, near Butler, Ga.	128	129	133	139	139	132	143						
				Taylor County, lat $32^{\circ}28'$, long $84^{\circ}16'$, 500 ft downstream from State Highway 3, just below Ramblette Creek, 6½ miles south of Butler.													
858	15	Cedar Creek	Whitewater Creek	Taylor County, lat $32^{\circ}26'$, long $84^{\circ}21'$; at State Highway 17, 1½ miles northwest of Butler.	19	19	20	21	21	20	21						
859	44	Shoal Creek	Buck Creek	Marion County, lat $32^{\circ}23'$, long $84^{\circ}27'$.	39	39	42	44	44	44	44						
860	146	Buck Creek	Flint River	Highway 137, 5½ miles northeast of Buena Vista.	100	100	110	120	120	120	120						
861	7.8	Mills Creek	Flint River	Highway 3, 5½ miles north of Ellaville.	8.2	8.3	8.3	8.3	8.3	8.3	8.3						
862	2,900	Flint River	Apalachicola River	Macon County, lat $32^{\circ}18'$, long $84^{\circ}08'$; at State Highway 26 and 49, below Buck Creek, 1 mile west of Monteanna.	600	618	639	1,050	950	775	1,863						
				Macon County, lat $32^{\circ}18'$, long $84^{\circ}02'$; at State Highway 26, at Monteanna.													
				Macon County, lat $32^{\circ}14'$, long $84^{\circ}00'$; at State Highway 40, 1½ miles southwest of Oglethorpe.													
				USGS Complete-Record Gaging Station 1905-40; 1911-12; 1930-33; 1944- Flint River at Monteanna, Ga.													
863	39	Beaver Creek	Flint River	Macon County, lat $32^{\circ}11'$, long $84^{\circ}08'$, at State Highway 40, south of Andersonville.	16	17	18	17	17	17	17						
864	54	Camp Creek	Flint River	State Highway 40, south of Andersonville.	16	17	19	17	18	18	18						
865	29	Sweetwater Creek	Flint River		12	12	13	12	13	13	13						

*Flow regulated by diversion.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly		
866	40	Hogcreek	Flint River	Dooly-Macon Counties, lat 32°17', long 83°54', at county road, 7½ miles east of Montezuma, Ga.	.44	.52	.76	.59	.59
867	16	Horsehead Creek	Hogcreek Creek	Macon County, lat 32°17', long 83°57', at State Highway 26, 5½ miles east of Montezuma, Ga.	.22	.24	.34	.26	1.4
868	76	Hogcreek Creek	Flint River	Dooly-Macon Counties, lat 32°15', long 83°58', at State Highway 90, 5½ miles southeast of Montezuma, Ga.	14	15	17	15	30
869	32	Turkey Creek	Flint River	Dooly County, lat 32°14', long 83°52', at county road, 3 miles northeast of Byronville, Ga.	.77	.86	1.2	.86	.94
870	45	Turkey Creek	Flint River	Dooly County, lat 32°12', long 83°54', at State Highway 30, at Byromville, Ga.	3.3	3.6	4.3	3.6	4.4
871	21	Pennahatchee Creek	Turkey Creek	Dooly County, lat 32°02', long 83°48', at State Highway 7, at Vienna, Ga.	0	0	0	0	0
872	28	Sandy Mount Creek	Pennahatchee Creek	Dooly County, lat 32°07', long 83°50', at State Highway 90, 2½ miles northwest of Vienna, Ga.	.81	.90	1.2	.90	.98
873	24	Little Pennahatchee Creek	Pennahatchee Creek	Dooly County, lat 32°07', long 83°52', at State Highway 90, 2½ miles southeast of Lillian, Ga.	.55	.65	.88	.65	.71
874	65	Lime Creek	Flint River	Sumter County, lat 32°02', long 83°00', at county road, 5 miles north of Cobb Crisp County, lat 31°57', long 83°50', at State Highway 30, 3 miles west of Cordele, Ga.	10	10	12	11	11
876	.0	Unnamed Tributary	Quilly Creek	Crisp County, lat 31°56', long 83°47', at State Highway 7, 2½ miles south of Cordele, Ga.	0	0	0	0	0
877	15	Cedar Creek	Flint River	Crisp-Worth Counties, lat 31°48', long 83°48', at State Highway 33, 4 miles southwest of Arabia, Ga.	0	0	0	0	0
879	10	Swift Creek	Flint River	Sumter County, lat 31°57', long 84°03', at State Highway 30, at Desoto, Ga.	0	0	0	0	0
880	11	Chokee Creek	Flint River	USGS Complete-Record Gaging Station 1930-33; Lee-Worth Counties, lat 31°46', long 83°59', at railroad bridge 1 mile southwest of Oakfield, Ga.	0	0	0	0	0
881	3,860	Flint River	Apalachicola River	Dougherty County, lat 31°37', long 84°02', at Highway 257, 7½ miles northeast of Albany, Ga.	165*	741*	364*	364*	364*
882	17	Unnamed Tributary	Flint River	Dougherty County, lat 31°34', long 84°02', at Highway 50, 7 miles east of Albany, Ga.	0	0	0	0	0
883	53	Piney Woods Creek	Flint River	Dougherty County, lat 31°36', long 84°03', at Highway 257, 6½ miles east of Albany, Ga.	0	0	0	0	0
884	58	Piney Woods Creek	Flint River						

885	33.8	Kinchafoonee Creek	Flint River	Marion County, lat 32°17', long 84°35', at county road, $\frac{1}{4}$ miles southwest of Buena Vista.	10	11	12	11	11	11	23
885A	48	Slaughter Creek	Kinchafoonee Creek	Webster County, lat 32°08', long 84°36', at mouth of Low Slaughter Creek.	5.2	5.4	6.5	6.1	6.1	6.0	18
885B	169	Kinchafoonee Creek	Flint River	Webster County, lat 32°05', just below Highway 27, $\frac{1}{4}$ miles northwest of Preston.	22	23	27	26	26	25	69
885C	176	Kinchafoonee Creek	Flint River	USGS Complete Record Gaging Station 1051; Kinchafoonee Creek at Preston, Ga.	29	32	38	57	53	46	84
886	197	Kinchafoonee Creek	Flint River	Webster County, lat 32°08', long 84°33', at State Highway 11, 1 mile southwest of Preston.	34	35	40	38	38	37	96
886A	52	Lanahassee Creek	Kinchafoonee Creek	Webster County, lat 32°03', long 84°30', at State Highway 27, 2 miles southeast of Preston.	6.2	6.8	8.4	13	12	10	20
886B	4.2	Hog Branch	Kinchafoonee Creek	Webster County, lat 32°03', long 84°29', at State Highway 27, $\frac{3}{4}$ miles southeast of Preston.	0	0	.050	.11	.094	.066	28
886C	35	Choctahatchee Creek	Kinchafoonee Creek	Webster County, lat 32°02', long 84°28', at State Highway 27, 4 miles southwest of Preston.	4.5	4.7	.56	5.3	5.3	.52	15
886D	22	Bear Creek	Kinchafoonee Creek	Webster County, lat 32°00', long 84°26', at State Highway 41, 6 miles southwest of Preston.	13	14	20	.18	.18	.17	16
887	485	Kinchafoonee Creek	Flint River	Lee-Terrell Counties, lat 31°52', long 84°18', at State Highway 118, $\frac{1}{2}$ miles northwest of Leesburg.	55	58	69	64	64	64	190
888	527	Kinchafoonee Creek	Flint River	Lee County, lat 31°46', long 84°15', at county road, $\frac{1}{2}$ miles southwest of Leesburg.	62	63	78	73	73	73	210
889	31	Middle Creek	Kinchafoonee Creek	Lee County, lat 31°46', long 84°16', at county road, $\frac{1}{2}$ miles northwest of Leesburg.	1.0	1.1	1.4	1.2	1.2	1.2	5.7
890	5.9	Reedy Creek	Kinchafoonee Creek	Lee County, lat 31°45', long 84°16', at State Highway 32, 6 miles west of Leesburg.	.060	.065	.064	.081	.081	.081	.58
891	586	Kinchafoonee Creek	Flint River	Lee County, lat 31°43', long 84°11', at county road, 1 mile southwest of Leesburg.	86	88	110	98	98	98	260
892	12	Towitown Creek	Kinchafoonee Creek	Lee County, lat 31°42', long 84°08', at county road, $\frac{1}{2}$ miles southwest of Leesburg.	2.1	2.2	2.6	2.4	2.4	2.4	6.0
893	53	Muckalee Creek	Flint River	Schley County, lat 32°11', long 84°22', at State Highway 153, $\frac{1}{2}$ miles southwest of Ellaville.	7.2	7.4	8.8	8.2	8.2	8.2	23
894	9.2	Little Muckalee Creek	Muckalee Creek	Schley County, lat 32°12', long 84°20', at county road, $\frac{1}{2}$ miles southwest of Ellaville.	1.2	1.3	1.5	1.4	1.4	1.4	3.9
895	161	Muckalee Creek	Flint River	Sunter County, lat 32°04', long 84°15', at State Highway 3, at Americas.	18	19	23	21	21	21	62
896	5.1	Mill Creek	Muckalee Creek	Sunter County, lat 32°03', long 84°11', at State Highway 30, $\frac{1}{2}$ miles east of Americas.	0	0	0	0	0	0	0
897	11	Bear Branch	Muckalee Creek	Sunter County, lat 31°58', long 84°15', at State Highway 3, 1 miles south of Americas.	1.9	2.0	2.3	2.2	2.2	2.2	5.4
898	.6	Phillema Creek	Muckalee Creek	Sunter County, lat 32°02', long 84°09', at State Highway 30, $\frac{1}{2}$ miles southeast of Americas.	0	0	0	0	0	0	0
899	1.3	Boggy Branch	Phillema Creek	Sunter County, lat 32°00', long 84°07', at State Highway 36, 4 miles north of Leslie.	0	0	0	0	0	0	0

^aFlow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly	June	July	August	
300	265	Muckalee Creek	Flint River	Lee County, lat 31°54', long 84°12', at State Highway 118, 11 1/2 miles north of Leesburg, at State Highway 27, 3 1/2 miles south of Dawson, at State Highway 27, 3 1/2 miles east of Plains	50	50	60	56	56	56	140
301	6 4	Muckaloohoe Creek	Muckalee Creek	Lee County, lat 31°54', long 84°15', at State Highway 118, 12 1/2 miles north of Leesburg, at State Highway 31°44', long 84°07', at Lee County, lat 31°54', long 84°12', at State Highway 32 1/2 miles east of Leesburg	2 1	2 1	2 4	2 3	2 3	2 3	4 5
302	47	Muckaloohoe Creek	Muckalee Creek	USGS Complete-Record Gaging Station 1897-1921; Flint River at Albany, Ga.	22	23	24	24	24	24	41
303	405	Muckalee Creek	Flint River	Dougherty County, lat 31°36', long 84°08', at Georgia Northern Railroad Bridge at Albany Dougherty County, lat 31°27', long 84°08', at Shaw, Highway 3, near Plant Mitchell, 8 1/2 miles south of Albany	.53	.57	.67	.63	.63	.63	170
304	5,310	Flint River	Apalachicola River	USGS Complete-Record Gaging Station 1897-1921; Flint River at Albany, Ga.	645 ^a	805 ^a	1,175 ^a				
306	68	Dry Creek	Flint River	Dougherty County, lat 31°30', long 84°08', at Georgia Northern Railroad Bridge at Albany Dougherty County, lat 31°27', long 84°08', at Shaw, Highway 3, near Plant Mitchell, 8 1/2 miles south of Albany	0	0	0	0	0	0	0
307	93	Raccoon Creek	Flint River	Mitchell County, lat 31°22', long 84°10', at State Highway 3, 1 mile south of Bacontown, at State Highway 62 1/2 miles east of Pretoria, at State Highway 91 at Newton	0	0	0	0	0	0	0
308	60	Cooleewahee Creek	Flint River	Terrell County, lat 31°46', long 84°34', at State Highway 50, 1 1/2 miles west of Dawson, at State Highway 41, 1 1/2 miles north of Shelnell	0	0	0	0	0	0	0
309	152	Cooleewahee Creek	Flint River	Randolph County, lat 31°46', long 84°44', at State Highway 50, 1 mile east of Cuthbert, at State Calhoun County, lat 31°36', long 84°44', at county road, 1 1/2 miles north of Cuthbert	.90	1 1	1 7	4 2	3 6	2 5	10
311	118	Little Nochaway Creek	Ichawaynochaway Creek	Cahoon County, lat 31°23', long 84°34', at State Highway 50, 1 1/2 miles west of Dawson, at Terrell-Randolph County line, lat 31°17', long 84°36', at State Highway 41, 1 1/2 miles north of Shelnell	19	20	24	36	33	28	53
312	52	Nochaway Creek	Ichawaynochaway Creek	Randolph County, lat 31°46', long 84°44', at State Highway 50, 1 mile east of Cuthbert, at State Calhoun County, lat 31°36', long 84°44', at county road, 1 1/2 miles north of Cuthbert	21	22	24	32	30	28	41
313	4. 9	Town Branch	Carter Creek	Calhoun County, lat 31°23', long 84°44', at State Highway 50, 1 1/2 miles west of Leary	2 1	2 2	2 4	3 1	2 9	2 7	3 9
314	31	Little Pachita Creek	Pachita Creek	USGS Complete-Record Gaging Station 1905-07; 1939.; Ichawaynochaway Creek at Millford, Ga., Highway 216, at Millford	3 6	4 0	4 9	7 8	7 1	6 0	12
315	188	Pachita Creek	Ichawaynochaway Creek	Highway 27, west of Dixie	45	49	56	79	75	65	110
316	570	Ichawaynochaway Creek	Flint River	Calhoun County, lat 31°28', long 84°34', at State Highway 62 1/2 miles west of Leary	100	110	140	200	190	160	290
317	620	Ichawaynochaway Creek	Flint River	USGS Complete-Record Gaging Station 1905-07; 1939.; Ichawaynochaway Creek at Millford, Ga., Highway 216, at Millford	120	129	145	214	199	166	312

918	14	Alligator Creek	Ichawaynochaway Creek	Baker County, lat. 31°21', long 84°34', downstream from county road, 2 miles southwest of Milford	0	0	0	0	0	0	0
919	15	Alligator Creek	Ichawaynochaway Creek	Baker County, lat. 31°21', long 84°33', at county road, 1½ miles south of Milford	0	0	0	0	0	0	0
920	24	Chickasawhatchee Creek	Ichawaynochaway Creek	Terrill County, lat. 31°44', long 84°22', at State Highway 50, 4½ miles southeast of Dawson	.58	.67	.96	1.9	1.7	1.3	3.8
921	11	Brantley Creek	Chickasawhatchee Creek	Terrill County, lat. 31°44', long 84°26', at south-west corner of American Legion golf course, south of Dawson	.87	.98	1.3	2.1	1.9	1.6	3.4
922	63	Chickasawhatchee Creek	Ichawaynochaway Creek	Terrill County, lat. 31°38', long 84°26', at county road, 7 miles south of Dawson	3.7	4.1	5.4	9.4	8.4	6.9	16
923	67	Kiokee Creek	Chickasawhatchee Creek	Douglas County, lat. 31°30', long 84°22', at State Highway 63, 3 miles west of Pretoria	0	0	0	0	0	0	0
925	11	Keel Creek	Chickasawhatchee Creek	Calhoun County, lat. 31°26', long 84°29', at State Highway 37, 3½ miles south of Leary	0	0	0	0	0	0	0
926	320	Chickasawhatchee Creek	Ichawaynochaway Creek	Baker County, lat. 31°22', long 84°28', at State Highway 37, at Finord	.58	.70	1.2	3.7	3.0	2.0	11
927	1,040	Ichawaynochaway Creek	Flint River	Baker County, lat. 31°13', long 84°28', at State Highway 91, 10½ miles southwest of Newton	150	160	190	300	270	230	440
929	35	Big Slough	Flint River	Mitchell County, lat. 31°15', long 84°12', at State Highway 3, north of Camilla	0	0	0	0	0	0	0
930	7,8	Unnamed Tributary	Big Slough	Mitchell County, lat. 31°11', long 84°09', at State Highway 3, 3½ miles north of Felham	0	0	0	0	0	0	0
931	318	Big Slough	Flint River	Decatur County, lat. 30°56', long 84°31', at State Highway 97, ¾ miles northeast of Bainbridge	0	0	0	0	0	0	0
932	7,570	Flint River	Apalachicola River	USGS Complete-Record Gaging Station 1908-13; 1,930 ^a	2,090 ^a	2,217 ^a					
933	49	Spring Creek	Flint River	Decatur County, Flint River at Bainbridge, Ga.							
934	4,4	Unnamed Tributary	Spring Creek	Highway 38, at Bainbridge							
935	14	Perry Creek	Spring Creek	Early County, lat. 31°25', long 84°47', at State Highway 62, 2½ miles southwest of Arlington	0	0	0	0	0	0	0
936	18	Long Branch	Spring Creek	Early County, lat. 31°25', long 84°47', at State Highway 62, 2½ miles southwest of Arlington	0	0	0	0	0	0	0
937	281	Spring Creek	Flint River	Miller County, lat. 31°16', long 84°45', at State Highway 1, at Colquitt	4.5	4.5	5.3	26	16	13	32
938	42	Big Drain Creek	Spring Creek	Miller County, lat. 31°06', long 84°41', at State Highway 1, 6½ miles south of Coquitt	0	0	0	0	0	0	0
939	61	Aycocks Creek	Spring Creek	Miller County, lat. 31°09', long 84°48', at State Highway 91, 4 miles west of Coquitt	9.1	9.3	11	51	32	25	64
940	485	Spring Creek	Flint River	USGS Complete-Record Gaging Station 1920-21; Decatur County, lat. 31°03', long 84°45', downstream from county road, 5½ miles northeast of Iron City							

^aFlow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
APALACHICOLA RIVER BASIN

Map No.	Draining Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly		
941	17,160	Analachicola River	Gulf of Mexico	USGS Complete-Record Gaging Station 1928; Apalachicola River at Chattohoochee, Fla., Jackson-Gadsden Counties, Fla., lat. $30^{\circ}42'$, long $84^{\circ}57'$, 0.3 mile downstream from Jim Woodruff Dam at U. S. Highway 90, 1 mile west of Chattohoochee, Fla.	5,010 ^a	5,156 ^a	5,319 ^a		

MOBILE RIVER BASIN

942	90	Cartecay River	Cosawattee River	Gilmer County, lat $34^{\circ}38'$, long $84^{\circ}24'$, at county road, 6 miles southeast of Ellijay, Ga.	55	57	59	110	83	75	140
943	135	Cartecay River		USGS Complete-Record Gaging Station 1937; Carteavay River near Ellijay, Ga.	70	73	77	148	115	99	200
944	10,7	Rook Creek	Cherrylog Creek	Gilmer County, lat $34^{\circ}31'$, long $84^{\circ}27'$, at State Highway 52, 2 miles southeast of Ellijay, Gilmer County, lat $34^{\circ}47'$, long $84^{\circ}24'$, at State Highway 5, $\frac{1}{2}$ miles northeast of Ellijay, Ga.	4.7	4.9	5.1	10	7.9	6.7	15
945	90	Ellijay River	Cosawattee River	USGS Complete-Record Gaging Station 1907; 1918-1921; 1933-; Ellijay River at Ellijay, Ga., Gilmer County, lat $34^{\circ}32'$, long $84^{\circ}29'$, 1,000 ft downstream from State Highway 5, at Ellijay, Gilmer County, lat $34^{\circ}45'$, long $84^{\circ}33'$, at State Highway 52, 7 miles northwest of Ellijay, Pickens County, lat $34^{\circ}31'$, long $84^{\circ}30'$, at State Highway 5, at Talking Rock, Pickens County, lat $34^{\circ}33'$, long $84^{\circ}31'$, at county road, at Whitestone and $\frac{1}{4}$ miles north of Talking Rock	28	31	36	81	57	45	134
946	32	Mountaintown Creek	Cosawattee River	Pickens County, lat $34^{\circ}32'$, long $84^{\circ}32'$, at county road, 1 $\frac{1}{2}$ miles north of Talking Rock	18	19	20	37	29	26	49
947	17	Talking Rock Creek	Cosawattee River	Talking Rock Creek	3.2	3.4	3.6	10	6.8	5.3	16
948	26	Talona Creek	Talking Rock Creek	Talking Rock Creek	6.5	7.0	7.4	19	13	11	28
949	35	Talona Creek	Talking Rock Creek	Talking Rock Creek	9.1	9.8	10	26	18	15	39
950	56	Talking Rock Creek	Cosawattee River	Cosawattee River	11	12	12	35	23	18	55

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 89

951	12.4	Town Creek	Talking Rock Creek	Floydens County, lat 34°22', long 84°33', at State Highway 5, 3 miles northwest of Talking Rock	3.5	3.7	3.9	9.6	6.8	4.3	14
952	21.1	Scarecorn Creek	Talking Rock Creek	Pickens County, lat 34°28', long 84°36', at State Highway 53, 3½ miles southwest of Talking Rock	4.2	4.4	4.8	13	8.0	7.0	21
953	142	Talking Rock Creek	Coosawattee River	Murray County, lat 34°25', long 84°40', at State Highway 63, 2½ miles southeast of Chatsworth	27	28	30	85	57	46	140
954	531	Cosarattie River	Oostanaula River	Murray County, lat 34°26', long 84°42', 900 ft upstream from State Highway 61, at Carters	220	236	240	510	380	320	710
955	6.87	Sugar Creek	Coosawattee River	Murray County, lat 34°41', long 84°43', at State Highway 61, ½ miles southeast of Chatsworth	1.1	1.2	3.7	2.4	1.9	6.2	
956	50.8	Sallacoa Creek	Coosawattee River	Gordon County, lat 34°26', long 84°43', at State Highway 63, 0.8 mile west of Fairmount	.71	.86	.99	5.4	3.0	1.8	24
957	16.5	Pinhook Creek	Sallacoa Creek	Gordon County, lat 34°28', long 84°42', at State Highway 61, 2½ miles north of Fairmount	.36	.41	.51	2.2	1.4	.76	8.7
958	24.2	Pine Log Creek	Sallacoa Creek	Bartow County, lat 34°22', long 84°43', at State Highway 61, 3 miles northeast of Pine Log	8.7	9.2	9.7	17	14	11	29
959	11.1	Little Pine Log Creek	Pine Log Creek	Bartow County, lat 34°21', long 84°46', at State Highway 140, 1 mile west of Pine Log	1.6	1.7	1.8	4.6	3.3	2.3	10
960	5.61	Rock Creek	Little Pine Log Creek	USGS Complete-Record Gaging Station 1951-1; Rock Creek near Fairmount, Ga.	.78	.84	.93	2.3	1.7	1.2	5.0
961	65.7	Pine Log Creek	Sallacoa Creek	Bartow County, lat 34°22', long 84°47', at State Highway 140, 7 miles southwest of Fairmount	12	13	14	32	24	18	65
962	15.0	Cedar Creek	Pine Log Creek	Gordon County, lat 34°26', long 84°46', at county road, 2 miles southeast of Sonora	.40	.45	.53	2.3	1.4	.78	
963	28.1	Pine Log Creek	Sallacoa Creek	Bartow County, lat 34°24', long 84°50', at county road, 6 miles east of Adairsville	4.8	5.1	5.5	13	9.5	6.8	27
964	99.2	Pine Log Creek	Pine Log Creek	Gordon County, lat 34°26', long 84°48', at county road, 5½ miles west of Fairmount	14	15	17	41	30	21	90
965	9.90	Dews Lake Outflow	Pine Log Creek	Gordon County, lat 34°27', long 84°48', at county road, 6½ miles west of Ranger	7.5	7.8	8.0	11	9.8	8.7	15
966	856	Coosawattee River	Oostanaula River	USGS Complete-Record Gaging Station 1938-1; Coosaattie River at Pine Chapel, Ga.	222	229	246	576	425	354	1,012
967	108	Conasauga River	Oostanaula River	Gordon County, lat 34°35', long 84°52', at Pine Chapel, 5 miles east of Resaca	19	23	25	36	29	27	89
968	180	Conasauga River	Oostanaula River	Polk County, Tennessee, lat 35°00', long 84°44', at U.S. Highway 411, 1½ miles north of Chatsworth	29	32	35	53	42	39	140
969	23.9	Sumach Creek	Conasauga River	Whitfield-Murray Counties, lat 34°55', long 84°50', at county road, at Beverdale and 11 miles northwest of Chatsworth	1.3	1.5	1.7	2.9	2.2	1.9	11
970	21.9	Mill Creek	Conasauga River	Murray County, lat 34°54', long 84°45', at State Highway 61, 8½ miles north of Chatsworth	2.2	2.4	2.8	4.5	3.4	3.1	13

^aFlow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
MOBILE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Minimum 12-Month Flow 1944-45 (cfs)
					1-Day	7-Day	Monthly	
971	87	Coahulla Creek	Conasauga River	Whitfield County, lat 34°34', long 84°55', at county road, 9 miles north of Dalton, Ga.	11	12	14	60
972	18.0	Mill Creek	Coahulla Creek	Whitfield County, lat 34°18', long 85°01', at State Highway 3, 3½ miles northwest of Dalton	2.9	3.2	3.5	14
973	38.4	Mill Creek	Coahulla Creek	USGS Complete-Record Gaging Station 1943; Mill Creek at Dalton, Ga.	12	13	14	39
974	50.0	Holly Creek	Conasauga River	Whitfield County, lat 34°48', long 84°59', 1,000 ft upstream from city pumping plant at Dalton Murray County, lat 34°46', long 84°46', at State Highway 24, at Chatsworth	2.4	2.6	3.0	21
975	16.5	Rock Creek	Holly Creek	Murray County, lat 34°42', long 84°44', at State Highway 61, 6 miles southeast of Chatsworth	1.0	1.2	1.3	8.0
976	682	Conasauga River	Oostanaula River	USGS Complete-Record Gaging Station 1937; Conasauga River at Tilton, Ga.	68	72	83	734
977	1,610	Oostanaula River	Coosa River	Murray-Whitfield Counties, lat 34°40', long 84°56', at county road at Tilton, Ga.	300	312	344	1,769
978	66.6	Oothkaloga Creek	Oostanaula River	USGS Complete-Record Gaging Station 1936; Oostanaula River at Resaca, Ga., Gordon County, lat 34°31', long 85°57', at State Highway 3, at Resaca	18	20	20	59
979	12	Snake Creek	Oostanaula River	Gordon County, lat 34°30', miles southwest of Calhoun	1.2	1.3	1.4	6.6
980	34	John Creek	Rocky Creek	Floyd-Gordon Counties, lat 34°32', long 85°01', at county road at Sugar Valley	4.4	4.8	5.3	23
981	9.8	Rocky Creek	Oostanaula River	Floyd-Gordon Counties, lat 34°26', long 85°06', at county road, 7 miles north of Shannon	0	0	0	0
982	9.9	Lowry Branch	Oostanaula River	Gordon County, lat 34°27', long 85°05', at county road at Curryville	13	.16	.19	2.4
983	5.52	East Armuchee Creek	Armuchee Creek	Floyd County, lat 34°28', long 85°07', at county road, 2½ miles west of Curryville	.16	.19	.22	1.9
984	34.5	West Armuchee Creek	Armuchee Creek	Walker County, lat 34°40', long 85°07', at State Highway 143, 9½ miles east of LaFayette	4.8	5.5	5.7	2.5
985	12	Woodward Creek	Oostanaula River	Chattooga County, lat 34°34', long 85°10', at county road, 2 miles east of Sulphur	2.3	2.5	2.7	9.8
				Floyd County, lat 34°23', long 85°02', at State Highway 53, 4 miles northeast of Shannon		4.0	3.2	2.9

EFFECT OF A SEVERE DROUGHT (1954) ON STREAMFLOW IN GEORGIA 91

		Oostanaula River	Coosa River	USGS Complete-Record Gaging Station 1950; Oostanaula River near Rome, Ga., lat. 35°18', long. 85°08', 4½ miles north of Rome, and 6½ miles downstream from Armuchee	408	489	530	1,080	723	620	2,349
986	2,120			Lumpkin County, lat. 34°31', long. 84°21', at State Highway 9, 4½ miles west of Dahlonega, Ga.	33	33	37	78	60	44	110
987	68	Etowah River	Coosa River	Highway 9, 4½ miles west of Dahlonega USGS Complete-Record Gaging Station 1940; Etowah River near Dawsonville, Ga.	50	50	54	112	88	72	156
988	103	Etowah River	Coosa River	Dawson County, lat. 34°23', long. 84°04', ½ mile upstream from Palmer Creek and 14 miles southeast of Dawsonville							
989	128	Etowah River	Coosa River	Dawson County, lat. 34°21', long. 84°07', at State Highway 9, 4½ miles south of Dawsonville	52	52	57	130	97	79	180
990	20	Shoal Creek	Etowah River	Dawson County, lat. 34°25', long. 84°07', at State Highway 55, 1½ miles west of Dawsonville	13	13	25	20	17	17	33
991	6 8	Cochran Creek	Amicalola Creek	Dawson County, lat. 34°34', long. 84°12', at State Highway 62, 9½ miles northwest of Dawsonville	4 6	4 6	4 8	9 0	7 3	6 1	12
992	26	East Amicalola Creek	Amicalola Creek	Dawson County, lat. 34°30', long. 84°12', at State Highway 136, 6½ miles northwest of Dawson- ville	21	21	22	38	32	27	48
993	28 4	East Amicalola Creek	Amicalola Creek	Dawson County, lat. 34°39', long. 84°12', at State Highway 138, 6½ miles northwest of Dawson- ville	20	20	21	39	32	27	50
994	77 4	Amicalola Creek	Etowah River	Dawson County, lat. 34°27', long. 84°13', at county road, 5½ miles north of Dawsonville	43	43	46	93	74	61	120
995	84 7	Amicalola Creek	Etowah River	Dawson County, lat. 34°26', long. 84°13', at State Highway 53, 5½ miles west of Dawsonville	48	48	51	100	80	68	140
995A	5 3	Brenton Creek	Etowah River	Forsyth County, lat. 34°19', long. 84°13', at county road, 9 miles northwest of Cumming	80	86	1 2	2 6	1 6	1 3	5 1
996	49	Settingdown Creek	Etowah River	Cherokee County, lat. 34°18', long. 84°16', at county road, 7 miles southeast of Ball Ground	3 9	4 3	6 5	17	9 2	6 9	38
997	3 15	Hinton Creek	Long Swamp Creek	Pike County, lat. 34°20', long. 84°25', at State Highway 108, 1 mile north of Jasper	1 1	1 1	1 2	2 8	2 1	1 7	4 1
997A	21	Long Swamp Creek	Etowah River	Pickens County, lat. 34°28', long. 84°24', at county road, 1½ miles east of Jasper	3 1	3 3	3 7	11	7 3	5 7	19
998	3 75	Daniell Creek	Long Swamp Creek	Pleasant County, lat. 34°26', long. 84°20', at State Highway 55, 2 miles northeast of Tate	56	56	61	2 1	1 4	1 0	3 4
999	54	Long Swamp Creek	Etowah River	Pickens County, lat. 34°25', long. 84°22', at State Highway 53, 1½ miles east of Tate	14	14	15	41	29	23	61
1000	75 7	Long Swamp Creek	Etowah River	Cherokee County, lat. 34°20', long. 84°21', at county road, southeast of Ball Ground	17	17	18	52	37	28	80
1001	16	Smithwick Creek	Etowah River	Cherokee County, lat. 34°18', long. 84°21', at county road, 3½ miles southeast of Ball Ground	1 9	1 9	2 1	7 6	4 9	3 5	13
1002	21 2	Sharp Mountain Creek	Etowah River	Pickens County, lat. 34°24', long. 84°29', at State Highway 143, 4½ miles south of Jasper	5 7	5 7	6 2	17	12	9 3	25
1002A	1 52	Polecat Creek	Sharp Mountain Creek	Pickens County, lat. 34°27', long. 84°24', at county road, 2 miles southeast of Jasper	.63	.66	.70	1 5	1 1	.93	2 1

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
MOBILE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow 1954-55 (cfs)
					1-Day	7-Day	Monthly		
1003	64	Sharp Mountain Creek	Etowah River	Cherokee County, lat 34°20', long 84°24', at county road, 1 1/4 miles west of Ball Ground	12	12	13	40	27
1004	73.2	Sharp Mountain Creek	Etowah River	Cherokee County, lat 34°19', long 84°24', at State Highway 5, 2 1/2 miles south-west of Ball Ground	15	15	17	49	34
1005	570	Etowah River	Cooosa River	Cherokee County, lat 34°18', long 84°24', at county road, 3 miles south of Ball Ground	170	180	200	490	360
1006	605	Etowah River	Cooosa River	USGS Complete-Record Gaging Station 1895-1905; 1927-7; Etowah River at Carton, Ga. Cherokee County, lat 34°14', long 84°20', at State Highway 5, spur and 140 ft. from Carton	178	190	214	482	352
1007	22	Canton Creek	Etowah River	Cherokee County, lat 34°14', long 84°29', at State Highway 20, at Carton	1.3	1.5	2.4	6.5	3.4
1008	21.0	Shoal Creek	Etowah River	Cherokee County, lat 34°19', long 84°34', at State Highway 140, 3/4 mile north-west of Waleska	2.5	2.5	2.7	9.9	6.5
1009	29.5	Shoal Creek	Etowah River	Cherokee County, lat 34°18', long 84°34', at county road, 1 1/4 miles south of Waleska	3.2	3.2	3.5	13	8.4
1010	60.5	Little River	Etowah River	USGS Complete-Record Gaging Station 1947-; Little River near Roswell, Ga. Cherokee-Etowah Counties, lat 34°07', long 84°23', at State Highway 140, 7 miles north of Roswell	3.1	3.5	5.7	17	8.5
1011	14	Rubes Creek	Little River	Cherokee County, lat 34°06', long 84°30', at county road, 1 mile east of Woodstock	0	0	0	.18	0
1012	137	Little River	Etowah River	Cherokee County, lat 34°07', long 84°30', at State Highway 5, 3/4 miles north of Woodstock	1.2	1.8	3.6	17	6.3
1013	4.1	Noonday Creek	Little River	Cobb County, lat 34°00', long 84°26', at State Highway 2, 4 miles northwest of Marietta	.070	.082	.15	.62	.16
1014	43	Noonday Creek	Little River	Cherokee County, lat 34°00', long 84°32', at county road, 1 1/4 miles south-west of Woodstock	.82	.99	1.8	7.0	2.9
1015	7.9	Proctor Creek	Etowah River	Cobb County, lat 34°02', long 84°40', at State Highway 3, 3 miles west of Kennesaw	0	0	0	0	0
1016	2.19	Tanyard Creek	Alatoona Creek (Arm of Reservoir)	Cobb County, lat 34°04', long 84°41', at State Highway 92, at Acworth	0	0	0	0	0
1017	1,110		Etowah River	USGS Complete-Record Gaging Station 1938-; Etowah River at Alatoona Dam above Cartersville, Ga.	222a	241a	332a		

1018	40	Pumpkintown Creek	Etiowah River	Bartow County, lat $34^{\circ}10'$, long $84^{\circ}44'$, $\frac{3}{4}$ mile downstream from Allatoona Dam and $\frac{3}{4}$ miles east of Cartersville, lat $33^{\circ}55'$, long $84^{\circ}33'$, at State Highway 6, $2\frac{1}{2}$ miles west of Dallas	.18	.20	.42	4.1	3.1	1.0	17
1019	2,638	Petit Creek	Etiowah River	Bartow County, lat $34^{\circ}10'$, long $84^{\circ}46'$, at State Highway 6, $1\frac{1}{2}$ miles south of White	0	0	0	0	0	0	0
1020	37.8	Pettit Creek	Etiowah River	Bartow County, lat $34^{\circ}11'$, long $84^{\circ}49'$, at State Highway 3, $1\frac{1}{4}$ miles northwest of Cartersville	6.4	6.8	7.4	17	13	9.3	36
1021	11	Nancy Creek	Petit Creek	Bartow County, lat $34^{\circ}11'$, long $84^{\circ}50'$, at county road, $2\frac{1}{2}$ miles northwest of Cartersville	1.6	1.8	1.9	4.7	3.4	2.4	10
1022	55	Raccoon Creek	Etiowah River	Bartow County, lat $34^{\circ}07'$, long $84^{\circ}53'$, at State Highway 113, $\frac{3}{4}$ miles east of Stilesboro	5.1	5.5	6.1	18	12	8.0	44
1023	24	Euharlee Creek	Etiowah River	Polk County, lat $33^{\circ}28'N$, long $85^{\circ}05'$, at county road, $2\frac{1}{2}$ miles southwest of Rockmart	.24	.26	.34	1.3	.94	.36	3.7
1024	7.9	Unnamed Tributary	Alin Creek	Polk County, lat $33^{\circ}58'$, long $85^{\circ}03'$, at county road, 1 mile south of Rockmart	.34	.37	.43	1.1	.91	.45	2.5
1024A	45	Euharlee Creek	Etiowah River	Polk County, lat $34^{\circ}00'$, long $85^{\circ}03'$, at State Highway 6, at Rockmart	4.9	5.1	5.9	13	10	6.0	22
1025	5.9	Unnamed Tributary	Euharlee Creek	Polk County, lat $34^{\circ}01'$, long $85^{\circ}03'$, at State Highway 101, 1 mile north of Rockmart	0	0	0	0	0	0	0
1026	15	Fish Creek	Euharlee Creek	Polk County, lat $34^{\circ}01'$, long $85^{\circ}07'$, at State Highway 6, $4\frac{1}{2}$ miles west of Rockmart	.078	.087	.11	.51	.36	.12	1.7
1027	88	Euharlee Creek	Etiowah River	Polk County, lat $34^{\circ}02'$, long $85^{\circ}03'$, at State Highway 101, at Aragon	21	22	24	42	37	25	65
1028	3.8	Unnamed Tributary	Euharlee Creek	Polk County, lat $34^{\circ}03'$, long $85^{\circ}07'$, at State Highway 101, 4 miles northwest of Aragon	0	0	0	0	0	0	0
1029	5.4	Hill Creek	Etiowah River	Polk County, lat $33^{\circ}55'$, long $85^{\circ}56'$, at Southern Railway bridge, $3\frac{1}{2}$ miles east of Rockmart	0	0	0	0	0	0	0
1030	1,630	Etiowah River	Coosa River	USGS Complete-Record Gaging Station 1928-1954; Bartow County, lat $34^{\circ}12'$, long $84^{\circ}55'$, at county road, $2\frac{1}{2}$ miles southwest of Kingston	380 ^a	428 ^a	580 ^a				
1031	32.0	Two Run Creek	Etiowah River	Bartow County, lat $34^{\circ}15'$, long $84^{\circ}53'$, at State Highway 20, 3 miles east of Kingston	7.0	7.7	8.4	17	13	10	33
1032	50.0	Two Run Creek	Etiowah River	Bartow County, lat $34^{\circ}13'$, long $84^{\circ}58'$, at county road, 2 miles southwest of Kingston	8.5	9.0	9.8	23	17	12	48
1033	17	Barnsley Creek	Etiowah River	Bartow County, lat $34^{\circ}15'$, long $85^{\circ}01'$, at State Highway 20, $4\frac{1}{2}$ miles west of Kingston	2.7	2.9	3.1	7.5	5.5	3.9	16
1034	16	Dikes Creek	Etiowah River	Floyd County, lat $34^{\circ}15'$, long $85^{\circ}05'$, at State Highway 20, 5 miles east of Rome	3.0	3.2	3.5	7.8	5.9	4.3	16
1035	1,810	Etiowah River	Coosa River	USGS Complete-Record Gaging Station 1903-1921; Etowah River at Rome, Ga.	400 ^a	473 ^a	613 ^a				
1036	24	Unnamed Tributary	Silver Creek	Floyd County, lat $34^{\circ}11'$, long $85^{\circ}10'$, at county road, southeast of Lullwater near Rome	8.2	8.4	9.0	15	13	9.3	21

^aFlow regulated by reservoir above station.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
MOBILE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)	Minimum 12-Month Flow (cfs)
					1-Day	7-Day	Monthly		
1037	4,040	Coosa River	Alabama River	USGS Complete-Record Gaging Station 1897-1903; 1928-1931; 1937-, Coosa River near Rome, Ga.	1,010*	1,044*	1,855*		
1038	8.3	Beach Creek	Coosa River	Floyd County, lat $34^{\circ}12'$, long $85^{\circ}16'$, at May 0 Bar Look and Burn, 6 miles southwest of Rome	.16	.17	.21	.71	.53 .22
1039	9.8	Cedar Creek	Big Cedar Creek	Floyd County, Int. $34^{\circ}16'$, long $85^{\circ}16'$, at State Highway 26, 5½ miles west of Rome	1.8	1.8	2.0	3.8	3.3 .2.1
1040	7.8	Lime Branch	Cedar Creek	Polk County, lat $33^{\circ}57'$, long $85^{\circ}13'$, at county road 43½ miles south of Cedartown	.44	.46	.54	1.4	1.1 .56
1041	5.8	Unnamed Tributary	Lime Branch	Polk County, lat $33^{\circ}50'$, long $85^{\circ}18'$, at county road 6 miles southwest of Cedartown	.20	.31	.37	.96	.77 .38
1042	16	Pumpkin Pie Creek	Lime Branch	Polk County, lat $33^{\circ}51'$, long $85^{\circ}17'$, at State Highway 100, 3½ miles south of Cedartown	0	0	0	.077	0 .0
1043	42	Lime Branch	Cedar Creek	Polk County, lat $33^{\circ}58'$, long $85^{\circ}19'$, at county road 5 miles southwest of Cedartown	5.5	5.9	6.5	13	11 .6 .7
1044	73	Cedar Creek	Big Cedar Creek	Polk County, lat $33^{\circ}58'$, long $85^{\circ}16'$, at county road 38½ miles south of Cedartown	15	15	17	31	27 .18
1045	109	Cedar Creek	Big Cedar Creek	USGS Complete-Record Gaging Station 1942-; Cedar Creek near Cedartown, Ga.	26	27	30	52	46 .30
1046	161	Cedar Creek	Big Cedar Creek	Polk County, lat $34^{\circ}04'$, long $85^{\circ}19'$, near State Highway 161, 4½ miles northwest of Cedartown	56	58	64	100	90 .64
1047	18	Little Cedar Creek	Big Cedar Creek	Floyd County, lat $34^{\circ}08'$, long $85^{\circ}18'$, at State Highway 28, 2½ miles northeast of Cave Springs	12	12	13	18	16 .13
1048	5.5	Unnamed Tributary	Little Cedar Creek	Floyd County, lat $34^{\circ}06'$, long $85^{\circ}20'$, at county bridge 75 ft above mouth, at Cave Springs	6.3	6.4	6.5	7.8	7.4 .6 .6
1049	25	Little Cedar Creek	Big Cedar Creek	Floyd County, lat $34^{\circ}07'$, long $85^{\circ}20'$, at State Highway 28 at Cave Springs	23	24	24	30	29 .24
1050	28	Little Cedar Creek	Big Cedar Creek	Floyd County, lat $34^{\circ}08'$, long $85^{\circ}20'$, at county road, 1½ miles north of Cave Springs	23	24	24	31	29 .24
1051	14.0	Town Creek	Chattooga River	Walker County, lat $34^{\circ}42'$, long $85^{\circ}16'$, at State Highway 143, at Lafayette	.74	.81	.88	1.3	1.4 .1 .1
1052	20.3	Duck Creek	Chattooga River	Walker County, lat $34^{\circ}40'$, long $85^{\circ}20'$, at county road, 4½ miles southwest of LaFayette	1.4	1.5	1.6	2.3	2.4 .1 .9

Flow regulated by reservoir above station.
Includes storage releases from Lake Carroll.

TABLE 1.—SUMMARY OF MINIMUM FLOWS DURING THE DROUGHT OF 1954—CONTINUED
MOBILE RIVER BASIN

Map No.	Drainage Area (sq. mi.)	Stream	Tributary to	LOCATION	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow 1934-55 (cfs)
					1-Day	7-Day	Monthly	June	July	August	
1074	4.6	Buffalo Creek	Little Tallapoosa River	Carroll County, lat 33°53'44", long 85°04', at county road, 1/4 miles south east of Carrollton	.002	.11	.18	.82	.61	.28	1.8
1075	13	Indian Creek	Little Tallapoosa River	Carroll County, lat 33°20', long 85°10', at county road, 2 1/2 miles northwest of Hoperville	.23	.27	.45	2.2	1.6	.70	4.9
1076	21.0	Little Tallapoosa River	Tallapoosa River	Carroll County, lat 33°51', long 85°14', at county road, 2 1/4 miles southwest of Bowdon	3.4	4.0	6.5	33	24	10	76
1077	6.0	Little Turkey Creek	Turkey Creek	Carroll County, lat 33°38', long 85°11', at county road, 0.8 mile northwest of Mt. Zion	0	0	0	.19	.12	0	.73
1078	41	Turkey Creek	Indian Creek	Carroll County, lat 33°34', long 85°15', at State Highway 100, 2 miles north of Bowdon	0	0	0	0	0	0	0

TENNESSEE RIVER BASIN

1078A	16.5	Betty Creek	Little Tennessee River	Rabun County, lat 34°58', long 83°23', at State Highway 15, at Dillard	3.1	3.1	3.5	15	9.3	5.8	22
1078B	26.7	Hawassee River	Tennessee River	Towns County, lat 34°52', long 83°23', at State Highway 75, 3 miles south of Presley	13	13	14	50	32	22	54
1079	45.5	Hawassee River		USGS Complete-Record Gaging Station 1041; Hawassee River at Presley, Ga.	23	23	25	87	55	38	93
				Towns County, lat 34°54', long 83°43', 1 mile downstream from Cynthia Creek, 1/2 mile south east of Presley							
1079A	32.4	Hightower Creek	Hawassee River	Towns County, lat 34°55', long 83°41', 1/4 mile south of State Highway 2, 1 1/2 miles east of Presley	16	16	17	61	38	27	65
1079B	7.99	Bell Creek	Hawassee River	Towns County, lat 34°56', long 83°44', at county road, 2 1/2 miles northeast of Hiawassee	2.1	2.1	2.3	12	6.5	4.0	13
1079C	20.3	Brasstown Creek	Hawassee River	Towns County, lat 34°57', long 83°51', at county road, 5 1/2 miles west of Hiawassee	3.8	3.8	4.2	26	14	7.9	29
1080	74.8	Nolette River	Hawassee River	USGS Complete-Record Gaging Station 1042; Notley River near Blairsville, Ga.	30	30	32	97	60	43	131
				Union County, lat 34°50', long 83°56', at county road, 2 3/4 miles southeast of Blairsville							

1081	215	Nottely River	Hawassee River																	
1081A	7.42	Dooley Creek	Nottely River	USGS Complete-Record Gaging Station 1942;																
1082	177	Toccoa River	Ocoee River	Nottely River at Nottely Dam, near Iylog, Ga., Union County, lat 34°55', long 84°06'; at county road, 2½ miles west of Iylog																
1083	233	Toccoa River	Ocoee River	USGS Complete-Record Gaging Station 1913;																
1084	70.9	Fightingtown Creek	Ocoee River	Pecos River near Dial, Ga., Fannin County, lat 34°47', long 84°14', near county road, 2½ miles northwest of Dial																
1085	37.3	West Chickamauga Creek	South Chickamauga Creek	USGS Complete-Record Gaging Station 1942;																
1085A	52.9	West Chickamauga Creek	South Chickamauga Creek	Fightingtown Creek at McCayville, Ga., Highway 2, 2½ miles northeast of Blue Ridge																
1086	73.0	West Chickamauga Creek	South Chickamauga Creek	USGS Complete-Record Gaging Station 1942;																
1087	1.73	Tiger Creek	South Chickamauga Creek	Fightingtown Creek at McCayville, Ga., Highway 2, 2½ miles northeast of Blue Ridge																
1088	43.2	Tiger Creek	South Chickamauga Creek	Whitfield County, lat 34°59', long 84°55'; at county road, 1¾ miles north of Dalton and 0.7 mile south of Ga.-Tenn. line																
1089	428	South Chickamauga Creek	Tennessee River	Catoosa County, lat 34°54', long 85°05'; at State Highway 3, 2 miles southeast of Ringgold																
1090	15.9	Chattanooga Rock Creek	Tennessee River	USGS Complete-Record Gaging Station 1928;																
1091	24.7	Chattanooga Rock Creek	Chattanooga River	South Chickamauga Creek near Chickamauga, Tennessee																
1092	50.6	Chattanooga Rock Creek	Tennessee River	Hamilton County, lat 36°00', long 85°12', ½ mile upstream from U. S. Highway 11, 1½ miles south of Chickamauga, Tenn.																
				Walker County, lat 34°56', long 85°21'; at State Highway 193, ¾ miles south of Flintstone																
				Walker County, lat 34°57', long 85°21', at county road, 1 mile north of Flintstone																
				USGS Complete-Record Gaging Station 1956;																
				Chattanooga Creek near Flintstone, Ga., Walker County, lat 34°58', long 85°20', near county road, 2.3 miles northeast of Flintstone																

^aFlow regulated by reservoir above station.

ERRATA

TABLE 1. Wherever a zero appears in the column headed "Minimum 12-Month Flow", all data for that site were intended to be omitted, and should be disregarded except for the zero in the column headed "1-Day". The zeros in the column headed "1-Day" represent factual information and are believed to be correct in all cases.

For example: Data for site 1078, page 96, should read as follows:

Map No.	Drainage Area	Stream	Min. Average Flow (cfs)			Min. Daily Flow (cfs)			Minimum 12-Month Flow
			1-Day	7-Day	Monthly	June	July	August	
1078	41	Turkey Creek	0						